INTERNATIONAL JOURNAL OF RESEARCH IN COMPUTER APPLICATION & MANAGEMENT

IJRCM

IJRCM

CONTENTS

INTERNATIONAL JOURNAL OF RESEARCH IN COMPUTER APPLICATION & MANAGEMENT

A Monthly Double-Blind Peer Reviewed (Refereed/Juried) Open Access International e-Journal - Included in the International Serial Directories

http://ijrcm.org.in/

iii

CALL FOR MANUSCRIPTS

We invite unpublished novel, original, empirical and high quality research work pertaining to recent developments & practices in the areas of Computer Science & Applications; Commerce; Business; Finance; Marketing; Human Resource Management; General Management; Banking; Economics; Tourism Administration & Management; Education; Law; Library & Information Science; Defence & Strategic Studies; Electronic Science; Corporate Governance; Industrial Relations; and emerging paradigms in allied subjects like Accounting; Accounting Information Systems; Accounting Theory & Practice; Auditing; Behavioral Accounting; Behavioral Economics; Corporate Finance; Cost Accounting; Econometrics; Economic Development; Economic History; Financial Institutions & Markets; Financial Services; Fiscal Policy; Government & Non Profit Accounting; Industrial Organization; International Economics & Trade; International Finance; Macro Economics; Micro Economics; Rural Economics; Co-operation; Demography: Development Planning; Development Studies; Applied Economics; Development Economics; Business Economics; Monetary Policy; Public Policy Economics; Real Estate; Regional Economics; Political Science; Continuing Education; Labour Welfare; Philosophy; Psychology; Sociology; Tax Accounting; Advertising & Promotion Management; Management Information Systems (MIS); Business Law; Public Responsibility & Ethics; Communication; Direct Marketing; E-Commerce; Global Business; Health Care Administration; Labour Relations & Human Resource Management; Marketing Research; Marketing Theory & Applications; Non-Profit Organizations; Office Administration/Management; Operations Research/Statistics; Organizational Behavior & Theory; Organizational Development; Production/Operations; International Relations; Human Rights & Duties; Public Administration; Population Studies; Purchasing/Materials Management; Retailing; Sales/Selling; Services; Small Business Entrepreneurship; Strategic Management Policy; Technology/Innovation; Tourism & Hospitality; Transportation Distribution; Algorithms; Artificial Intelligence; Compilers & Translation; Computer Aided Design (CAD); Computer Aided Manufacturing; Computer Graphics; Computer Organization & Architecture; Database Structures & Systems; Discrete Structures; Internet; Management Information Systems; Modeling & Simulation; Neural Systems/Neural Networks; Numerical Analysis/Scientific Computing; Object Oriented Programming; Operating Systems; Programming Languages; Robotics; Symbolic & Formal Logic; Web Design and emerging paradigms in allied subjects.

Anybody can submit the **soft copy** of unpublished novel; original; empirical and high quality **research work**/**manuscript** *anytime* in *M.S. Word format* after preparing the same as per our **GUIDELINES FOR SUBMISSION**; at our email address i.e. infoijrcm@gmail.com or online by clicking the link **online submission** as given on our website (*FOR ONLINE SUBMISSION, CLICK HERE*).

GUIDELINES FOR SUBMISSION OF MANUSCRIPT

1. **COVERING LETTER FOR SUBMISSION:**

DATED: _____

THE EDITOR

IJRCM

Subject: **SUBMISSION OF MANUSCRIPT IN THE AREA OF _____.**

(e.g. Finance/Mkt./HRM/General Mgt./Engineering/Economics/Computer/IT/ Education/Psychology/Law/Math/other, please specify)

DEAR SIR/MADAM

Please find my submission of manuscript entitled '_____' for possible publication in one of your journals.

I hereby affirm that the contents of this manuscript are original. Furthermore, it has neither been published elsewhere in any language fully or partly, nor is it under review for publication elsewhere.

I affirm that all the co-authors of this manuscript have seen the submitted version of the manuscript and have agreed to their inclusion of names as co-authors.

Also, if my/our manuscript is accepted, I agree to comply with the formalities as given on the website of the journal. The Journal has discretion to publish our contribution in any of its journals.

NAME OF CORRESPONDING AUTHOR	:
Designation	:
Institution/College/University with full address & Pin Code	:
Residential address with Pin Code	:
Mobile Number (s) with country ISD code	:
Is WhatsApp or Viber active on your above noted Mobile Number (Yes/No)	:
Landline Number (s) with country ISD code	:
E-mail Address	:
Alternate E-mail Address	:
Nationality	:

NOTES:

a) The whole manuscript has to be in *ONE MS WORD FILE* only, which will start from the covering letter, inside the manuscript. *pdf. version is liable to be rejected without any consideration*.

b) The sender is required to mention the following in the **SUBJECT COLUMN of the mail**:

New Manuscript for Review in the area of (e.g. Finance/Marketing/HRM/General Mgt./Engineering/Economics/Computer/IT/Education/Psychology/Law/Math/other, please specify)

c) There is no need to give any text in the body of mail, except the cases where the author wishes to give any **specific message** w.r.t. to the manuscript.

d) The total size of the file containing the manuscript is expected to be below **1000 KB**.

e) **Abstract alone will not be considered for review** and the author is required to submit the **complete manuscript** in the first instance.

f) *The journal gives acknowledgement w.r.t. the receipt of every email within twenty four hours* and in case of non-receipt of acknowledgment from the journal, w.r.t. the submission of manuscript, within two days of submission, the corresponding author is required to demand for the same by sending a separate mail to the journal.

g) The author (s) name or details should not appear anywhere on the body of the manuscript, except the covering letter and the cover page of the manuscript, in the manner as mentioned in the guidelines.

2. **MANUSCRIPT TITLE:** The title of the paper should be **bold typed**, **centered** and **fully capitalised**.

3. **AUTHOR NAME (S) & AFFILIATIONS:** Author (s) **name**, **designation**, **affiliation** (s), **address**, **mobile/landline number** (s), and **email/alternate email address** should be given underneath the title.

4. **ACKNOWLEDGMENTS:** Acknowledgements can be given to reviewers, guides, funding institutions, etc., if any.

5. **ABSTRACT:** Abstract should be in **fully italicized text**, ranging between **150** to **300 words**. The abstract must be informative and explain the background, aims, methods, results & conclusion in a **SINGLE PARA**. *Abbreviations must be mentioned in full*.

6. **KEYWORDS:** Abstract must be followed by a list of keywords, subject to the maximum of **five**. These should be arranged in alphabetic order separated by commas and full stop at the end. All words of the keywords, including the first one should be in small letters, except special words e.g. name of the Countries, abbreviations.

7. **JEL CODE:** Provide the appropriate Journal of Economic Literature Classification System code (s). JEL codes are available at www.aeaweb.org/econlit/jelCodes.php, however, mentioning JEL Code is not mandatory.

8. **MANUSCRIPT:** Manuscript must be in *BRITISH ENGLISH* prepared on a standard A4 size *PORTRAIT SETTING PAPER*. *It should be free from any errors i.e. **grammatical**, **spelling** or **punctuation**. It must be thoroughly edited at your end*.

9. **HEADINGS:** All the headings must be bold-faced, aligned left and fully capitalised. Leave a blank line before each heading.

10. **SUB-HEADINGS:** All the sub-headings must be bold-faced, aligned left and fully capitalised.

11. **MAIN TEXT:**

THE MAIN TEXT SHOULD FOLLOW THE FOLLOWING SEQUENCE:

INTRODUCTION

REVIEW OF LITERATURE

NEED/IMPORTANCE OF THE STUDY

STATEMENT OF THE PROBLEM

OBJECTIVES

HYPOTHESIS (ES)

RESEARCH METHODOLOGY

RESULTS & DISCUSSION

FINDINGS

RECOMMENDATIONS/SUGGESTIONS

CONCLUSIONS

LIMITATIONS

SCOPE FOR FURTHER RESEARCH

REFERENCES

APPENDIX/ANNEXURE

The manuscript should preferably range from ***2000 to 5000 WORDS***.

12. **FIGURES & TABLES**: These should be simple, crystal **CLEAR**, **centered**, **separately numbered** & self explained, and **titles must be above the table/figure**. **Sources of data should be mentioned below the table/figure**. *It should be ensured that the tables/figures are referred to from the main text*.

13. **EQUATIONS/FORMULAE**: These should be consecutively numbered in parenthesis, horizontally centered with equation/formulae number placed at the right. The equation editor provided with standard versions of Microsoft Word should be utilised. If any other equation editor is utilised, author must confirm that these equations may be viewed and edited in versions of Microsoft Office that does not have the editor.

14. **ACRONYMS**: These should not be used in the abstract. The use of acronyms is elsewhere is acceptable. Acronyms should be defined on its first use in each section: Reserve Bank of India (RBI). Acronyms should be redefined on first use in subsequent sections.

15. **REFERENCES**: The list of all references should be alphabetically arranged. ***The author (s) should mention only the actually utilised references in the preparation of manuscript*** and they are supposed to follow Harvard Style of Referencing. **Also check to make sure that everything that you are including in the reference section is duly cited in the paper**. The author (s) are supposed to follow the references as per the following:

- All works cited in the text (including sources for tables and figures) should be listed alphabetically.

- Use (**ed.**) for one editor, and (**ed.s**) for multiple editors.

- When listing two or more works by one author, use --- (20xx), such as after Kohl (1997), use --- (2001), etc, in chronologically ascending order.

- Indicate (opening and closing) page numbers for articles in journals and for chapters in books.

- The title of books and journals should be in italics. Double quotation marks are used for titles of journal articles, book chapters, dissertations, reports, working papers, unpublished material, etc.

- For titles in a language other than English, provide an English translation in parenthesis.

- *Headers, footers, endnotes* and **footnotes** *should* **not be used** *in the document*. However, **you can mention short notes to elucidate some specific point**, which may be placed in number orders after the references.

PLEASE USE THE FOLLOWING FOR STYLE AND PUNCTUATION IN REFERENCES:

BOOKS

- Bowersox, Donald J., Closs, David J., (1996), "Logistical Management." Tata McGraw, Hill, New Delhi.

- Hunker, H.L. and A.J. Wright (1963), "Factors of Industrial Location in Ohio" Ohio State University, Nigeria.

CONTRIBUTIONS TO BOOKS

- Sharma T., Kwatra, G. (2008) Effectiveness of Social Advertising: A Study of Selected Campaigns, Corporate Social Responsibility, Edited by David Crowther & Nicholas Capaldi, Ashgate Research Companion to Corporate Social Responsibility, Chapter 15, pp 287-303.

JOURNAL AND OTHER ARTICLES

- Schemenner, R.W., Huber, J.C. and Cook, R.L. (1987), "Geographic Differences and the Location of New Manufacturing Facilities," Journal of Urban Economics, Vol. 21, No. 1, pp. 83-104.

CONFERENCE PAPERS

- Garg, Sambhav (2011): "Business Ethics" Paper presented at the Annual International Conference for the All India Management Association, New Delhi, India, 19–23

UNPUBLISHED DISSERTATIONS

- Kumar S. (2011): "Customer Value: A Comparative Study of Rural and Urban Customers," Thesis, Kurukshetra University, Kurukshetra.

ONLINE RESOURCES

- Always indicate the date that the source was accessed, as online resources are frequently updated or removed.

WEBSITES

- Garg, Bhavet (2011): Towards a New Gas Policy, Political Weekly, Viewed on January 01, 2012 http://epw.in/user/viewabstract.jsp

RECOGNISING RELATIONSHIP BETWEEN CUSTOMER SATISFACTION AND CUSTOMER LOYALTY: AN ILLUSTRATION FROM ORGANISED RETAIL SECTOR

DR. R. R. CHAVAN
ASST. PROFESSOR
SCHOOL OF MANAGEMENT STUDIES
NORTH MAHARASHTRA UNIVERSITY
JALGAON

ANIL DONGRE
PROFESSOR & HEAD
UG DEPARTMENT OF MANAGEMENT
SCHOOL OF MANAGEMENT STUDIES
NORTH MAHARASHTRA UNIVERSITY
JALGAON

ABSTRACT

The retail sector is highly competitive industry and one can gain competitive advantage is to ensure that the customers are satisfied all the time every time. It is also a fact that, having loyal customers is a great asset to ensure long term growth of a company. The literature on marketing has recognised customer satisfaction as a significant antecedent to customer loyalty. The aim of this paper is to study the relationship between customer satisfaction and customer loyalty with reference to organised retail sector. Customer satisfaction is widely recognized as a key pressure in the formation of consumers' future purchase intentions. The satisfied customers are also likely to tell others of their favourable experiences and thus engage in positive word of mouth publicity. The filled survey has been undertaken and the frequent shopper at retail store has been considered for sampling. Their satisfaction and loyalty have been assessed by engaging structured questionnaire. The relationship between satisfaction and loyalty is analysed by with the help of correlation coefficient. The results indicate that there is significant association between satisfaction and loyalty, which is companionable with the traditional view.

KEYWORDS

Customer satisfaction, customer loyalty, retail store, organised retail.

JEL CODE

L81, L84.

1.0 INTRODUCTION

In India retailing is progressively moving towards becoming the next fastest growing industry. According to A.T. Kearney, retailing accounts for $410 billion and organized retailing accounts for only 5% of the above market. According to the Global Retail Development Index 2012, India ranks on 5th among the top 30 emerging retail markets. The recent announcement by the Indian government with Foreign Direct Investment (FDI) in retail, especially allowing 100% FDI in single brands and multi-brand FDI has created positive attitudes in this sector.

Customers are most likely to appreciate the goods and services they buy, provided if they are made to feel special. This occurs when they feel that the goods and services that they buy have been specially produced for them or for people like them. It should be always keep measuring in order to get feedback for the products and services in order to develop it further with wide customization. Customer satisfaction levels can be measured using survey techniques and questionnaires. Gaining high levels of customer satisfaction is very important to a business because satisfied customers are most likely to be loyal, place repeated orders and use a wide range of services offered by a business. The paper examines the connection between customer satisfaction and customer loyalty in retail sector.

2.0 LITERATURE REVIEW

2.1 CUSTOMER SATISFACTION

Customer satisfaction is mainly consequential from the physiological response with the perceptual difference gap between expectation before consumption and practical experience after consumption of service or products. It implies an accumulated temporary and sensory response. Therefore, under such a specific consumption setting, it frequently influences the overall attitude and decision-making when customers purchase products or service (Lee et al., 2010). Anderson and Srinivasan (2003) assessed consumer satisfaction categorized into five dimensions of overall satisfaction, customer favourite, customer loyalty, customer recommendation and priority option. Understanding customer satisfaction will facilitate companies to maintain customer satisfaction to products or services. As such, inferior products or services can be improved to allow customers with wonderful impression. (Anderson and Srinivasan, 2003)

2.2 CUSTOMER LOYALTY

Loyalty has been defined as repeat purchase behaviour led by favourable attitudes or as a consistent purchase behaviour resulting from the psychological decision-making and evaluative process. According to Walsh et al. (2008), three popular conceptualizations of loyalty exist as an attitude that leads to a relationship with the brand; as expressed in terms of revealed behaviour, and as buying moderated by individual characteristics, circumstances, and/or the purchase situation. Oliver (1997), proposed loyalty as a deeply held commitment to re-buy or re-patronize a preferred product or service consistently in the future, which causes repetitive same-brand or same-brand set purchasing, despite any situational influences and marketing efforts that might cause switching behavior. Customer loyalty has been defined as a construct that measures the probability that the customer will return and is ready to perform partnering activities such as referrals (Cater and Cater, 2009). Sudhahar et al. (2006) addressed the SERVLOYAL constructs into seven dimensions for scale construction process as behavioral dimension; attitudinal dimension; cognitive dimension; conative dimension; affective dimension; trust dimension; and commitment dimension.

2.3 RELATIONSHIP BETWEEN SATISFACTION AND LOYALTY

According to literature review, is derived from service management and study on the satisfaction and loyalty relationship is performed generally and in organizational level. The satisfaction is the experience of loyalty that impacts on profitability of organization. It is evident that loyalty is affected by satisfaction even if their relationship is not logical. The findings of the study indicate a weak or unimportant relationship between repeated buying behavior (loyalty) and satisfaction (Bodet, 2008). Davis et al. (2007) suggest that the behavioral relationship between satisfaction and loyalty is not a linear one and has two levels of crises threshold. It also shows that when satisfaction reaches above the level of certain threshold (trust zone), buying behavior increases rapidly. When

satisfaction decreases to lower threshold (defection zone), buying behavior decreases rapidly. Between threshold levels (consideration zone), buying behavior is constant. They believe that satisfaction should be high enough to stimulate behavioral loyalty, or it should be low enough to reduce it.

The hypothesis is been derived from the literature

H0: There is no significant relationship between customer satisfaction and customer loyalty in organised retail sector

3.0 METHODOLOGY

The researcher has obtained primary research findings through collecting primary data by conducting survey predominately.

A total of 200 consumers from four parts of Nashik city were surveyed for this research study. The survey is based on interviewing retail store consumers at various retail stores in city. The questionnaire and personal Interview method used for primary data collection is been employed.

The sampling method chosen is simple random sampling which is a type of probability sampling. The total 200 samples selected using a random sampling for the present study. The questionnaire was designed keeping in mind the objectives of the study. The literature survey and pre study consultation with industry and academician experts were taken into account. The questionnaire comprises Likert type of 7 point scale. The secondary data was collected through research papers, newspapers, journals, websites, books, project reports

4.0 DATA ANALYSIS & FINDINGS

DEMOGRAPHICS

Questionnaires were distributed between both male and female having the percentage 70.9% and 29.1% respectively. The respondents, from which data were collected having different level of age, education, and income. Some of the respondents were single while some were married and having children or without children. Respondents were advised to select one retail store which they have visited recently.

Pearson correlation coefficient is used to assess existence of relationship between customer satisfaction and loyalty.

TABLE 1: STATISTICAL OUTPUT

		Satisfaction	CL1	CL2	CL3	CL4	CL5
Satisfaction	Correlation Coefficient	1.000	.325**	.312**	.262**	.267**	.135**
	Sig. (2-tailed)	.	**.000**	**.000**	**.000**	**.000**	**.000**
	N	650	650	650	650	650	650
CL1	Correlation Coefficient	.325**	1.000	.742**	.744**	.824**	.327**
	Sig. (2-tailed)	.000	.	.000	.000	.000	.000
	N	650	650	650	650	650	650
CL2	Correlation Coefficient	.312**	.742**	1.000	.566**	.787**	.265**
	Sig. (2-tailed)	.000	.000	.	.000	.000	.000
	N	650	650	650	650	650	650
CL3	Correlation Coefficient	.262**	.744**	.566**	1.000	.731**	.341**
	Sig. (2-tailed)	.000	.000	.000	.	.000	.000
	N	650	650	650	650	650	650
CL4	Correlation Coefficient	.267**	.824**	.787**	.731**	1.000	.399**
	Sig. (2-tailed)	.000	.000	.000	.000	.	.000
	N	650	650	650	650	650	650
CL5	Correlation Coefficient	.135**	.327**	.265**	.341**	.399**	1.000
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.
	N	650	650	650	650	650	650

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

As per the table1 indicates that the correlation (r) of customer satisfaction is 0.325, 0.312, 0.262, 0.267 and 0.135 p-value is 0.000. Therefore, the null hypothesis is rejected and it can be concluded that customer satisfaction is positively related to customer loyalty in the organised retail sector.

5.0 DISCUSSION AND CONCLUSIONS

The aim of this survey was to examine the relationship between customer satisfaction and loyalty. The results show a significant relationship between satisfactions of customers their loyalty. This result is compatible with the results of the investigation of Davise et al. (2007), Kotler and Armstrong (2010), and Jones and Sasser (1995). In this respect, this survey can be classified as the third category of classification of Henning-Thurau and Klee (1997), in which a weak/unimportant relationship between satisfaction and repeated buying behavior (loyalty) was been observed.

6.0 IMPLICATION

The research contributes to the knowledge by providing support the relationship between satisfaction and customer loyalty. The result of the study recognized that with improvement of customer satisfaction the firm will find customers that are more loyal. By the referring of loyal customers a firm can also attract more customers. However, the main focus of management attention is to strive hard for customer satisfaction and building loyalty of the customer for the retail store. The future research may be focus on identifying and possibly developing unique measure for customer satisfaction for retail firm.

REFERENCES

1. Anderson, R.E., and Srinivasan, S.S. (2003). "E-Satisfaction and E-Loyalty: A Contingency Framework". *Psychology and Marketing*, 20(2), 122–138.
2. Bodet, G. (2008). "Customer Satisfaction and loyalty in service, Two concepts, four constructs, several relationships". *Journal of Retailing and Consumer service*, 15(3), 156-162.
3. Cater, B. and Cater, T. (2009). "Relationship-value-based antecedents of customer satisfaction and loyalty in manufacturing". *Journal of Business & Industrial Marketing*, 24(8), 585-597.
4. Davis-sramek, B. Mentzer, T.J. and Sank, P.T. (2008). "Creating Consumer durable retailer Customer loyalty through order fulfillment service operations". *Journal of Operations Management*. 26(6), 781-797.
5. Fecikova, I. (2004). "An index method for measurement of customer satisfaction". *The TQM Magazine* , 16(1), 57-66.
6. Gould, G. (1995). "Why it is customer loyalty that counts and how to measure it". *Managing Service Quality*, 7(4), 4-26.
7. Hansemark, O.C. and Albinsson, M. (2004). "Customer satisfaction and retention: the experience of individual employees". *Managing Service Quality*, 14(1), 40-57.
8. Henning-Thurau, T. and Klee, A. (1997). "The impact of customer satisfaction and relationship quality on customer retention: a critical reassessment and model development". *Psychology & Marketing*, 14(8), 737-764.

9. IEEE (1991). "IEEE std 610.12-1990 – IEEE standard glossary of software engineering terminology", in *IEEE software engineering standards collection*. New York: The Institute of Electrical and Electronics Engineers.

10. Issac, G., Rajendran, C. and Anantharaman, R.N. (2006). "An instrument for the measurement of customer perceptions of quality management in the software industry: An empirical study in India". *Software Quality Journal*, 14(4), 291-308.

11. Jones, T.O. and Sasser, E.W. (1995). "Why satisfied customers defect". *Harvard Business Review*, 73(6), 88-99.

12. Khan, R.A., Mustafa, K. and Ahson, S.I. (2006). *Software quality: Concepts and practices*. Oxford: Alpha Science.

13. Khosravi, K. and Gueheneuc, Y.G. (2004). *A quality model for design patterns*. University of Montreal: Technical Report 1249.

14. Kotler, P. and Armstrong, G. (2010). *Principles of marketing*. India: Pearson Education Ltd.

15. Lee, M.S., Hsiao, H.D. and Yang, M.F. (2010). "The study of the relationships among experimental marketing, service quality, customer satisfaction and customer loyalty". *International Journal of Organizational Innovation*, 3(2), 353-379.

16. Mc Carthy, D.G. (1997). *The Loyalty Link: How Loyal Employees Create Loyal Customers*. New York, NY: John Wiley and Sons Inc.

17. Oliver, R.L. (1997). *Satisfaction: A Behavioral Perspective on the Consumer*. New York, NY: McGraw-Hill.

18. Reichheld, F., and Sasser, W.E. (1990). "Zero defections: quality comes to services". *Harvard Business Review*, 68(5), 105-111.

19. Sudhahar, J.C., Israel, D., Britto, A. and Selvam, M. (2006). "Service Loyalty Measurement Scale: A Reliability Assessment". *American Journal of Applied Sciences*, 3(4), 1814-1818.

20. Walsh, G., Evanschitzky, H. and Wunderlich, M. (2008). "Identification and analysis of moderator variables : Investigating the customer satisfaction-loyalty link". *European Journal of Marketing*, 42(9/10), 977-1004.

21. Walsh, G., Gwinner, K.P. and Swanson, S.R. (2004). "What makes mavens tick? Exploring the motives of market mavens' initiation of information diffusion". *Journal of Consumer Marketing*, 21(2), 109-122.

22. Yuen, K.K.F. and Lau, H.C.W. (2011). "A fuzzy group analytical hierarchy process approach for software quality assurance management: Fuzzy logarithmic least squares method". *Expert Systems with Applications*, 38(8), 10292-10302.

23. Zineldin, M. (2000). *TRM: Total Relationship Management,* Lund: Student literature.

INTERNATIONAL JOURNAL OF RESEARCH IN COMPUTER APPLICATION & MANAGEMENT 3

A Monthly Double-Blind Peer Reviewed (Refereed/Juried) Open Access International e-Journal - Included in the International Serial Directories

http://ijrcm.org.in/

PRODUCER GAS AS A VIABLE ENERGY SOURCE

RAHUL BASU
PROFESSOR
SAMBHRAM INSTITUTE OF TECHNOLOGY
MS PALYA

ABSTRACT

The Offsetting of Carbon emissions is a major concern worldwide. The generation of power from Fossil fuels remains a major source for underdeveloped and developing countries. Use of waste material to produce Biogas by bacterial action results in a sludge, which has a high Nitrogen and Carbon content after Methane production. The sludge can be used as fertilizer, and also further processed to give Producer gas. Other waste materials like coconut husk, agricultural and cellulosic wastes could be used directly. The disadvantage of slow reaction times from biogas (methane) production by bacterial action is avoided. The Producer gas can be stored or used directly in place of LPG as a substitute for Methane which has hazardous qualities. In earlier times it was piped directly to homes for cooking and used as a petrol substitute in vehicles when petrol was scarce.

KEYWORDS

Energy sources, gas production.

INTRODUCTION

Since the Energy crisis of the 1970's when the Middle Eastern Oil producers held the world economies to ransom, there have been increasing efforts and attention to research and usage of renewable energies like hydropower, solar, biogas and wind power. It has not widely been realized that water, wind and more recently producer gas have been used in previous decades and centuries as power and motive sources. In a sense, efforts have been made to reinvent the (water) wheel, and Private and government funds have been spent on non productive academic research to improve (for example) solar cell efficiency to impractical levels, perpetual motion machines, and various Free Energy projects.

For a country like India which has a sizeable rural population subsisting on agriculture and depending on livestock, Biogas has provided a viable source of energy and has been subsidized by various Governmental incentives and schemes. The problem underlying such efforts is the extreme poverty in which the majority of the rural populace lives. In fact, traditional village lifestyles dictate the use of cow dung for cooking with fire, smearing the compounds and ground, placing cow dung cakes on the walls and so on. Till recently it was difficult to get people to use cow dung as a crop fertilizer, and the major fertilizer companies have made hay of this fact.

Biogas has certain desirable qualities with regard to the environment:
1. It is low cost and low tech
2. It requires low investment and capital
3. It uses waste products and does not require chemical additives
4. It produces a sludge which can be used further as a fertilizer
5. It can contribute to treatment of domestic and municipal wastes.

Most of the subsidies given by State and NGO's so far have been on Biogas, whereas Producer gas has been neglected in the resurgence of Renewable energy sources.

Apart from the payoffs in secondary energy generation (i.e., after Methane has been recovered from biomass by bacterial action), the remaining bio matter/biomass residue which consists of C and N with H20 is capable of further reduction into the so called "Producer Gas". A further advantage is in reducing the biologically active component which may consist of any harmful bacteria, mosquito larvae and viruses and other vectors into inert form. The resultant solid matter is highly concentrated with Nitrogeneous matter and thus suitable as fertilizer for agricultural usage. Although the initial biomatter which may be dung, composted material and waste food matter can be used and is frequently applied directly on the fields, the result of Producer gas reduction is more inert and as useful if not more suitable as a fertilizer. Besides, the decomposition of animal dung in the open after being applied as a surface additive for crops yields large amounts of methane and adds to the pollutants in the atmosphere, besides contributing to vector propagation like flies and mosquitoes.

In Ghana, W. Africa, one of the main reasons of development of biogas is to treat sewage which is largely untreated and run off into the bush outside the villages, in order to improve sanitation and reduce attendant risks of epidemics an diseases endemic to Africa,(1)

INTERNATIONAL EFFORTS IN THE AREA OF PRODUCER GAS

It appears that serious work has been done in the island nations of the Indian and Pacific Oceans, like the Philippines and SriLanka, subsidised by the International agencies like UN. In Africa, countries like Ghana have taken up Biogas projects at a national level in their National Strategic planning. According to a recent survey (1), the focus in Ghana has shifted from energy to sanitation, with construction of bio-toilets. The aim is to treat human wastes to a level where they can be safely discharged into drains. The remaining sludge is used as fertilizer.

In the Philippines, GEMCOR had set up gasifiers using coconut shell charcoal, resulting in cheap gas at lower rates than from wood or biomass. Boats have been fitted with engines running on producer gas, (2).

A number of raw materials have been researched for Producer gas, including coconut, sugar cane bagasse, rice husks, corn cobs, coffee bean husks, peanut shells, cotton gin trash and stalks. The list could use organic trash, which has been reported in the recent issue of Scientific American, (3) (Dec 2010, p24). Indian cities with their large slums and attendant sanitation problems could take a leaf from these efforts initiated by India's neighbours.

During times of petrol scarcity as in the last world war, engines were developed to run on coal gas and gas from wood, which would be towed behind the vehicles.

PRIMARY REACTIONS AND PRODUCTS FROM BIOMASS GASIFICATION

The gaseous products from carbon biomass are CO, CO2, H2, CH4, N2, water. Trace amounts of higher hydrocarbons are present also.
The reactions involve the steam reaction on carbon with limited oxygen:

$4C + 2H_2O + 2O_2 \longrightarrow 4CO + 4H + O_2$ [1]

$2CO + O_2 \longrightarrow 2CO_2$ [2]
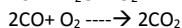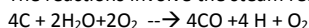
Also there are sub reactions of C with H, H2 and H2O, similarly with CO and H.
These reactions need the addition of heat which is supplied by burning additional raw material, and a supply of steam.

USE IN IC ENGINES

As a result of the impending shortage in worldwide fossil fuel supplies which include petrol and diesel, increasing efforts have been made to look at alternatives to the IC engine which has so far not been modified beyond the basic piston-cylinder-valve design (4 stroke and 2 stroke variants). Strong interests in the

Petroleum and automotive industry has resisted and thwarted attempts to develop alternative designs and implementation of these in Industry.   One can see this in viewing the basic undergraduate syllabi for Indian Engineering colleges which still use books written before the 1970's, whilst books on steam turbines and gas turbines are also rewritten from outdated foreign texts, (pre independence 1947).

Modification of engines to use Producer gas is not difficult, provided one understands the nature of the combustion and power cycle in the IC engine.   Basically, one cannot run the engine at a speed beyond the rate at which the fuel gas ignites and burns (flame velocity). In addition, the compression and air/fuel ratio are important. If too high a compression results, there is possibility of the gas igniting spontaneously, (knocking), which would damage the engine. Producer gas is capable of higher Octane numbers than petrol, (OCTANE number being a measure of the compression ratio at which detonation occurs).   As a result, higher engine thermal efficiencies can be achieved with Producer gas. Further refinements are possible but may need more research for Indian scenarios. Recently analysis of the higher water content in producer gas and Syn gas has been presented where the water content of over 15% as compared to 3% for natural gas may lead to corrosion in gas turbines. (4)

PRODUCER GAS FOR POWER GENERATION

1kg air-dry wood (15-20% mc) gives about 2.3 cub.meters of gas
1 litre petrol = 2.5 to 3kg wood
1 litre diesel = 3 to 3.5 kg wood
1 kWh requires 1 to 1.3 kg charcoal, 2 to 4 kg woodchips or 2.4 to 3.2 kg rice husk.

Feasibility and viability of a gasifier project depends on many factors, including cost of fuel, labour costs, money and finance, design life, value of the energy produced, cost of disposal of the residue, and value of the sludge for fertiliser. Further benefits are there when the electricity if generated can be sold to the grid.

The existence of a national energy programme and incorporation of such schemes into the development plans at state and national level would enhance such energy schemes.

At present the focus has been blurred by the large corporations battling it out for offshore oil rights, trying to sell cheap gas guzzling cars to the public, the conflicts (oil generated) in the middle east, and other political agendas.

The attendant benefits of health and sanitation have been almost ignored in the energy plans at the higher levels.

In Tanzania, a programme for design of gasifiers for maize mills in rural areas was taken up by the Small Industries Development Organisation and the Nederlands Twente University, (5).   A similar system was developed at Chulalongkorn University in Thailand.   In El Salvador, with GEKA of Karlsruhe, coffee bean husks are burnt and the gas mixture fed to further dry coffee beans.   In Valdosta, Georgia and Auburn, Alabama peanut shells have been used to give heat for drying. In Asia, rice husks are very commonly available as a byproduct, but according to the FAO in 1975, no mill existed which used steam produced by husk fired boilers. India and Thailand directly used rice husks as a form of boiler heat fuel, with some other countries also following suit.   Parboiled rice in India is made mostly (50% usage) by husk fired boilers, with some mills in Sri Lanka, Guyana, and Italy doing the same. The Govt of Malaysia had given funds for development of two pilot plants at rice mills using one ton of rice husks per hour. Electric power output of about 350KW/hour has been obtained in 1983 (6,7).

OVERALL EFFICIENCY AND ECONOMIC ANALYSIS OF THE SCHEME

Since Producer gas production requires heat and steam production as input, there is an expenditure of energy involved which debits from the overall total of energy. The heating can be obtained by diverting part of the biogas obtained in the primary digestion stage to be used for heating and producing steam and high temperatures in gasifying the sludge residue for Producer gas. Alternatively, dried biomass used for the initial biogas production could be ignited and used for the secondary producer gas stage. So far no study has been done on the efficiency and economics of the scheme.

FUTURE STUDIES AND AVENUES OF RESEARCH

It may be possible to invoke the genetic modification of microbes to directly excrete hydrocarbons.   Turning water, photonic energy and Carbon dioxide into hydrocarbons is a very old process developed by Nature, which uses chlorophyll. Perhaps more useful than solid carbohydrates, would be a liquid hydrocarbon that could directly be put to use as fuel. Algae are known to efficiently convert Carbon dioxide into fatty acids, and similarly potato plants into carbohydrates. Converting this potato starch into alcohol is a long and expensive process. There has been a search for micro organisms that could do this, (8). Alternatively, sugars can be turned into alcohol, but again there are attendant costs. Much more attractive and useful would be a way to convert raw materials directly into hydrocarbon fuels. Apart from micro organisms, mobile robots are being proposed that would "eat" garbage and unwanted plants and convert these into hydrocarbon fuel forms. (9)

The direct conversion of cellulose to alcohol (cellulolysis) using lignocellulose (wood cellulose containing lignin a component of wood), has been researched at Argonne Labs (10). The process depends on cellulase enzymes produced by bacteria. Saccaromyces cerevisiae, Zymomonas mobilis, E Coli., are some bacteria targeted for bio engineering to produce ethanol via the cellulosis route.

Producer gas has been applied as a raw material for bacterial conversion to ethanol also, using the bacteria Clostridium Ljungdahlii, which ingests CO, CO2 and H2 producing Ethanol and water. This process involves Gasification, fermentation and distillation to yield alcohol.   The alternative is to use a catalytic reactor. (Catalysis involves intermediate compounds that get involved in the reaction but are unchanged in composition at the end).

The effect of physical and chemical parameters on bacterial fermentation of cellulose has been studied by various groups (10,11). Another bacteria acetivibro celluloyticus produces acetate, ethanol, water and carbon dioxide.

Recently, groups have tried to bioengineer bacteria to give oil for fuel directly. The group LS9 with UC Berkeley has engineered a bacterium to make enzymes to convert biomass into diesel oil, (13). A recent patent 7794969 uses cyanobacteria to produce n-alkanes, (14).

The end is not in sight, and clearly microorganisms exist or can be modified to excrete oils which can be used as fuels, possible without further processing. However the overall effect on the effect on life on the planet and the ecology and environment must be carefully evaluated before attempting such bioengineering on a large scale in order to satiate the need of some industrial groups which have stuck to old designs for motive engines. The alternative would be to invest in alternative designs for motive power converters.

The I.C. engine was a byproduct of the Industrial revolution and the industrialisation of the Midwest USA, with resultant mass migrations, prior to which electric cars, steam cars and other variants were in vogue in the early 20th century. In fact the steam engine served Indian railroads for well over a century before the diesel engines took over. Hence one must not get carried away by the demons of Science and Finance and attempt to change the natural order of nature and life by introducing artificial genetic alterations. Life in all probability is at a delicate tipping point today. In order to propagate a failing and inefficient design, the I.C. Engine, which is limited by the laws of thermodynamic efficiency, and further inherent limitations one must not tinker with natural life and biological designs which have optimised over millennia.

REFERENCES

1.   E.C. Bensah and A. Brew-Hammond, "Biogas Effluent and Food Production in Ghana", 4th National Conference of Ghana Society of Agricultural Engineering, March14th 2008.
2.   D.B.Mahin, "Bioenergy from Crop residues", BST, Office of energy, Wash DC, 1983.
3.   Scientific American, (Dec 2010),V5,No12, p24
4.   M Basu Majumdar, R Clayton, D Mumm (2015) "Chemical and Mechanical Evolution of Ceramic Abradable Turbine Coatings Subjected to Simulated High Hydrogen Content Combustion Environments", presented at 42nd ICMCTF, San Diego

5.   see ref(2),p9
6.   see ref(2),p11-13
7.   en.wikipedia.org/wiki/ethanol_fermentation
8.   Scientific American, (Dec 2010), V5,No12,p 21
9.   www1.eere.energy.gov/biomass/news.html
10. V.SenthilKumar and P Gunasekharan, J..of Sci and Ind. Res., (Nov 2005) V64,p845-853
11. D.W.Armstrong and S.M.Martin, "Bacterial fermentation of cellulose: Effect of physical and chemical parameters", Biotechnology and Bioengineering, (Nov 1983),V25,11, pp2567-2575,.
12. technologyreview.com/energy/24422
13. N.B.Reppas and C.P.Perry, US Patent 7794969, US Patent Sept 14 2010

ENSET VALUE CHAIN ANALYSIS: THE CASE OF DIRE ENCHINI WOREDA, OROMIA REGIONAL STATE, ETHIOPIA

ABEBE UMA
STUDENT
DEPARTMENT OF RURAL DEVELOPMENT & AGRICULTURAL EXTENSION
INSTITUTE OF CO-OPERATIVES & DEVELOPMENT STUDIES
AMBO UNIVERSITY
AMBO

DR. J. PAUL MANSINGH
PROFESSOR
DEPARTMENT OF RURAL DEVELOPMENT & AGRICULTURAL EXTENSION
INSTITUTE OF CO-OPERATIVES & DEVELOPMENT STUDIES
AMBO UNIVERSITY
AMBO

ABSTRACT

Value chain analysis was conducted for a variety of purposes. The primary purpose of value chain analysis, however, is to understand the reasons for inefficiencies in the chain, and identify potential leverage points for improving the performance of the chain, using both qualitative and quantitative data. This study aimed at analyzing value chain of enset in Dire Enchini District, West Showa Zone, Oromia Region, Ethiopia. The study area, Dire Enchini District, was selected purposively because of the potential for enset production. Out of 18 kebeles and 1town kebele in the district, two of them namely Homi Hane and Waldo Hine are purposively selected based on the area under enset cultivation. A total of 144 respondents were selected from the two kebeles randomly using simple random sampling technique. In addition to 144 sample respondents, key informants were selected from the other value chain actors including; input suppliers, collectors, wholesalers, retailers, consumers and support services like; cooperatives and extension. Such key informants were selected at various levels using simple random sampling from selected kebeles. For the purpose of this study, 6 input suppliers, 6 collectors, 6 wholesalers, 12 retailers, 30 consumers and 14 persons from support services were selected. The input suppliers composed of: two cooperatives (one from each kebele), two experts from District agricultural office and the other two were private input suppliers. The data were collected from both primary and secondary sources. The primary data for this study were collected from farmers, traders, input suppliers, support services and consumers. Data were analyzed using Descriptive statistics such as percentage, mean and standard deviation. It was found that in the study area there are many actors were involved in enset value chain analysis, from input supply to the consumers playing different roles. They were, input suppliers, producers, collectors, wholesalers, retailers and consumers. Collectors purchased enset product from producers in distant areas and sold at district markets to wholesalers. Wholesalers purchased enset product from collectors and producers and sold to retailers and consumers. Retailers purchased enset product from producers, collectors, wholesalers and sold to consumers. Enset product produced in the study area passes through several intermediaries. The linkage among value chain actors was to some extent weak and informal in type. There was no responsible body who is working for effective and efficient linkage between value chain actors. Farmers trusted relative farmers and shared information and experiences among themselves. Limited availability and lack of input supply by cooperatives, existence of disease, marketing problem, inadequate extension service, shortage of land, shortage of credit service, were the main challenges faced in the area. On the other hand, increased farmer's interest on enset production system, availability of high yielding and potential soil and favorable climatic conditions, sustainable sales of enset product, high consumer demand, infrastructure and district location were the available opportunities that encourage the development of enset value chain. Each of the 'Kocho' and' Bulla' value chain actors added value to the product as the product transferred from one actor to another. Traders (collectors, wholesalers, and retailers) operating expense was small in amount but the profit margin they got was more than the producer farmers. The traders simply bought from the farmer and sold to consumers. But they took high amount of profit share than the farmers who did all the works from producing enset to processing of enset.

KEYWORDS

Enset, Value Chain, Value Chain Analysis, Value Chain Actors, Value Chain Opportunities and Constraints.

INTRODUCTION

African economies are increasingly confronted with changing food and commodity markets, due to globalization, economic liberalization and urbanization (Heike, 2005). As a result, consumer preferences change. This poses new opportunities but also challenges to small-scale producers, traders and processors along agricultural value chains. To address this situation, development agencies, donors and NGOs are placing more emphasis on enabling farmers to increase their level of competitiveness, to produce for an identified market, rather than trying to sell what they have already produced and also seeking new market opportunities that offer higher levels of income. Such goals can be achieved through better economic coordination and institutional linkages. Farmer organizations can play a key role of organizing economic activities beyond local boundaries. They can build up relationships with various chain actors and securing commitments from various actors to cooperate on mutually beneficial actions and investments and thus create value chains (Bezabih & Mengistu, 2011).

The cultivation of different crops around homestead was regarded as a strategy of many high land farmers to diversify their subsistence and cash needs. Diversification of crops also helps to stabilize yield and income and avoid risk of crop loss from diseases and pests incidences, and market price fluctuation and hence food security in a given region. Enset (Enset ventricosum) is one of the indigenous root crops widely cultivated for its food and fiber values in south and southwest highlands of Ethiopia (Taye, 1996). Enset was previously cultivated only in the south and southwestern parts of Ethiopia, but recurrent droughts have led to the expansion of enset cultivation to other parts of the country (Brandt et al. 1997). It is one of the most drought tolerant crops sustaining the lives of many Ethiopians during drought periods. It has been suggested that the Ethiopian population who depended upon enset as a staple food have never suffered from famine, even during the Ethiopia's tragic drought and famine prone decades of the 1970s and 1980s. Several authors have noted that enset tolerates short season drought that have seriously damaged annual crops, especially cereals (Bayush, 1991; Shigeta, 1990).

Enset (Ensete ventricosum Welw. Cheesman) is a perennial crop belonging to the Musaceae family. It has been used as a food crop for thousands of years only in Ethiopia, where it was once domesticated. It is an important staple crop for over 20 per cent of the Ethiopian population living in the southern and southwestern parts of the country (Brandt et al.1997). Enset has multipurpose uses and nothing will be left from the plant and can be a dependable source of income. Thus, farmers in enset growing areas describe the importance of enset by saying that it is everything for us our food, cloths, houses; cattle feed and plates (Birmeta et al.2004). The major foods obtained from enset are kocho, bulla and amicho. Kocho is the bulk of the fermented starch obtained from the mixture of decorticated (scraped) leaf sheaths and grated corm (underground stem base). Bulla is the small water-soluble starchy product that may be separated from kocho during

processing by squeezing and decanting the liquid. Amicho is the fleshly inner portion of the enset corm, which may be cooked and eaten separately, tasting similar to potato.

STATEMENT OF THE PROBLEM

Value chain analysis is essential to understand relationships and linkages among buyers and suppliers and a range of market actors in between (Wenz and Bokelmann, 2011). Bammann (2007) illustrated that the value chain concept helps to trace product flows; show value addition at different stages; identify key actors and their relationships in the chain; identify enterprises that contribute to production, services and required institutional support; identify bottlenecks preventing progress; provide a framework for sector-specific action; identifies strategy to help local enterprises to compete and to improve earning opportunities and identify relevant stakeholders for program planning. Enset value chain analysis plays an important role in the livelihood and food security of the densely populated area of Homi Hane and Waldo Hine where there is an increasing trend of low input supply, traditional enset farming system and traditional marketing practices. Recently, the demand for production and consumption of enset is increasing tremendously in the study area (Dire Enchini District). The main reasons for the existing demand are availability of conducive soil characteristics for enset production and climatic conditions, search for alternative cereal crop for consumption, soil conservation, and its leaf need for livestock fodder.

Even though there is a huge demand and potential of agro-ecology for enset production in the study area, the farmers are still facing different problems related to, input supply, modern enset farming system, market information for selling enset and accesses to market. Therefore, this entails a need for more comprehensive study which rigorously examines enset value chain analysis in the study area. There is no comprehensive study made so far to understand the whole enset value chain analysis in the study area. This is the first study of its kind which analyzes the entire value chain from input supplier to the consumer. This study has the benefit of an integrated/holistic approach that tries to analyze the dynamics of input supply, producer, access to marketing information, access to market and consumption of enset in the study area. Through such an approach, potential areas or entry points can be identified further to upgrade value chain analysis. It also provides a holistic picture of existing challenges and opportunities in the enset value chain, identifying and taking appropriate intervention measures for improvement.

OBJECTIVES

To understand opportunities and constraints in addressing the existing problems and to increase competitive advantage of the enset production in the area, this study was designed with the following specific objectives.

1.   To identify the major enset value chain actors in the study area.
2.   To assess the roles of enset value chain actors in the study area.
3.   To study the linkages among various actors in the study area.
4.   To identify the opportunities in the enset value chain in the study area.
5.   To identify the constraints in the enset value chain in the selected area.

RESEARCH QUESTIONS

The study tries to answer the following questions:

1.   Who are the actors involved in the value chain processes and what they actually do?
2.   What does enset value chain look like and who is more benefiting from enset value chain?
3.   What are the key opportunities in enset value chain in the study area?
4.   What are the constraints in the enset value chain?

SIGNIFICANCE OF THE STUDY

The study analyzes the entire enset value chain analysis from input supplier to the consumer. Therefore, the primary goal of this study was to assess and generate information on enset value chain analysis and identify the major enset value chain actors in the study area. The study also aimed to analyze the opportunities in enset value chain analysis in the study area and identify the constraints faced by enset value chain actors. The results of the study will be helpful to improve enet production and marketing practices for high value realization. Effective value chain management would minimize production cost and increase market efficiency, thereby enhancing the profitability of the enset farmers. The information generated will also help a number of organizations; research and development organizations, traders, producers, policy makers, extension service providers, to assess their activities and redesign their mode of operations and ultimately influence the design and implementation of policies and strategies.

RESEARCH METHODOLOGY

The study was conducted in Dire Enchini District, West Show Zone, Oromia Regional State, central part of Ethiopia. Enchini town is the capital city of Dire Enchini District and it is located 40 km south west of Ambo town. The district is located between 8° 1'N to 8° 46 N latitude and 37° 35' E to 37° 38'E longitude. The study area, Dire Enchini District, was selected purposively because of the potential for enset production and there is no research conducted before on the related issues. The area under enset cultivation was 3,610 hectares (District Agricultural office Report, 2014). In the second stage, out of 18 kebeles and 1town kebele in the district, two of them namely Homi Hane and Waldo Hine were purposively selected based on the area under enset cultivation. Enset was cultivated in 210 hectares in Homi Hane and 190 hectares was covered by enset in Waldo Hine (WOARD, 2014). Then the sample respondents were stratified into male and female headed households. A total of 144 respondents were selected randomly using simple random sampling technique. In addition to 144 sample respondents, key informants were selected from the other value chain actors including; input suppliers, collectors, wholesalers, retailers, consumers and support services like; cooperatives and extension. Such key informants were selected at various levels using simple random sampling from selected kebeles. For the purpose of this study, 6 input suppliers, 6 collectors, 6 wholesalers, 12 retailers, 30 consumers and 14 persons from support services were selected. The input suppliers composed of: two cooperatives (one from each kebele), two experts from District agricultural office and the other two were private input suppliers. The data required for the study were collected from both primary and secondary data sources. Primary data were collected from main value chain actors such as farmers, collectors, wholesalers, retailers, consumers (household and institutions), and support services providers. For primary data collection, semi-structured interview schedule was used after pretesting. Pretesting was done to identify and avoid vague and sensitive questions. Attempt was made to train enumerators practically about how to approach respondents and collect the needed data. The primary data were collected using four development agents (enumerators) working in the district. They are hired and trained on how to conduct and approach the sample members. The researcher preferred development agents because they have intimate relationship with enset growing farmers.

Secondary information that could supplement the primary data was collected from published and unpublished documents obtained from different government organizations. To make the communication easier during collection of data from the respondent members, the interview schedule was prepared in English and translated to Afan Oromo before final administration. The schedule was checked for clarity and consistency. This was followed by coding of answers and data entry into the computer for analysis. Analysis of the data was done by using Statistical Package for Social Science (SPSS version 20) computer package. Descriptive statistics was used to compare and analyze the collected data.

RESULTS AND DISCUSSION

ENSET VALUE CHAIN ACTORS AND THEIR ROLES

According to McCormick and Schmitz (2001), the value chain visualizes the flow of the product from production to end consumer through various actors. It also helps to identify the different actors involved in the enset value chain and to understand their roles. Consequently, the value chain actors and their roles in Dire Encini District are depicted in Figure 1.

FIGURE 1: ENSET VALUE CHAIN ACTORS AND THEIR ROLES
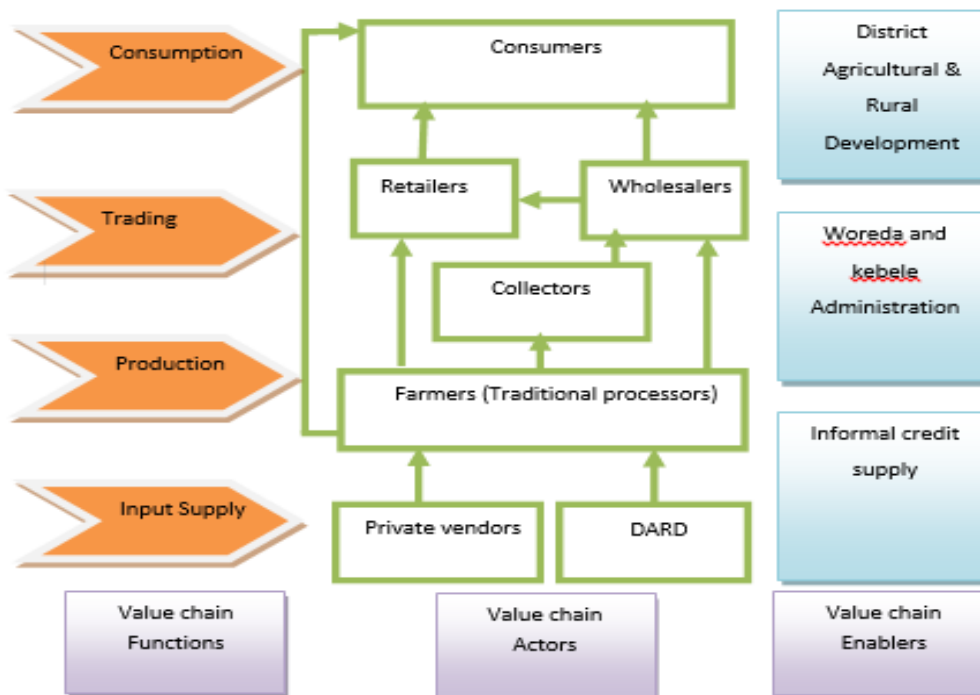
Source: Computed from Field Survey (2015)

Actors are those involved in producing, processing, trading or consuming a particular agricultural product. They include direct actors who are commercially involved in the chain (input suppliers, producers, traders, retailers, consumers) and indirect actors who provide financial or non-financial support services, such as bankers and credit agencies, business service providers, government, researchers and Extension service.

A.   INPUT SUPPLIERS

At this stage of the value chain, there are many actors who are involved directly or indirectly in agricultural input supply. In the study area, DARD and private input suppliers are the main sources of input supply. The survey results implied that farm implements are supplied by private vendors as well as through the Agricultural office. Regarding fertilizers, all farmers used only animal manure, house wastes and residues which could be obtained from their own livestock backyard. In the study area, farmers did not use chemical fertilizers, like DAP, Urea for enset cultivation. Hence, the cost of inorganic fertilizers was nil.

DISTRICT OF AGRICULTURE AND RURAL DEVELOPMENT OFFICE (DARD)

Regarding the delivery of inputs like farm tools, technical support or advice, district office of Agriculture and Rural Development was playing a great role. Both Homi Hane and Waldo Hine kebeles have primary cooperatives. But the cooperatives did not supply inputs for enset growers. The input used for enset cultivation was supplied by DARD. Development agents are the main players in input supply activities at grass root level. They also played facilitation role in collecting farmers input requirement or demand, submitting it to DARD and input distribution.

PRIVATE INPUT SUPPLIERS

Inputs such as improved enset variety, credit service, technologies, among others had been obtained from different sources. According to the respondents surveyed and key informant interview, private input suppliers are playing an important role by supplying agricultural inputs used for enset cultivation. The private vendors supplied ploughing materials, hand hoe, and sickles for enset cultivation.

B.   PRODUCTION STAGE

Enset producers are the major actors who perform most of the value chain functions starting from farm land preparation on their farms or procurement of the inputs from other sources to post harvest handling and marketing. The major value chain functions that enset producers performed include ploughing, planting, weeding, controlling pest/disease, harvesting and post-harvest handling. Conducive agro-climatic conditions make enset production highly effective and competitive and provide vast opportunities in study area. Unfortunately, as noted by key informants, these opportunities have not been exploited by the farmers due to the lower price they received for their produce in the market. The survey results showed that all farmers in the study area used traditional farming techniques and local variety of enset. On an average 1.25 ha of land was held per household. Labour was used for enset cultivation from land preparation to harvesting of crops. The family labour force (owned labour) consisted of the highest per cent in enset cultivation. Members of household have different responsibility for different enset farming operations. For example in the study area land preparation and planting enset were mostly handled by men. However, females performed majority of enset farm operations like weeding, harvesting, processing and cooking.

C.   PROCESSING

Processing is the act of converting enset into enset products such as Kocho, Bulla and Amicho. According to the respondents and key informant interview, enset processing is labour intensive, and is usually done by women using traditional tools, although men help with cutting and harvesting the mature plant. Processing involves: Cutting and harvesting the mature plant, digging and lining a pit for fermenting the pulverized corm or root, scrapping (decorticating) the outer sheaths of the stem to remove edible parts.

D.   MARKETING STAGE

Enset products kocho, bula, and enset by product fibres and enset leaves are traded within and outside the district. These products are traded mainly in Guder town, Ambo town, and Addis Ababa city. The results of the household survey showed that the average quantity of kocho produced per household during 2014/2015 production season was 11.88 Qt (as depicted in Table 1). The average quantity of kocho consumed and sold was 5.38 and 6.21 at per house hold respectively in the study area.

INTERNATIONAL JOURNAL OF RESEARCH IN COMPUTER APPLICATION & MANAGEMENT   9

A Monthly Double-Blind Peer Reviewed (Refereed/Juried) Open Access International e-Journal - Included in the International Serial Directories

http://ijrcm.org.in/

TABLE 1: AVERAGE AMOUNT OF KOCHO PRODUCED, CONSUMED AND SOLD AT HOUSEHOLD LEVEL

Descriptive stat.	Total amount of kocho produced (Qt)	Total amount of kocho consumed (Qt)	Total amount of kocho sold (Qt)
Mean	11.88	5.38	6.21
Standard Deviation	4.37	2.61	3.93

Source: Computed from Field Survey (2015)

The results of the household survey showed that the average quantity of bulla produced per household during 2014/2015 production season in the study area was 9.78 qt as depicted in Table 2. The average quantity of bulla consumed and sold was 1.62 and 5.6 at per house hold respectively in the study area. This implied that the largest proportion of bulla was sold to the market respectively in the study area.

TABLE 2: AVERAGE AMOUNT OF BULLA PRODUCED, CONSUMED AND SOLD AT HOUSEHOLD LEVEL

Descriptive measures	Total amount of Bulla produced (Qt)	Total amount of Bulla consumed (Qt)	Total amount of Bulla sold (Qt)
Mean	9.78	1.62	5.6
Standard Deviation	3.26	0.93	2.64

Source: Computed from Field Survey (2015)

E. COLLECTORS

Local collectors are those who collected enset product from farmers in village markets and from farms for the purpose of reselling it to wholesalers, retailers and consumers. They use their financial resources and their local knowledge to gather enset products from the surrounding area. Collectors are one of the actors in the enset value chain in the study area. According to the survey, there are few local collectors in the study area who are responsible for trading of kocho and bulla from production areas to wholesalers. Local collectors bought the enset products in large sacks. Then repacked in small sacks, transported and sold to wholesalers.

F. WHOLESALERS

Wholesalers are mainly involved in buying enset from collectors and producers in larger volume and supplied them to retailers and consumers. They also stored the product, usually for a maximum of two (2) months. Survey results indicate that wholesalers were the main buyers of enset products in the study area. They have better storage, transport and communication access than other traders.

G. RETAILERS

Retailers are key actors in enset value chain in the study area. They are the last link in the value chain connecting the consumers. In the study area, retailers mostly bought from wholesalers and sold to consumers. Sometimes retailers directly bought from the producers also. Consumers usually buy the product from retailers as retailers offer according to the requirement and purchasing power of the buyers. It was observed that during the market survey retailers sold kocho, bulla, enset leaf and enset fiber. Amicho was not sold by retailers in the area.

H. CONSUMERS

Consumers are those purchasing the products for consumption. Enset consumers are of two types; rural and urban consumers. The former include producer farmers who consume themselves and urban consumers are those who live in the district town. Urban consumers purchased enset product directly from producers, wholesalers, and retailers. Majority of the consumers purchased from retailers. Farmers also form a important segment of the rural consumers since they consumed part of their produces. Among the total sample of respondents all were found to use enset products for consumption.

ACTORS' LINKAGE

Linkages are defined as a business relationship between two parties of the value chain and could be formal and informal. Linkage analysis involves not only identifying which organizations and actors are linked with one another but also identifies the reasons for those linkages and whether the linkages are beneficial or not. The type of linkage in the study area was mostly informal type mainly among supportive actors in the value chain. There were no formal and structured linkage mechanisms in the study area. It was evident from the table that majority of the farmers (90.97%) had no linkage with other actors. Only 9.03 per cent had informal linkage with other actors. As noted by sample respondents and key informants there was poor horizontal linkage types; between producer, input suppliers, wholesalers, retailers, local enset processer and consumers. Regarding vertical linkage, there was no vertical linkage among value chain actors directly involved in enset value chain in the area. It was observed from the study that various reasons were mentioned as linkage constraints, specifically; lack of understanding the benefit of linkage, lack of responsible body who is working on facilitation of linkage among the actors, lack of budget for giving training to producers and actors about linkage, lack of institutional support to create linkage, etc.

VALUE CHAIN GOVERNANCE

Value chain governance is the most important value chain actor playing facilitation role to determine the flow of products and level of prices. In the study area, the wholesalers in different markets were well networked but their linkage was informal. For Example Kocho and Bulla wholesalers in Dire Enchini district have network (telephone communication) with wholesalers in Guder, and wholesalers in Guder also have network (telephone communication) with Addis Ababa wholesalers. These traders exchanged information on enset product prices, local supply situation and the prospects of harvest potential of the product in their area. Then, they agree on the price at which they have to buy from the producers. Except this networking and business relation, there was no formal collateral when the transaction takes place.

The smallholder farmers are not organized and are not governing the value chain. Hence, they are price takers and hardly negotiate the price; otherwise the product could not sell. The major source of market information was fellow farmers who sold enset product during the previous market days. The use of mobile is increasing in the study area; this facilitated in getting information on market price from the wholesalers and fellow farmers. Access to television was very much limited in the study area. Also the farmers have not listened to the information aired through radio.

MARKETING CHANNELS

Enset product market channels connect producers, traders (local collectors, wholesalers and retailers), and consumers as shown in figure 2. The starting point in the enset product market channel was producers. The final users of the products were the consumers. In the study area, five channels have been identified in the enset value chain analysis. Enset products passed through various channels until it reaches the consumers.

FIGURE 2: ENSET PRODUCT MARKETING CHANNELS
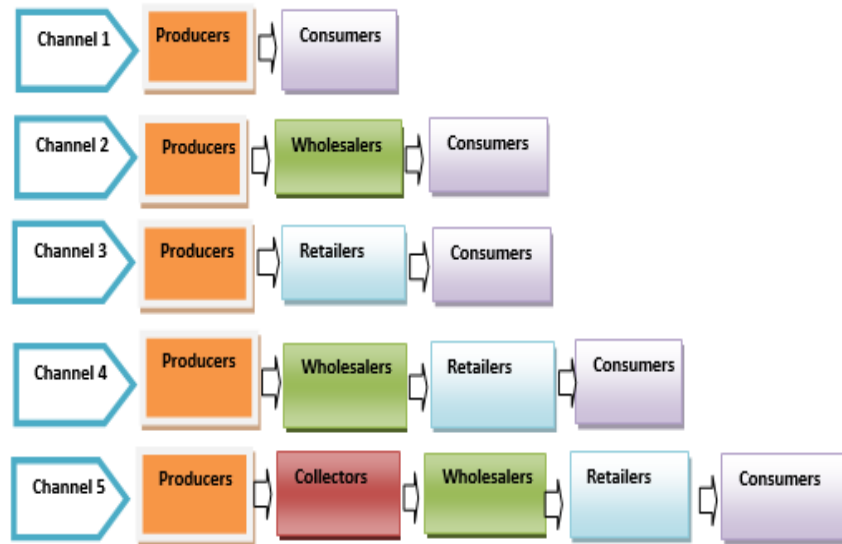
Source: Computed from Field Survey (2015)

➤ The first channel was the shortest channel in which producers directly sell enset products to the consumers. This occurs when the farmer brings small quantity of the products to market and when the farm is closer to the district town.

➤ In the second channel, producers sell enset products directly to the wholesaler, and in turn the wholesaler sells to the consumers by adding value on the price of the producers.

➤ In the third channel, producers supply enset products directly to retailers and in turn the retailers sell to consumers by adding some value in the price of producers.

➤ The fourth channel is the most common type of enset product market channel, where producers directly supply enset products to the wholesaler, wholesaler sells to the retailers by adding some value on the price of producers, and retailers sell to the consumers by adding value on the price of the wholesaler.

➤ In the fifth channel, producers directly supply enset products to local collectors, and in turn the local collectors sell enset products to wholesalers by adding some margin on the price they paid to the farmers, wholesaler sells to the retailers by adding some value on the price of local collectors, retailers sells to the consumers by adding value on the price of wholesaler.

PRICE STRUCTURE AND COST ANALYSIS -MARKUP COSTS

It was observed from the study that bulla and kocho has five marketing channels. The producers did not sell amicho in the market. They used amicho for their own consumption. The other non- food enset products like fiber, leaves, rope and mats were directly sold to the user.

Channel 1: The producers did all the work for producing kocho and transporting to markets for selling directly to consumers. The producers had the highest share (89.55 %) in channel 1 for kocho and 73.71 per cent for bulla.

FIGURE 3: VALUE CHAIN 1
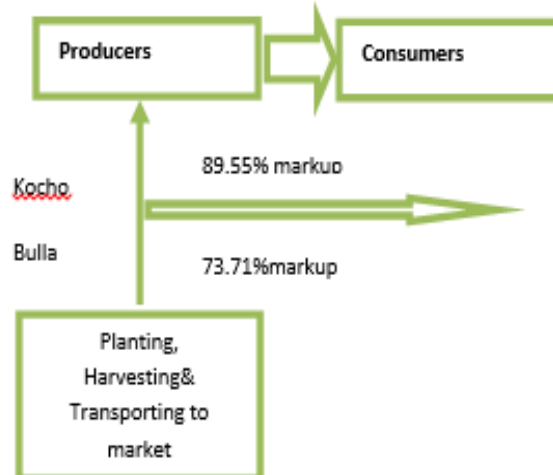
Source: Computed from Field Survey (2015)

Channel 2: Wholesalers bought kocho from producers for sale. Producers added a value of 36.89 per cent for kocho and 41.34 per cent for bulla. Wholesaler added a value of 63.11 per cent for kocho and 58.66 per cent for bulla. In this case, wholesaler earned higher profit since they sold the products directly to the consumers.

FIGURE 4: VALUE CHAIN 2
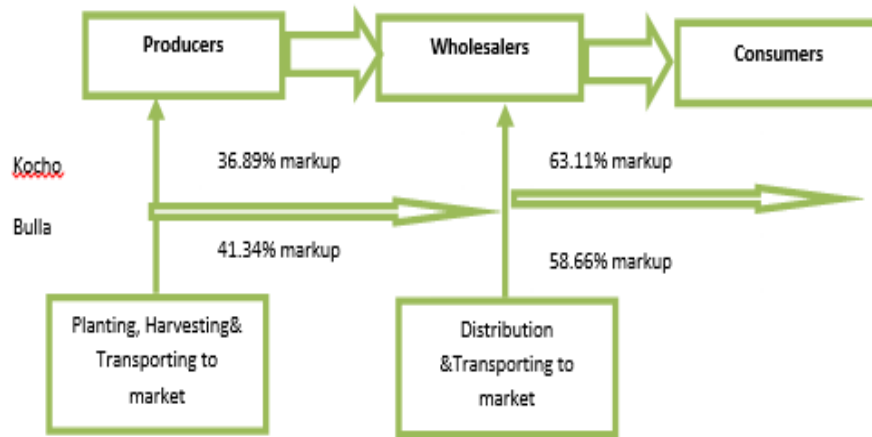
Source: Computed from Field Survey (2015)

Channel 3: The producers sold the product directly to retailers. In VC3 (Sell to retailers Chain), retailers bought kocho brought to them for sale by the producers. Retailers added a value of 47.61 per cent for kocho and 48.02 per cent for bulla. In this channel the producers earned high profit than the previous channel (channel 2) because they sold the products directly to the retailers.

FIGURE 5: VALUE CHAIN 3
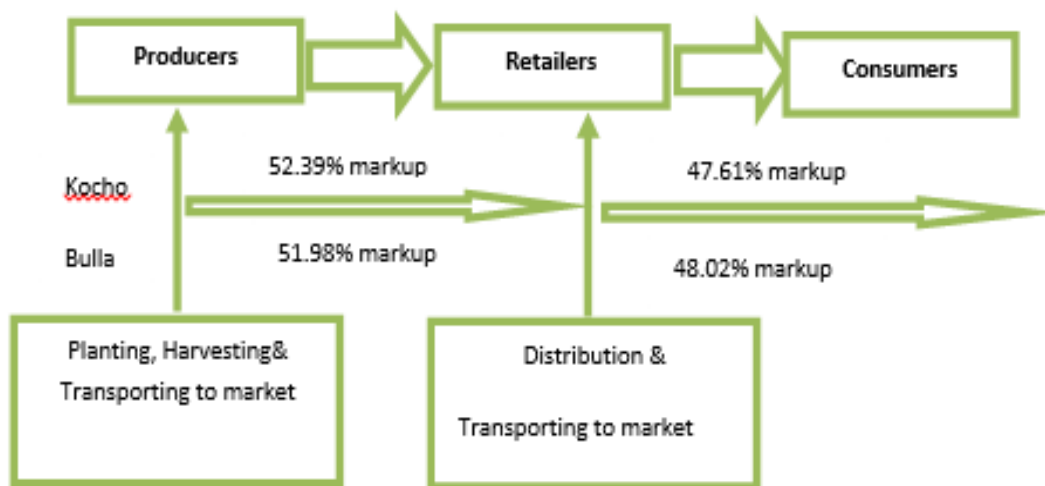
Source: Computed from Field Survey (2015)

The chain length was increased in VC4 (Sell to WH Chain) with 2 intermediaries. It is illustrated in Figure 4.16. Producers added a value of 27.63 per cent for kocho and 29.92 per cent for bulla. Wholesaler added a value of 47.25 per cent for kocho and 42.45 per cent for bulla and retailers added a value of 25.12 per cent for kocho and 27.64 per cent for bulla. In this case, wholesaler earned higher profit since they bought directly from the producers.

FIGURE 6: VALUE CHAIN 4
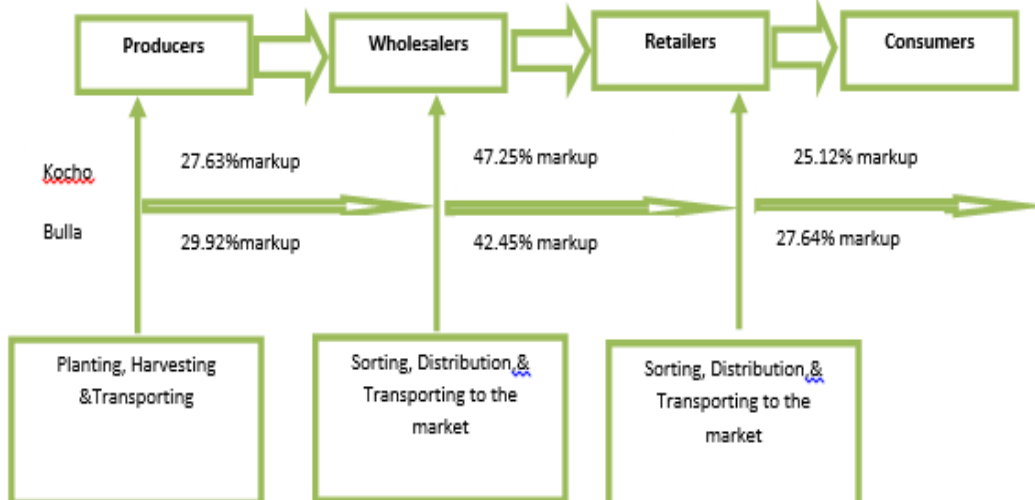
Source: Computed from Field Survey (2015)

The chain length was further increased in VC5 (Sell to collector Chain) with 3 intermediaries. Producers added a value 22.24 per cent for kocho and 25.45 per cent for bulla. Collectors added a value of 19.35 per cent for kocho and 14.94 per cent for bulla. The wholesalers added a value of 38.19 per cent for kocho and 36.10 per cent for bulla. The retailers added a value of 20.22 per cent for kocho and 23.51 per cent for bulla. In this case the highest profit was earned by wholesaler, due to small operational cost. Producers, collectors and retailers are earned relatively lower profit.

FIGURE 7: VALUE CHAIN 5
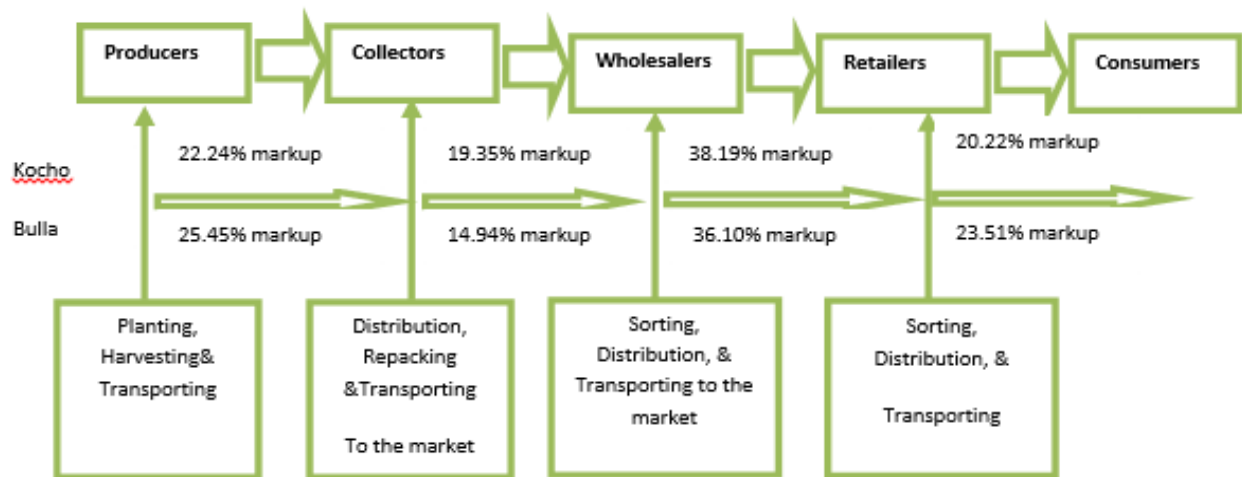
Source: Computed from Field Survey (2015)

OPPORTUNITIES IN THE ENSET VALUE CHAIN ANALYSIS

1. FAVORABLE LAND AND CLIMATIC CONDITION

There exists favorable climate and fertile land for the production of enset. The survey results showed that all the respondents (100%) had mentioned the availability of favorable land with high fertile soil and climatic condition as an opportunity to grow enset in the area. The key informants also revealed that the soils in the area are fertile and enset producer farmers do not apply fertilizer and they are free of fertilizer cost. The area also has favorable environmental conditions for enset production. It has an altitude ranging between 2200 to 3023 m.a.s.l. The annual temperature ranged between 6°C and 24°C, and annual rainfall between 100mm – 1800mm which is appropriate for enset production.

2. PRESENCE OF HIGH CONSUMER DEMAND

Enset producers were not using improved enset variety and used traditional farming system in the area. There was high consumption of enset products in the study area and neighboring areas. There was also growing demand for food self-sufficiency and food security in the area. In the area there is an opportunity for enset producers to use improved varieties and increase the income to meet the growing demand.

3. SUSTAINABLE SALES OF ENSET PRODUCT

Enset plant is able to withstand or quickly recover from difficult conditions (drought and climate changes) and can be stored for long periods. Also it can be harvested at any time of the year so that the product is available for consumption throughout the year.

4. HIGH PRODUCTIVITY POTENTIAL OF ENSET

The carrying capacity of enset crop was higher as compared to the carrying capacity of other cereals and pulse crops. Thie indicated that enset plant is extremely important over cereal and other crops to assure food and material needs of the community in the study area. As it was observed from the study area, yield of enset crop per unit area was high as compared to cereals and pulse crops. Under normal condition, the food security of the study area was self-sufficient due to the high enset production throughout the year. The high yield from small plot is one of the best opportunities for the producer farmers and for those who has small area of land. Ghimiray et.al (2007) confirms that higher yield potential is considered as an important factor particularly for farmers' innovation not only because it provides food security at household level but also because surplus production can be sold to generate cash for other expenditure.

5. MARKET AVAILABILITY (CLOSENESS OF DISTRICT TO MARKET)

The district is located 28 km from Toke kutaye district (Guder town), 40 km from Ambo town and 152 Km from Addis Ababa city. The district geographical location nearness has better advantage to the town and cities like Guder, Ambo, and Addis Ababa and was one of the most important opportunity for the enset producer farmer to sell their products (Bulla, Kocho, Amicho, Fiber and fresh enset leaf) as well. It is also the most important opportunity for the traders (retailer and wholesaler) to easily buy the enset product from the district market of the study area without much transportation cost.

6. AVAILABILITY OF BASIC INFRASTRUCTURE

Regarding infrastructure development and availability in the area, the district has all weather road. This has created an opportunity to transport and supply enset products to the market. The surveyed district also has infrastructure facilities like electricity and telecommunication.

CONSTRAINTS IN THE ENSET VALUE CHAIN

1. PRODUCTION

Enset farming systems is a major source of livelihood for all the respondents in the study area. The identified production constraints were lack of: improved varieties, appropriate agronomic practices, treatment of disease /insect pests, mechanically efficient processing devices, extension service, market information, linkage and storage practices.

2. DISEASE/ INSECT PESTS

Result of the survey indicated that bacterial wilt disease in enset was **a** very serious problem in all enset growing communities in the district. Farmers in the district have adopted the enset-based agricultural system and use the crop to feed their families as well as their livestock during dry season when there is scarcity of grass. The sustainability of enset production is threatened by enset bacterial wilt disease, since enset has high significance in day to day life of the whole peasant households cultivating this crop as staple food. According to discussions with the respondents and key informants, regular harvesting of leaves for animal feed and sale was a source of income. This was done especially by women. The spread of disease was through contaminated tools. In general, spread and incidence of enset bacterial wilt disease was more pronounced during the rainy season than in the dry season (Dereje, 1985). All interviewed farmers confirmed enset bacterial wilt disease was the major constraint for enset production in the study area.

3. IMPROVED VARIETIES

Lack of supply of improved enset variety was a major problem in the study area. All the respondents reported lack of access and supply of improved enset varieties as a major constraint. Due to lack of improved enset varieties, the farmers in the study area were forced to cultivate local enset varieties. Therefore, using local enset varieties was the main constraint for producers since this contributed to decrease in the yield of enset from time to time.

4. FARMERS MARKETING CONSTRAINTS

The majority of producer farmers identified that there were market problems in their area. The major enset marketing constraints were: low price for enset products, lack of modern storage facility, lack of transport facility, insufficient market information, non-involvement of cooperatives in the marketing of enset products and poor linkage.

5. TRADERS MARKETING CONSTRAINTS

The major marketing constraints mentioned by traders were: limited power of price setting, poor storage facility, problem in information flow, lack of sufficient working capital, high transportation costs, lack of institutional support with respect to credit and low product quality.

6. EXTENSION SERVICE

Lack of extension service was the major constraint in enset value chain analysis in the study area. No special farm advice specific to enset production, enset marketing, modern enset food preparation techniques, pre and post-harvest handling of enset and use of enset for animal fodder have been given in the study area. From the results given in table 4.26 it was observed that 57.64 per cent of farmer's did not access enset extension services for the last three years. Farmers in the study area reported that even the DAs did not have sufficient knowledge or skill regarding the enset production.

7. PACKAGING

All sampled respondents reported that enset product packaging in modern business context was not practiced in the study area. However, chain actors used dried leaf sheaths, sacks, and plastic materials for packaging of enset products from production to consumption center. From the key informant interview, it was informed that this style of packaging was the main source of post-harvest loss.

8. LAND

Shortage of land was the main problem of the farmers. It is reported in table 4.7 that 52.08 per cent of the respondents belonged to the land size category of 0.5-1 hectare. This situation directly reduces enset production and forces the farmers with limited production capacity.

9. INPUT SUPPLY

All the respondents had reported input supply as one of their major problems. It is also observed in table 4.17 that all the farmers used local enset varieties. The other main problem regarding input supply was the absence of involvement of cooperatives in supplying inputs required for enset production.

10. CREDIT AVAILABILITY

High interest rates and non-availability of the required amount of credit were the main constraints in the study area.

RECOMMENDATIONS

Based on the findings of the study, the following recommendations are made to improve enset value chain in the study area.

❖ More area specific information on enset cultivation and storage should be provided by the district agricultural office.
❖ Capacity building training programmes should be organized regularly to increase the knowledge and skill of DAs.
❖ Creating the linkage between value chain actors; both horizontal and vertical formal linkage should be taken in to consideration.
❖ Encouraging cooperative organizations to collect the enset products from the producers since cooperatives are not involved at present. This will help the farmers to get better price for their products.
❖ Scientific research focusing on control measures of enset bacterial wilt should be given priority in the study area
❖ Economical support should be given to farmers through formal credit agencies.
❖ Ensure the availability of improved enset varieties.
❖ Market information services have to be established or strengthened to provide information for producers.
❖ Developing the modern enset processing technology closer to production areas should be given attention as this could benefit the farmers for increasing the quality of the product.

CONCLUSION

In the study area there are many actors involved in enset value chain analysis, from input supply to the consumers playing different roles. They were: input suppliers, producers, collectors, wholesalers, retailers and consumers. Enset products produced in the study area passes through several intermediaries, like collectors, wholesalers and retailers, before reaching the consumers. The intermediate buyers purchased the enset products from the farmers at a lower price and they sold to the end user at a higher price. The linkage among value chain actors was to some extent weak and informal in type. Each of the kocho and bulla value chain actors added value to the product as the product was transferred from one actor to another. Traders (collectors, wholesalers, and retailers) operating expense was small in amount but the profit margin they got was more than the producer farmers. The traders simply bought from the farmers and sold to consumers. But they took high amount of share profit than the farmers who did all the works from producing enset to processing of enset. Encouraging cooperative organizations to collect the enset products from the producers since cooperatives are not involved at present. This will help the farmers to get better price for their products by avoiding the intermediaries. Developing the modern enset processing technology closer to production areas should be given attention as this could benefit the farmers for increasing the quality of the product.

REFERENCES

1. Bammann, H., (2007), *"Participatory value chain analysis for improved farmer incomes, employment opportunities and food security"*. Pacific Economic Bulletin, Vol. 22, No.3, p.125.
2. Bayush, T. (1991).*" Community Management of Crop Genetic Resources in the Enset Complex Farming System of Southern Ethiopia: a Case Study from Sidama Region."* Unpublished Masters' Degree Thesis. Agricultural University, Norway.
3. Bezabih Emana and Mengistu Nigussie. (2011), "Potato value chain Analysis and Development in Ethiopia case of Tigiry and SNNP Regions", International Potato Center (CIP-ETHIOPIA), Addis Ababa, Ethiopia.
4. Birmeta, G.,Nybom, H. and Bekele, E. (2004), *"Distinction between wild and cultivated enset (Enset ventricosum) gene pools in Ethiopia using RAPD markers", Hereditas,* Vol.140, No.2 : pp 139-148
5. Brandt,S.A.,Spring,A.,Hiebsch,C.,McCabe,S.T.,Endale,T.,Mulugeta,D.,Gizachew,W/M.Gebre,Y.,Shigeta,M. and Shiferaw,T. (1997), *"The'TreeAgainst Hunger '. Enset-based Agricultural systems in Ethiopia"*, American Association for the Advancement of Science: pp 56.
6. Dereje, A. (1985).*"Studies on the bacterial wilt of enset (Enset ventricosum) and prospect for its control"*. Ethiopian Journal of Agricultural science, Vol. 7, No.1: pp 1-14.
7. Ghimiray M., Wangdi K., Chhetri B.G., Bockel L. and Punjabi M. (2007). *"Rice Commodity Chain Analysis"*, FAO, Rome
8. Heike Hoeffler (2005), *"Promoting the Kenyan Potato Value Chain: Can Contract Farming Help Build Trust and Reduce Transaction Risks*?", Paper prepared for presentation at the 99th EAAE Seminar 'Trust and Risks in Business Networks, February 8-10, 2006, Bonn, Germany.
9. McCormick and Schmitz. (2001) *"Manual for Value Chain Research on Homemakers in the Garment Industry"*, Institute of Development Studies, University of Sussex, UK.
10. Shigeta, M.(1990) *"Folk in situ conservation of ensete (Ensete ventricosum [Welw.] E.E. Cheesman): towards the interpretation of indigenous agricultural science of the Ari, southwestern Ethiopia"*, African Studies Monographs, Vol. 10, No.3:pp 93-107.
11. Taye,B. (1996). "*An over view of enset research and the future technological needs for enhancing its production and utilization.* In Enset-based sustainable agriculture in Ethiopia (Tsedeke Abate, Clifton Hiebsch and Steve Brandet eds.), Proceedings of the first International Workshop on Enset. Dec 13-21 1993. IAR, Addis Ababa, Ethiopia.
12. Wenz, K. and W. Bokelmann, (2011). *"Incorporating value chain research and problem based learning into horticulture and agriculture study programs in Kenya and Ethiopia."* Humboldt-University Berlin, Faculty of Agriculture and Horticulture, Department of Agricultural Economics, Berlin, Germany.

ARCHITECTURAL REVIEW OF NEURAL NETWORK

KULBIR KAUR
PROFESSOR
DEPARTMENT OF COMPUTER SCIENCE
S.G.A.D COLLEGE
KHADOOR SAHIB

GAGANDEEP KAUR
PROFESSOR
DEPARTMENT OF COMPUTER SCIENCE
S.G.A.D COLLEGE
KHADOOR SAHIB

ABSTRACT

An Artificial Neural Network (ANN) is an information processing technology that is inspired by biological nervous systems(that is based on human body), such as the brain, process information. The key element of this technology is the novel structure of the information processing system. It is composed of a large number of highly interconnected neuron working in unison to solve specific problems. ANNs, like people, learn by example. An ANN is configured for a specific application, such as pattern recognition or data classification, through a learning process. Learning in biological systems involves adjustments to the synaptic connections that exist between the neurons. This is true of ANNs as well. This paper gives overview of Artificial Neural Network, architecture of ANN. It also explain some basic learning rule in ANN.

KEYWORDS

ANN, Neurons Multilayer, SRN.

INTRODUCTION

An ANN is basically approach of biological neuron. It have device with many input and one output. An ANN is composed of processing elements called or perceptronsor neuron organized in different ways to form the network's structure. An ANN consists of perceptrons. Each of the perceptrons receives inputs, processes inputs and delivers a single. Similar to biological neuron ANN have neuron which are artificial and receive input also from other element and after Input are weighted and added, result is transformed by transfer function in to output [1].

Some term based on neural model:-

Input:-the neuron responds to input, in this case coming from x1, x2, …, xn.

Output: -the neuron computes its output value, denoted here as f(net).

Weight: -the computation for f(net) takes the values of the inputs and multiplies each input by its corresponding weight

x1*w1 + x2*w2 + … + xn*wn

FIGURE 1: NEURAL MODEL
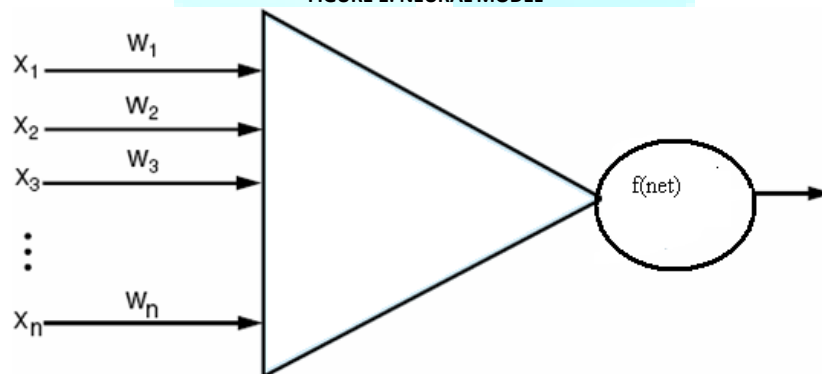
Weight may be positive (excitatory) or negative (inhibitory).

Threshold: - different types of neurons will use different activation functions with the simplest being if x1*w1 + x2*w2 + … + xn*wn>= t then f(net) = 1 else f(net) = -1

Checks each input symbol to see if it is above or below the threshold value (signals below threshold values are ignored).

Activation function:-Used to combine the neurons inputs and generate an output signal. Transfers function f may be a linear or nonlinear function of net input n.

Bias: - the bias b is much like a weight w,that has a constant input of 1.it can be omitted if not necessary .bias and weight are adjustable scalar parameter of neuron. They are adjustable by some learning rule so that the neuron input and output meets some special goal [2,4].

ADVANTAGES

1. Adaptive learning: An ability to learn how to do tasks based on the data given for training or initial experience.
2. Self-Organization: An ANN can create its own organization or representation of the information it receives during learning time.
3. Real Time Operation: ANN computations may be carried out in parallel, and special hardware devices are being designed and manufactured which take advantage of this capability.
4. Pattern recognition is a powerful technique for harnessing the information in the data and generalizing about it. Neural nets learn to recognize the patterns which exist in the data set.
5. The system is developed through learning rather than programming.. Neural nets teach themselves the patterns in the data freeing the analyst for more interesting work.
6. Neural networks are flexible in a changing environment. Although neural networks may take some time to learn a sudden drastic change they are excellent at adapting to constantly changing information.

INTERNATIONAL JOURNAL OF RESEARCH IN COMPUTER APPLICATION & MANAGEMENT   15

A Monthly Double-Blind Peer Reviewed (Refereed/Juried) Open Access International e-Journal - Included in the International Serial Directories

http://ijrcm.org.in/

7.   Neural networks can build informative models whenever conventional approaches fail. Because neural networks can handle very complex interactions they can easily model data which is too difficult to model with traditional approaches such as inferential statistics or programming logic.
8.   Performance of neural networks is at least as good as classical statistical modeling, and better on most problems. The neural networks build models that are more reflective of the structure of the data in significantly less time.

ARCHITECTURE OF NEURAL NETWORK
Architecture of ANN is based on requirement of problem or application:-
1. Single layer architecture
2. Multilayered architecture
3. Recurrent architecture
Architecture of neural network are by the three basic entities:
Model of processing element (neuron),
Model of interconnection and structures (network topology)
Model of learning rules(ways information is stored in network. [6]
1. SINGLE LAYER ARCHITECTURE
In single layer Architecture**,** figure the layer receives inputs is called input layer and output generated by output layer.

FIGURE 2: SINGLE LAYER MODEL
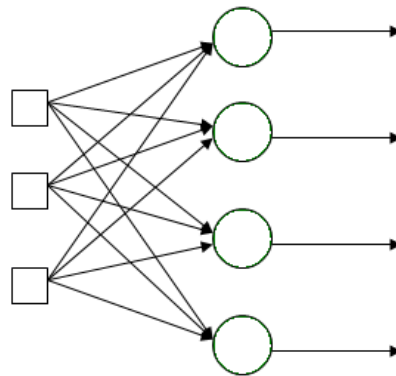
The perceptron was first proposed by Rosenblatt (1958) is a simple neuron that is used to classify its input into one of two categories. A perceptron uses a step function that returns +1 if weighted sum of its input $\geq$ 0 and -1 otherwise .Theperceptron is used for binary classification.
First train a perceptron for a classification task.
Find suitable weights in such a way that the training examples are correctly classified.
Geometrically try to find a hyper-plane that separates the examples of the two classes.The perceptron can only model linearly separable classes. When the two classes are not linearly separable, it may be desirable to obtain a linear separator that minimizes the mean squared error[3].
Given training examples of classes C_1, C_2 train the perceptron in such a way that:
If the output of the perceptron is +1 then the input is assigned to class C_1
If the output is -1 then the input is assigned to C_2

FIGURE 3: LINEAR SEPARABLE
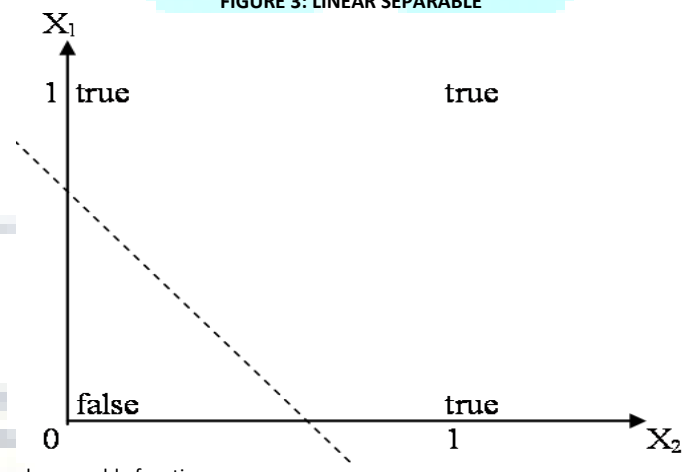
● The perceptron can only model linearly separable functions,
− Those functions which can be drawn in 2-dim graph and single straight line separates values in two part.
● Boolean functions given below are linearly separable:
− AND
− OR
− COMPLEMENT
● It cannot model XOR function as it is non linearly separable.
− When the two classes are not linearly separable, it may be desirable to obtain a linearseparator that minimizes the mean squared error.
2. MULTILAYER ARCHITECTURE
The second class of feed forward neural network it differs from layer network network. It is more general network architecture where arehidden layer between and output layer.

FIGURE 4: MULTILAYER ARCHITECTURE
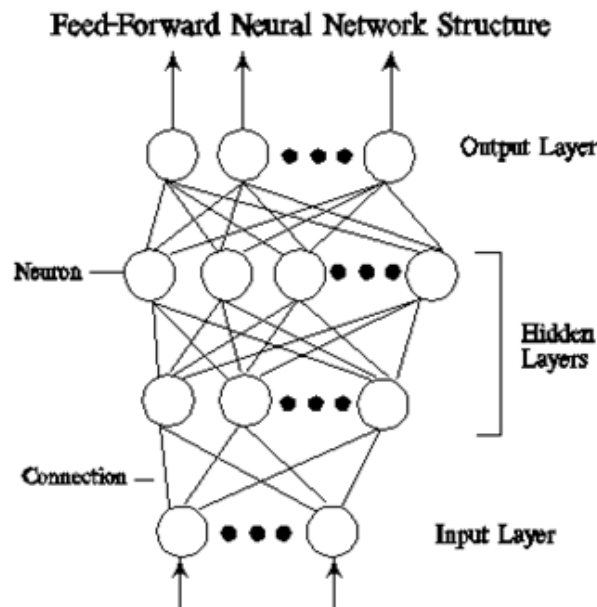
This architecture consistsof:-
• Source node (input)
• Hidden layer (one or more)
• Output layer

Concept of hidden layer: whose computation node is corresponding called hidden layer. Hidden layer node do not directly receive input. They send output to external environment. They also handle non separable problem[4].

Working of multilayer feed forward network: the source in input layer of network supply respective element of activation patterns. Inputsignal applied to neuron in second hidden layer. Output of second layer is input to third and so on. They are two types:-
•Fully connected
•Partially connected

Fully connected: -The neural network is said to be fully connected in the sense that every node in each layer of the network is connected to every other node in the adjacent forward layer. Shown in following figure:-

FIGURE 5: FULLY CONNECTEDMULTILAYER ARCHITECTURE
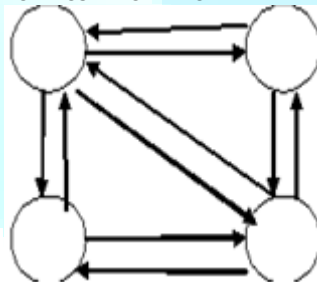
Partially connected:- some of the communication links missing from the network ,refer partially connected.

FIGURE 6: PARTIALLY CONNECTED MULTILAYER ARCHITECTURE
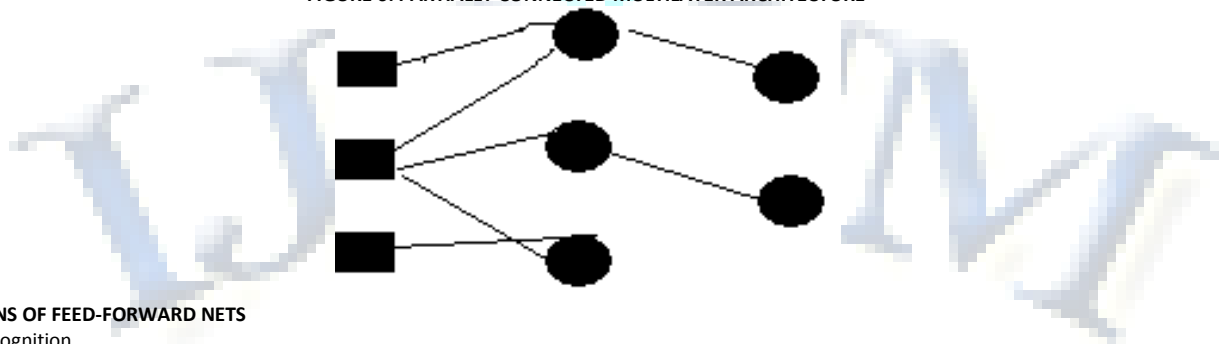
APPLICATIONS OF FEED-FORWARD NETS
• Pattern recognition
- Character recognition
- Face Recognition
• Sonar mine/rock recognition (Gorman &Sejnowksi)
- Navigation of a car (Pomerleau, 1989)
- Stock-market prediction
- Pronunciation (NETtalk)

3. RECURRENTARCHITECTURE
Some connections are present from a layer to the previous layers. Recurrent are those which are one or more feedbackloop. Feedback loop are two types:-
• Local
• Global

Recurrent architecture use concept of global.

FIGURE 7: RECURRENT ARCHITECTURE
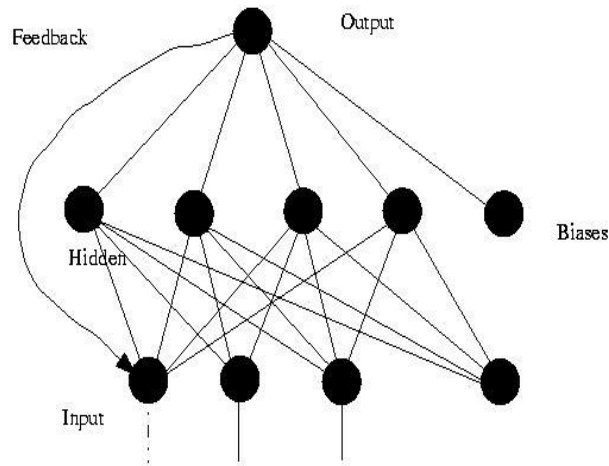
Basically two area of this network:-
• Associate memories
• Input output mapping network
Input output mapping network:-Input space of mapping network is mapped onto an output space. Thisnetwork responds temporary to an externally appliedinput signal.

FIGURE 8: SIMPLE RECURRENT NETWORK (SRN)
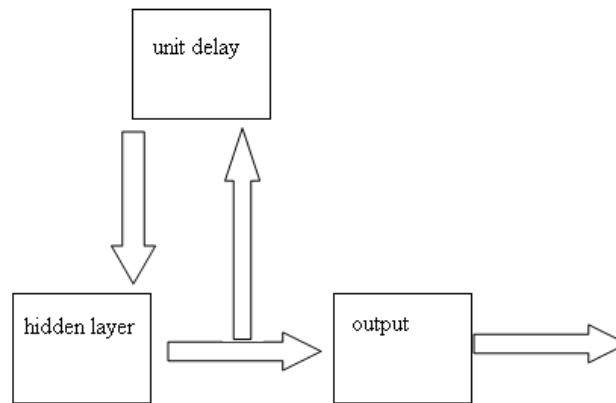
Hidden layer define stateOutput of hidden is feedback to input layer via unit delay .Input layer consist of catcatentation of feedback node and source.Network concected to external environment via source node

ASSOCIATIVE NETWORKS
There is no hierarchical arrangement.The connections can be bidirectional. An associate memory is a brain like distributed memory that learns by association.
Memory assocition takes one of two forms:-
Auto association
Hetro association

LEARNING
The ability of the neural network (NN) to learn from its environment and to improve its performance through learning.
-      The NN is stimulated by an environment
-      The NN undergoes changes in its free parameteres
-      The NN responds in a new way to the environment
Learning is a process by which the free parameters of a neural network are adapted through a process of stimulation by the environment in which the network is embedded. The type of the learning is determined by the manner in which the parameter changes take place. (Mendel & McMcLaren 1970).

FIVE BASIC LEARNING RULES
•   Error-correction learning <- optimum filtering
•   Memory-based learning <- memorizing the training data explicitly
•   Hebbian learning <- neurobiological
•   Competitive learning <- neurobiological
•   Boltzmann learning <- statistical mechanics

ERROR-CORRECTION LEARNING
Error-Correction Learning is based onerror signal = desired response – output signal
$e_k(n) = d_k(n) - y_k(n)$
where $e_k(n)$ actuates a control mechanism to make the output signal $y_k(n)$ come closer to the desired response $d_k(n)$ in step by step manner.
A cost function $\varepsilon(n) = \frac{1}{2}e^2_k(n)$ is the instantaneousvalue of the error energy.delta rule or Widrow-Hoff rule
$\Delta w_{kj}(n) = \eta\, e_k(n)\, x_j(n)$,
η is the learning rate parameter.The adjustment made to a synaptic weight of a neuron is proportional to the product of the error signal and the input signal of the synapse in question.
$w_{kj}(n+1) = w_{kj}(n) + \Delta w_{kj}(n)$
Memory-Based Learning:all of the past experiences are explicitly stored in a large memory of correctly classified input-output examples
$\{(x_i, d_i)\}^N_{i=1}$

Hebbian Learning: It is based on neurobiological

If two neurons on either side of synapse (connection) are activated simultaneously, then the strength of that synapse is selectively increased.

2. If two neurons on either side of a synapse are activated asynchronously, then that synapse is selectively weakened or eliminated.

A Hebbian synapse increases its strength with positively correlated presynaptic and postsynaptic signals, and decreases its strength when signals are either uncorrelated or negatively correlated.Note, that:

1. Synaptic weight w_{kj} is enhanced if the conditions $x_j > \bar{x}$ and $y_k > \bar{y}$ are both satisfied.

2. Synaptic weight w_{kj} is depressed if there is $x_j > \bar{x}$ and $y_k < \bar{y}$ or $y_k > \bar{y}$ and $x_j < \bar{x}$.

COMPETITIVE LEARNING

The output neurons of a neural network compete among themselves to become active.

- a set of neurons that are all the same (excepts for synaptic weights)
- a limit imposed on the strength of each neuron
- a mechanism that permits the neurons to compete -> a winner-takes-all

The standard competitive learning rule

$\Delta w_{kj} = \eta(x_j - w_{kj})$ if neuron k wins the competition

ss= 0 if neuron k loses the competition

Note. all the neurons in the network are constrained to have the same length
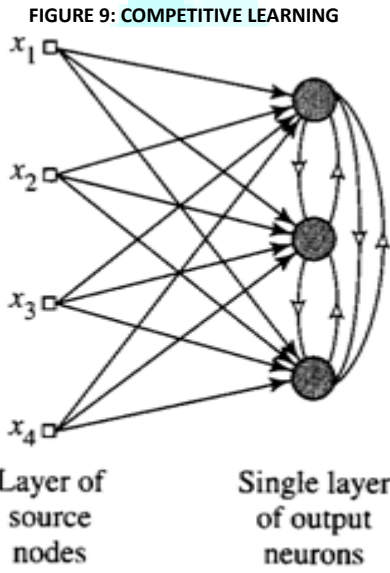
FIGURE 9: COMPETITIVE LEARNING

Layer of source nodes   Single layer of output neurons

1. BOLTZMANN LEARNING

The neurons constitute a recurrent structure and they operate in a binary manner. The machine is characterized by an energy function E.

$E = -\frac{1}{2}\Sigma_j\Sigma_k w_{kj}x_k x_j$, $j \neq k$

Machine operates by choosing a neuron at random then flipping the state of neuron k from state x_k to state $-x_k$ at some temperature T with probability

$P(x_k \rightarrow -x_k) = 1/(1+\exp(-\Delta E_k/T))$

It follow two condition:

Clamped condition: the visible neurons are all clamped onto specific states determined by the environment

Free-running condition: all the neurons (=visible and hidden) are allowed to operate freely .

The Boltzmann learning rule:

$\Delta w_{kj} = \eta(\rho^+_{kj} - \rho^-_{kj})$, $j \neq k$,

both ρ^+_{kj} and ρ^-_{kj} range in value from −1 to +1

TYPE OF LEARNING

Learning is the process of modifying the weights in order to produce a network that performs some function

Learning with Teacher->Supervised training

Learning without a Teacher->1. Reinforcement learning

2. UNSUPERVISED LEARNING

SUPERVISED TRAINING

In supervised training, both the inputs and the outputs are provided. The network then processes the inputs and compares its resulting outputs against the desired outputs. Errors are then propagated back through the system, causing the system to adjust the weights which control the network. This process occurs over and over as the weights are continually tweaked. The set of data which enables the training is called the "training set." During the training of a network the same set of data is processed many times as the connection weights are ever refined. The current commercial network development packages provide tools to monitor how well an artificial neural network is converging on the ability to predict the right answer.

INTERNATIONAL JOURNAL OF RESEARCH IN COMPUTER APPLICATION & MANAGEMENT   19

A Monthly Double-Blind Peer Reviewed (Refereed/Juried) Open Access International e-Journal - Included in the International Serial Directories

http://ijrcm.org.in/

FIGURE 10: SUPERVISED TRAINING
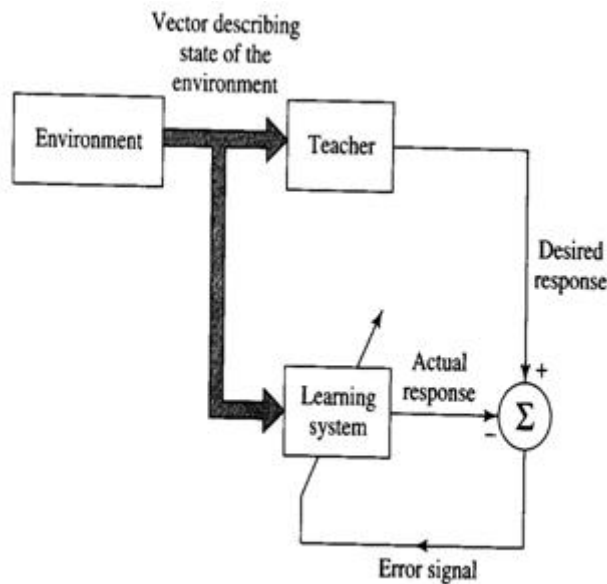
These tools allow the training process to go on for days, stopping only when the system reaches some statistically desired point, or accuracy. However, some networks never learn. This could be because the input data does not contain the specific information from which the desired output is derived.

Learning without a Teacher: no labeled examples available of the function to be learned.

Reinforcement learning

Unsupervised learning

UNSUPERVISED OR ADAPTIVE TRAINING

The other type of training is called unsupervised training. In unsupervised training, the network is provided with inputs but not with desired outputs. The system itself must then decide what features it will use to group the input data. This is often referred to as self-organization or adaption.

FIGURE 11: UNSUPERVISED OR ADAPTIVE TRAINING

Reinforcement learning: The learning of input-output mapping is performed through continued interaction with the environment in oder to minimize a scalar index of performance.

FIGURE 12: REINFORCEMENT LEARNING
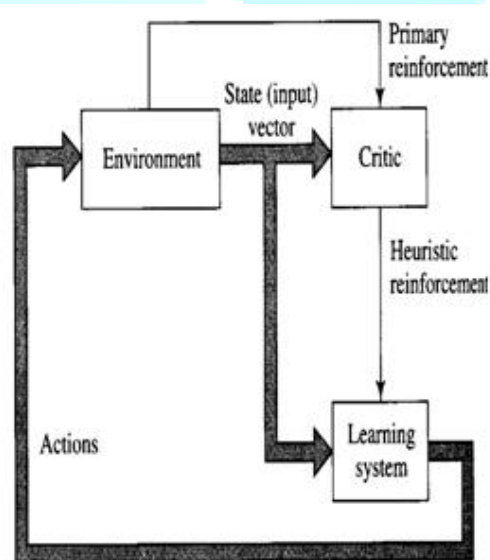
APPLICATIONS OF NEURAL NETWORKS

Character Recognition - The idea of character recognition has become very important as handheld devices like the Palm Pilot are becoming increasingly popular. Neural networks can be used to recognize handwritten characters.

Image Compression - Neural networks can receive and process vast amounts of information at once, making them useful in image compression. With the Internet explosion and more sites using more images on their sites, using neural networks for image compression is worth a look.

Stock Market Prediction - The day-to-day business of the stock market is extremely complicated. Many factors weigh in whether a given stock will go up or down on any given day. Since neural networks can examine a lot of information quickly and sort it all out, they can be used to predict stock prices.

Traveling Salesman's Problem - Interestingly enough, neural networks can solve the traveling salesman problem, but only to a certain degree of approximation.

Medicine, Electronic Nose, Security, and Loan Applications - These are some applications that are in their proof-of-concept stage, with the acception of a neural network that will decide whether or not to grant a loan, something that has already been used more successfully than many humans.

Miscellaneous Applications - These are some very interesting (albeit at times a little absurd) applications of neural networks.

CONCLUSION AND FUTURE WORK

In this paper, we discussed about the Artificial neural network,architecture and learningof ANN. There are various advantages of ANN over conventional approaches. In this we discuss architecture of ANN, and understand how choose on application.Depending on the nature of the application and the strength of the internal data patterns you can generally expect a network to train quite well. This applies to problems where the relationships may be quite dynamic or non-linear. Today, neural networks discussions are occurring everywhere. Their promise seems very bright as nature itself is the proof that this kind of thing works. Yet, its future, indeed the very key to the whole technology, lies in hardware development. Currently most neural network development is simply proving that the principal works. In future, we work on algorithms of learning

REFERENCES

1. Bradshaw, J.A., Carden, K.J., Riordan, D., 1991. Ecological —Applications Using a Novel Expert System Shell‖. Comp. Appl. Biosci. 7, 79–83.
2. Lippmann, R.P., 1987. An introduction to computing with neural nets. IEEE Accost. Speech Signal Process. Mag., April: 4-22.
3. N. Murata, S. Yoshizawa, and S. Amari, —Learning curves, model selection and complexity of neural networks,‖ in Advances in Neural Information Processing Systems 5, S. Jose Hanson, J. D. Cowan, and C. Lee Giles, ed. San Mateo, CA: Morgan Kaufmann, 1993, pp. 607-614
4. Ajith Abraham, "*Artificial Neural Networks*", Stillwater,OK, USA, 2005. [3]
5. Ugur HALICI, " *Artificial Neural Networks*", Chapter 1, ANKARA
6. Eldon Y. Li, " *Artificial Neural Networks and their Business Applications*", Taiwan, 1994.
7. Christos Stergiou and DimitriosSiganos, "*Neural Networks*".
8. Limitations and Disadvantages of Artificial Neural Network from website http://*www.ncbi.nlm.nih.gov/pubmed/8892489*
9. Image of a Neuron form website *http://transductions.net/ 2010/02/04/313/neurons/*
10. About Artificial Neural Network from website *http:// en.wikipedia.org/wiki/Artificial_neural_network*
11. RC Chakraborty, "*Fundamentals of Neural Networks*", myreaders.info/html/artificial_intelligence.html, june 01, 2010.
12. Haykin, S., *Neural Networks*, Prentice HallInternational Inc., 1999

EXPERIENTIAL BRANDING IN WONDERLA (VEEGALAND) AMUSEMENT PARK, KOCHI: THE ENHANCING ROLE OF GROUP ORIENTATION OF VISITORS

K.J. JAIMS
RESEARCH SCHOLAR
KUVEMPU UNIVERSITY
SHANKARGHATTA

BELAGAVI BAKKAPPA
PROFESSOR (MARKETING)
DAVANGERE UNIVERSITY
DAVANGERE

ABSTRACT

Customer-centric and customer-delighting organisations resort to Experiential Branding to differentiate themselves from competitors and to maintain relevance and price premiums. Experiential Branding is 'beneficially differentiating a product or service in somebody's mind by focusing on the totality of the experience, rather than focusing on the features, attributes and benefits of the product or service'. One of the best metrics to study Experiential Branding is to apply the Gallup's metric for customer engagement (three factors of rational satisfaction and four factors in pairs of emotional engagement) to firms known for consistently superior brand equity or customer reviews. There is hardly any research on Experiential Branding on Indian firms. Hence, this study has been done on Wonderla (Veegaland) amusement park. The objective of the research is to identify the factors contributing to the customer engagement and Experiential Branding practice in Wonderla. The three null hypotheses are: 1.The Gallup formula for customer engagement (three factors of rational satisfaction and eight factors of emotional attachment) does not operate in the Indian situation with respect to Wonderla (Veegaland) amusement park, 2. Experiential Branding and customer engagement practices of Wonderla do not give it differentiating advantages, and 3.Group orientation of the visitors to the park does not result in repeat visits. On the basis of sampling 476 representative customers of Veegaland on two weekdays and two weekends in October 2011, and analysing the data structures, we are factually able to reject the three null hypotheses and establish that the Gallup formula does operate in Wonderla, Kochi, and that customer engagement and Experiential Branding practices give it significant advantages, and that group orientations of the visitors result in repeat customers. When the three prominent groups (family, friends, and schools) are cross tabulated against repeat visits three or more times, and again cross tabulated against the age groups, it is clearly seen that group orientations significantly contribute to higher levels of repurchases. The strength of the group orientations emerges from the substantial synergy arising out of the engaged youngsters in supportive family-friends-school networks which generate and reflect positive word of mouth feedback on account of Experiential Branding by the amusement park.

KEYWORDS
branding, amusement park.

INTRODUCTION

Experiential Branding is subjectively impacting the customers with a total experience of the brand by taking care of all the occasions when they come in contact with the brand. It is defined (Bernstein, 2005) as 'beneficially differentiating a product or service in somebody's mind by focusing on the totality of the experience, rather than focusing on the features, attributes and benefits of the product or service'. Experiential branding is seen to be essential to survive and grow in the current day world of competition and commoditization. As products and services are copied and marketed relatively easily on similar features, attributes, benefits, and cheaper prices, exclusive relevance and differentiation are difficult to achieve. Bernstein (2003) explains how products and services win when the competition is taken to the realm of customer's relationship with the products/ services, into the total experience of the product at every customer touch point with them. On shifting the playing field from the product to the larger, more complex field of product experience, the product itself becomes multi-dimensional, and hence more difficult and costly for competitors to imitate.

The benefits of customer engagement (through Experiential Branding) are improved customer loyalty (86%), increased revenue (76%), increased profits (75%) and bigger market share (56%)(The Economist Intelligence Unit, 2007). The EIU global survey also found that the winning differentiator is no longer the product or the price, but the level of engagement – the degree to which the company succeeds in creating an intimate long-term relationship with the customer or external stakeholder.

Experiential Branding is a scantily researched area in India, and therefore, it has been worthwhile to survey and analyse the customer engagement practices in Wonderla (Veegaland) amusement park in Kochi, Kerala. Wonderla (originally started in 2000 as Veegaland- from the House of V Guard) theme park has been consistently rated as one of the best amusement parks in India and possibly Asia. It has created a reputation for delighting most of the visitors (young or old, male or female) to the park. Thus, it has been the appropriate organisation to study the Experiential Branding practices in the country.

REVIEW OF LITERATURE

We can trace the concept and practice of Experiential Banding to Brand Equity, which emerged in the 1980s (Hayes and Abernathy, 1980 and Feldwork, 1996). For proving the long-term value of advertising and other marketing investments, marketing needed financial metrics. The term 'brand equity' was then used to imply the brand's long-term customer franchise and the financial value of that franchise (Barwise, 1993). The Marketing Science Institute also complemented by declaring brand equity as a priority area for research in the late 80s which resulted in extensive publications in journals like the International Journal of Research and Marketing (1993), and the Journal of Marketing Research   (1994). Cutting through the plethora of definitions on brand equity, Aker (1991) defined it as 'the assets and liabilities linked to a brand, its name and symbol, that add to or subtract from the value provided by a product or service to a firm and/or to that firm's customers'. He categorized it into five: brand loyalty, name awareness, perceived quality, brand associations, and other proprietor assets.

Research on brand equity is now broadly based on four standpoints: consumer-based, financially-based, relationally based, and network-based (Tauber, 1988; Farquhar,1990; Biel,1992;Simon and Sullivan,1993;Keller, 1993). Consumer-based research highlights equity in terms of the strengths of consumers' attachments to the brand, and their associations and beliefs about the brand(Keller, 1993). Financially-based research focused on the overall financial value of the brand to the organization (Simon and Sullivan, 1993; Davis and Smith, 1998; Interbrand, 1992; Srivastava et al, 1998). The emerging area of research is relationship-based, on the value of the relational and experiential aspects of branding, where the organization is the primary determinant of brand equity (Berry, 2000; Gronroos, 2000). The field of experiential branding is largely an offshoot of this stream of research on brand equity. And finally, the network perspective posits that equity emerges not only from the end-customer, but also from broad relationships within the marketing system- co-branding, brand alliances, channel partners, and joint ventures- (Rao and Ruekert, 1994;Simonin and Ruth, 1998; Samu et al.,1999; Park et al.,1996). Part of theoretical substructure of experiential branding comes from the network-based idea of brand equity.

The International Experiential Marketing Association(ixma.org), and its interactive newsgroup, Experiential Forum (experientialforum.com) researched on the empirical success factors of focusing on the relational and network-based approaches of brand equity in the present decade. The Association and the Forum popularized the empirical success factors of experiential branding by taking up global studies (ixma.org and experientialforum.com, 2007). The research found that the most successful marketing tactic was some form of live brand experience (58.6%). Next in order were word of mouth (14.3%), online experience (10%), and product engagement/ sampling (8.56%).

The crucially significant study conducted in the area was published by the Gallup Organisation in the article: The Constant Customer (Fleming, Gallup Management Journal, June 17, 2001). The research established that 'customer satisfaction alone was not enough to predict the future behaviour of customers. Satisfaction scores measure only past experience. It is a rational assessment at a particular moment. It fails to capture either the customer's intentions- whether she would recommend the brand to others- or emotions. People stay faithful to brands that earn both their rational trust and their deeply felt affection'. The Gallup team came out with an eleven point customer engagement metric (CE11) which measures rational formulations of loyalty on three key factors (L3), and eight factors of emotional attachment (A8). The Loyalty factors are: (1) overall satisfaction, (2) intent to repurchase, and (3) intent to recommend.

Gallup developed the eight emotional attachment questions as paired indicators of four emotional states: confidence in a brand, belief in its integrity, pride in the brand, and passion for it. Gallup's finding is that customers develop emotional attachment to a brand in a cumulative way: customers who agreed strongly with the first two statements of confidence in a brand were more likely to agree with the next two on belief in its integrity, then pride, and ending in agreeing with the passion for it. The proprietary formula for customer engagement was thus developed: $L^3 + A^8 = CE^{11}$.

Traditionally, passion for a brand was associated with only a few items: cars, beer, and jewellery. When Gallup surveyed 3611 customers in six industries, using its CE11 metric, the findings were that across industries, the proportion of emotionally attached consumers is remarkably consistent. (Fleming, 2001). 'No matter what the industry, there is an emotional element to how a customer interacts with the brand. For example, in the case of South West Airlines, five times as many of its customers were fully engaged as were the customers of United Airlines. The same dynamic occurs across industries, including retailing, among competitors with similar prices and products. Each of the brand pairs in the study seems interchangeable from the point of view of the traditional customer satisfaction measures. But when emotional investment is considered, winners emerge regarding the likelihood of attracting lifelong customers' (Fleming, 2001).

Driving word of mouth advocacy is crucial for successes today (Keller Fay Group, 2007). It is seen as a top influence on purchase decisions, and more trustworthy than other forms of communication. In a survey by Keller Fay Group among executives in the USA, and the UK in March-April 2007, word of mouth recommendation is the number one purchase influencer for business decision makers. Top influences after word of mouth are sales force, events/conferences, tradeshows, and the internet. Word of mouth has twice the influence of advertising, press coverage and direct mail/ email. Executives talk 18% more, and about 32% more brands than typical consumers. Seventy five per cent of executive word of mouth happens face-to-face. Eighty six per cent of word of mouth is based on personal experience. The study patently brings out the importance of the influence of word of mouth in the BtoB space.

When it comes to literature on research on customer engagement management, and experiential branding in the Indian context, especially on the theme parks, and the online retail sector, it is non-existent. When the relevance and effectiveness of experiential branding have been proven, and the metrics available, it is only a natural corollary that the sectors in India have to be researched, the veracity in the Indian context found out, and the findings passed on to the practitioners, the business community and the academic world.

IMPORTANCE OF THE STUDY

The topic of Experiential Branding calls for consistently customer-centric and customer delighting organisations in India to be compared on the same yardsticks with those rare ones in the rest of the world. Wonderla amusement park in Kochi was selected on Management quality, reputation for top-class experience delivery at multi-faceted levels, and rave reviews by the visitors to the park. As the customers have to share their memories and experiences as truthfully and subtly as possible in an emotionally pleasant context, a two-hour window of opportunity was available in the park, from around 5 pm to 7 pm, when the customers would have been through with most of the rides and be fresh to pass on some of their experiences to the research investigators. It has been a rare survey conducted unobtrusively to test the influencing parameters of Experiential Branding.

STATEMENT OF THE PROBLEM

The problem statement can be converted into the following questions:
1.   How do we properly sample and study the engagement and experience levels of excited and busy customers?
2.   Which is the best approach to capturing the delight levels of the customers: during lunch break when only half of the rides would be over; before exiting when they are through with their park visit; after a week or so through an self-administered email questionnaire?
3.   Should we study the visitors on weekends alone, weekdays alone, or a combination of both on two typical weekends and two typical weekdays?
4.   Which are the analytical tools to use to the data structures to get to the meaningful findings?

OBJECTIVES

The main objective is to identify the factors responsible for the Experiential Branding and customer engagement practices in Wonderla (Veegaland) amusement park, Kochi.

HYPOTHESES

The null hypotheses are:
1.   The Gallup formula for customer engagement (three factors of rational satisfaction and eight factors of emotional attachment) does not operate in the Indian situation with respect to Wonderla (Veegaland) amusement park
2.   Experiential Branding and customer engagement practices of Wonderla do not give it differentiating advantages.
3.   Group orientation of the visitors to the park does not result in repeat visits.

RESEARCH METHODOLOGY

Wonderla (Veegaland) amusement park in Kochi attracts around 6000 to 9000 visitors every day. The sample has to match the visitor profiles, comprising tweens, teens, youngsters, middle-aged, and the older people. Accordingly, the stratified random sample was arrived at. On account of the peculiarity of the amusement park operations, and the movement behaviour of the visitors, the window of opportunity to interview them is around two hours from 5 pm to 7 pm. The interviewees could be only those who have around twenty to thirty minutes free time just before exit. Therefore, the convenient sampling was employed to meet the dynamic nature of visitor aggregations near the exit areas. In tune with the framework of visitor-mixes to be interviewed in a shifting window of opportunity, we employed sequential sampling to get the following break-up of the visitors of Wonderla (Veegaland):

TABLE 1: AGE GROUP AND GENDER MIX OF THE SAMPLE OF VISITORS INTERVIEWED AT WONDERLA (VEEGALAND) AMUSEMENT PARK, KOCHI IN OCT, 2011

		Gender		Total
		Male	Female	
Age Group	8-12	29	17	46
	13-19	44	100	144
	20-30	91	66	157
	31-50	62	35	97
	>50	18	14	32
Total		244	232	476

A structured non-disguised questionnaire was used by six to eight trained research investigators to interview the visitors.

The questionnaire shown in the Appendix had the elements from the Gallup study and the requisite demographic and classification data for the study.

Two typical weekdays (Friday in the second week of October, and Wednesday in the third week of Oct 2011) and two typical weekends (Sunday in the second week of October, and Saturday In the third week of Oct, 2011) were randomly selected. Debriefing was done at the end of the four days to properly sequentialise the sampling units and also to help in cleaning the filled in questionnaire. We used the IBM SPSS 19 programme to do the univariate and the multivariate analyses.

RESULTS AND DISCUSSION

The methodology of stratified random sampling based on age and gender groups had to be modified to sequential sampling, and convenience sampling, looking at the need for cutting down on the number of school children in the visitors' group. Debriefing was done at the end of day one for the modified methodology, and on day two and day three for getting cleaner data.

FINDINGS

More than 80% of the visitors gave a top rating of 7 or 6 to six of the factors and 79% of the respondents rated the remaining factor, Pride with 7 or 6.These ratings could be seen as an overwhelming acceptance of the applicability of the customer engagement metric to Wonderla amusement park. The strength of customer engagement and Experiential Branding in Wonderla could be seen in the ratings:

TABLE 2: RATINGS FOR OVERALL SATISFACTION

Likert Scale of 1 to 7; 7 showing highest, and 1 lowest		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	3	.6	.6	.6
	3	3	.6	.6	1.3
	4	7	1.5	1.5	2.7
	5	34	7.1	7.1	9.9
	6	**182**	**38.2**	**38.2**	48.1
	7	**247**	**51.9**	**51.9**	100.0
	Total	476	100.0	100.0	

TABLE 3: RATINGS FOR INTENT TO REPURCHASE

Likert Scale of 1 to 7; 7 showing highest, and 1 lowest		Frequency	Percent	Valid Percent	Cumulative Percent
	1	6	1.3	1.3	1.3
	2	11	2.3	2.3	3.6
	3	4	.8	.8	4.4
	4	7	1.5	1.5	5.9
	5	49	10.3	10.3	16.2
	6	166	34.9	34.9	51.1
	7	233	48.9	48.9	100.0
	Total	476	100.0	100.0	

TABLE 4: RATINGS FOR INTENT TO RECOMMEND

Likert Scale of 1 to 7; 7 showing highest, and 1 lowest		Frequency	Percent	Valid Percent	Cumulative Percent
	1	3	.6	.6	.6
	2	3	.6	.6	1.3
	3	4	.8	.8	2.1
	4	8	1.7	1.7	3.8
	5	41	8.6	8.6	12.4
	6	151	31.7	31.7	44.1
	7	266	55.9	55.9	100.0
	Total	476	100.0	100.0	

TABLE 5: RATINGS FOR CONFIDENCE IN THE BRAND

Likert Scale:1 lowest, 7 highest		Frequency	Percent	Valid Percent	Cumulative Percent
	1	1	.2	.2	.2
	2	3	.6	.6	.8
	3	8	1.7	1.7	2.5
	4	10	2.1	2.1	4.6
	5	59	12.4	12.4	17.1
	6	190	**39.9**	40.0	57.1
	7	204	**42.9**	42.9	100.0
	Total	475	99.8	100.0	
Missing	System	1	.2		
Total		476	100.0		

INTERNATIONAL JOURNAL OF RESEARCH IN COMPUTER APPLICATION & MANAGEMENT   24

A Monthly Double-Blind Peer Reviewed (Refereed/Juried) Open Access International e-Journal - Included in the International Serial Directories

http://ijrcm.org.in/

Highly engaged customers not merely showed their intent to repurchase, but did demonstrate their affection with repeat visits:

TABLE 6: NUMBER OF TIMES THE RESPONDENTS VISITED WONDERLA

Number of times customers visited Wonderla Kochi amusement park		Frequency	Percent	Valid Percent	Cumulative Percent
	Once	167	35.1	35.5	35.5
	Twice	107	22.5	22.7	58.2
	Thrice	97	20.4	20.6	78.8
	Four Times	42	8.8	8.9	87.7
	Five Times	23	4.8	4.9	92.6
	More than5times	35	7.4	7.4	100.0
	Total	471	98.9	100.0	
Missing	System	5	1.1		
Total		476	100.0		

Percentage of Repeat Visitors (Who have visited twice or more): 64.50%. Percentage of Veegaland guests who have visited the park three or more times: 41.80%.

Group Orientation of visitors also showed a conspicuous trend in repeat visits:

TABLE 7: GROUP ORIENTATION OF VISITORS

The Groups the respondent came to Wonderla with.		Frequency	Percent	Valid Percent	Cumulative Percent
	Family	**147**	**30.9**	**31.1**	31.1
	School	**145**	**30.5**	**30.7**	61.9
	College	**79**	**16.6**	**16.7**	78.6
	Organisation	20	4.2	4.2	82.8
	Friends	**76**	**16.0**	**16.1**	98.9
	Lovers	1	.2	.2	99.2
	Honeymooners	1	.2	.2	99.4
	Others	3	.6	.6	100.0
	Total	472	99.2	100.0	
Missing	System	4	.8		
Total		476	100.0		

The age group of the visitors was important in contributing to the higher engagement levels and repeat visits.

TABLE 8: AGE GROUP VS TIMES VISITED CROSS TABULATION

Age Groups		Times Visited						Total
		Once	Twice	Thrice	FourTimes	Five Times	More than5times	
Age Group	8-12	17	13	9	4	2	1	46
	13-19	49	36	**27**	**9**	**4**	**15**	**140**
	20-30	55	31	**43**	**12**	**6**	**10**	**157**
	31-50	28	20	**15**	**14**	**10**	**9**	**96**
	>50	18	7	3	3	1	0	32
Total		167	107	97	42	23	35	471

Finally, we noticed the significant impact group orientation has on repeat visits and engagement levels with a cross tabulation of Times Visited Vs. Group Orientation.

TABLE 9: CROSS TABULATION BETWEEN TIMES VISITED AND GROUP ORIENTATIONS

Number of Times Respondents as Groups Visited Wonderla			Group Orientation								Total
			Family	School	College	Organisation	**Friends**	Lovers	Honeymooners	Others	
Once		Count	52	51	30	12	19	0	1	1	166
		Expected Count	51.8	50.4	28.0	7.1	27.0	.4	.4	1.1	166.0
		% within Times Visited	31.3%	30.7%	18.1%	7.2%	11.4%	.0%	.6%	.6%	100.0%
		% within Group Orientation	35.6%	35.9%	38.0%	60.0%	25.0%	.0%	100.0%	33.3%	35.5%
		% of Total	11.1%	10.9%	6.4%	2.6%	4.1%	.0%	.2%	.2%	35.5%
Twice		Count	38	33	26	3	5	1	0	1	107
		Expected Count	33.4	32.5	18.1	4.6	17.4	.2	.2	.7	107.0
		% within Times Visited	35.5%	30.8%	24.3%	2.8%	4.7%	.9%	.0%	.9%	100.0%
		% within Group Orientation	26.0%	23.2%	32.9%	15.0%	6.6%	100.0%	.0%	33.3%	22.9%
		% of Total	8.1%	7.1%	5.6%	.6%	1.1%	.2%	.0%	.2%	22.9%
Thrice		Count	29	23	14	4	26	0	0	0	96
		Expected Count	29.9	29.1	16.2	4.1	15.6	.2	.2	.6	96.0
		% within Times Visited	30.2%	24.0%	14.6%	4.2%	27.1%	.0%	.0%	.0%	100.0%
		% within Group Orientation	19.9%	16.2%	17.7%	20.0%	34.2%	.0%	.0%	.0%	20.5%
		% of Total	6.2%	4.9%	3.0%	.9%	5.6%	.0%	.0%	.0%	20.5%
FourTimes		Count	11	16	5	0	10	0	0	0	42
		Expected Count	13.1	12.7	7.1	1.8	6.8	.1	.1	.3	42.0
		% within Times Visited	26.2%	38.1%	11.9%	.0%	23.8%	.0%	.0%	.0%	100.0%
		% within Group Orientation	7.5%	11.3%	6.3%	.0%	13.2%	.0%	.0%	.0%	9.0%
		% of Total	2.4%	3.4%	1.1%	.0%	2.1%	.0%	.0%	.0%	9.0%
Five Times		Count	9	7	2	1	3	0	0	1	23
		Expected Count	7.2	7.0	3.9	1.0	3.7	.0	.0	.1	23.0
		% within Times Visited	39.1%	30.4%	8.7%	4.3%	13.0%	.0%	.0%	4.3%	100.0%
		% within Group Orientation	6.2%	4.9%	2.5%	5.0%	3.9%	.0%	.0%	33.3%	4.9%
		% of Total	1.9%	1.5%	.4%	.2%	.6%	.0%	.0%	.2%	4.9%
More than 5 times		Count	7	12	2	0	13	0	0	0	34
		Expected Count	10.6	10.3	5.7	1.5	5.5	.1	.1	.2	34.0
		% within Times Visited	20.6%	35.3%	5.9%	.0%	38.2%	.0%	.0%	.0%	100.0%
		% within Group Orientation	4.8%	8.5%	2.5%	.0%	17.1%	.0%	.0%	.0%	7.3%
		% of Total	1.5%	2.6%	.4%	.0%	2.8%	.0%	.0%	.0%	7.3%
Total		Count	146	142	79	20	76	1	1	3	468
		Expected Count	146.0	142.0	79.0	20.0	76.0	1.0	1.0	3.0	468.0
		% within Times Visited	31.2%	30.3%	16.9%	4.3%	16.2%	.2%	.2%	.6%	100.0%
		% within Group Orientation	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	31.2%	30.3%	16.9%	4.3%	16.2%	.2%	.2%	.6%	100.0%

The groups which revisited the amusement park thrice or more significantly were family, friends, and schools.

RECOMMENDATIONS/ SUGGESTIONS

The segments of customers who feel engaged and visit the Wonderla (Veegaland) amusement park in Kochi are significantly more in Family, Friends, School and College groups and . This is further reinforced by the young age profile of the repeat visitors. Therefore, group-specific incentives and recognitions (memorabilia, greeting mails etc.) for repeat visitors in these group orientations and age-groups could be rewarding.

CONCLUSIONS

Customer-centric and customer-delighting organisations resort to Experiential Branding to differentiate themselves from competitors and to maintain relevance and price premiums. Experiential Branding is 'beneficially differentiating a product or service in somebody's mind by focusing on the totality of the experience, rather than focusing on the features, attributes and benefits of the product or service'. One of the best metrics to study Experiential Branding is to apply the Gallup's metric for customer engagement (three factors of rational satisfaction and four factors in pairs of emotional engagement) to firms known for consistently superior brand equity or customer reviews. There is hardly any research on Experiential Branding on Indian firms. Hence, this study has been done on Wonderla (Veegaland) amusement park. The objective of the research is to identify the factors contributing to the customer engagement and Experiential Branding practice in Wonderla. The three null hypotheses are: 1.The Gallup formula for customer engagement (three factors of rational satisfaction and eight factors of emotional attachment) does not operate in the Indian situation with respect to Wonderla (Veegaland) amusement park, 2.Experiential Branding and customer engagement practices of Wonderla do not give it differentiating advantages, and 3.Group orientation of the visitors to the park does not result in repeat visits.

On the basis of sampling 476 representative customers of Veegaland on two weekdays and two weekends in October 2011, and analysing the data structures, we are factually able to reject the three null hypotheses and establish that the Gallup formula does operate in Wonderla, Kochi, and that customer engagement and Experiential Branding practices give it significant advantages, and that group orientations of the visitors result in repeat customers.

When the three prominent groups (family, friends, and schools) are cross tabulated against repeat visits three or more times, and again cross tabulated against the age groups, it is clearly seen that group orientations significantly contribute to higher levels of repurchases. The strength of the group orientations emerges from the substantial synergy arising out of the engaged youngsters in supportive family-friends-school networks which generate and reflect positive word of mouth feedback on account of Experiential Branding by the amusement park.

LIMITATIONS

Although a significant share of the customers is from schools, the sample size does not have a proportionate share in the sample. (One could justify it referring to the logic of disproportionate stratified random sampling).Inspite of the clarity of the Gallup metric, it is difficult to cull out the articulated responses of the experience and memories of the visitors. Oxytocin-based scientific blood tests could not be done to confirm the feeling changes before and after the park visits.

SCOPE FOR FURTHER RESEARCH

Longitudinal studies can be done in similar organisations to find out the customer centricity, engagement, and experiential branding levels of theirs so that their strengths in these areas could be mapped.

INTERNATIONAL JOURNAL OF RESEARCH IN COMPUTER APPLICATION & MANAGEMENT   26

A Monthly Double-Blind Peer Reviewed (Refereed/Juried) Open Access International e-Journal - Included in the International Serial Directories

http://ijrcm.org.in/

REFERENCES

1. Aaker, D.A. (1992) 'The Value of Brand Equity', Journal of Business Strategy 13(4):27-32
2. Applebaum, Alec (2001) 'The Constant Customer' The Gallup Management Journal June 17, 2001
3. Barwise, P. (1993) 'Brand Equity Branding: Snark or Boojum', International Journal of Research in Marketing 10(1), March:93-104
4. Bernstein, Laurence, (2003) White Paper on Experiential
5. Berry, L.L. (2000) 'Cultivating Service Brand Equity' Journal of the Academy of Marketing Science 28(1), 128-137
6. Customer Lifetime Value is Reshaping Corporate Strategy. New York:The Free Press.
7. Farquhar, P.H. (1990), 'managing and Brand Equity', Juriad of Advertising Research 30(4): RC-7-RC-12.
8. Feldwick, P. (1996) "What is Brand Equity Anyway, And how do you Measure it?', Journal of the Market Research Society 38(2): 85-104.
9. Fournier, S. (1998) 'Consumers and their Brands: Developing Relationships Theory in Consumer Research,' Journal of Comsumer Research 24(4): 343-73.
10. Interbrand (1992) World's Greatest Brand: An International review by Interbrand. Chichester: Wiley.
11. Keller, K.L. (1993) ' Conceptualizing , Measuring, and Managing Customer-based Brand Equity', Journal of Marketing 57 (1): 1-22.
12. Morgan, R.M. And Hunt S.D. (1994) 'The Commitment-Trust Theory of Relationship Marketing' Journal of Marketing 58(3):20-38.
13. Park C. and Srinivasan, V. (1994) 'A Survey-based Method for Measuring and Understanding Brand Equity and its Extendibility', Journal of Marketing Research 31(2): 271-88.
14. Parvatiyar, A. and Sheth, J.N. (2000) 'The Domain and Conceptual Foundations of Relationships marketing', in J.N. Sheth and A. Parvatiyar (eds) handbook of Relationship Marketing, Thousands Oaks, CA:Sage
15. Rao. A.R. and Ruckert, R. (1994) 'Brand Alliances as Signals of Product Quality',sloan Management Review 36(1):87-97.
16. Reicheild, F.F. (1996) The Loyalty Effect, Bostong M.A: Harvard Business School Press.
17. Rust, R.T., Zeithaml, V.A. and lemon, K.N. (2000) Driving Customer Equity: How
18. Samu S., Krishnan, H.S. and Smith, R.E. (1999) 'Using Advertising Alliances for New Product Introduction; Interactions between Product Complementarity and Promotional Strategies', Journal of Marketing 63(1): 57-74.
19. Simon, C.J. and Sullivan M.W. (1993) 'The Measurements and Determinants of Brand Equity: A Financial Approach', Marketing Science 12(1):28-52.
20. Srivastava, R.K., Shervani, T.A. and Fahey, L., (1998) 'Market-based Assets and Shareholder Value: A Framework for Analysis', Journal of Marketing 62(1):2-18 Webster, F.E. (2000) 'Understanding the Relationships among Brands, Consumers, and Resellers', Journal of Academy of Marketing Science 28(1): 17-23
21. The Economist Intelligence Unit (2007) 'Beyond Loyalty:Meeting the Challenge of Customer Engagement', Part I and II, Survey sponsored by Adobe Systems.

APPENDIX/ ANNEXURE

QUESTIONNAIRE TO THE VISITORS OF VEEGALAND/ WONDERLA, PALLIKKARA, COCHIN

As part of a doctoral research, I am studying the satisfaction levels of visitors to Veegaland/ Wonderla. I will be thankful, if you could spare a few minutes and answer these questions.

1. Overall, how satisfied are you with Veegaland/ Wonderla?

Not at all Satisfied 1	Mostly Not Satisfied 2	Partly Not Satisfied 3	Neither Satisfied nor unsatisfied 4	Partly Satisfied 5	Mostly Satisfied 6	Fully satisfied 7

2. How likely are you to visit Veegaland/ Wonderla again?

Least Likely 1	Most Unlikely 2	Partly Unlikely 3	Neither Likely nor Unlikely 4	Partly Likely 5	Most Likely 6	Fully Likely 7

3. How likely are you to recommend Veegaland/ Wonderla to your friends / relatives?

Least Likely 1	Mostly Unlikely 2	Partly Unlikely 3	Neither Likely nor Unlikely 4	Partly Likely 5	Mostly Likely 6	Fully Likely 7

The following are statements relating to your level of relationship with the Veegaland theme park. Please indicate your levels of agreement with the statement on a 1 to 7 scale; 1 meaning completely disagree, and 7 meaning completely agree.

4. Veegaland/ Wonderla is a name I can always trust

Completely Disagree 1	Mostly Disagree 2	Partly Disagree 3	Neither Agree nor Disagree 4	Partly Agree 5	Mostly Agree 6	Completely Agree 7

5. Veegaland/ Wonderla always delivers on what it promises

Completely Disagree 1	Mostly Disagree 2	Partly Disagree 3	Neither Agree nor Disagree 4	Partly Agree 5	Mostly Agree 6	Completely Agree 7

6. Veegaland/ Wonderla always treats me fairly

Completely Disagree 1	Mostly Disagree 2	Partly Disagree 3	Neither Agree nor Disagree 4	Partly Agree 5	Mostly Agree 6	Completely Agree 7

7. If a problem arises, I can always count on Veegaland/ Wonderla to reach a fair and satisfactory solution

Completely Disagree 1	Mostly Disagree 2	Partly Disagree 3	Neither Agree nor Disagree 4	Partly Agree 5	Mostly Agree 6	Completely Agree 7

INTERNATIONAL JOURNAL OF RESEARCH IN COMPUTER APPLICATION & MANAGEMENT   27

A Monthly Double-Blind Peer Reviewed (Refereed/Juried) Open Access International e-Journal - Included in the International Serial Directories

http://ijrcm.org.in/

8. I feel proud to be a Veegaland/ Wonderla customer

Completely Disagree 1	Mostly Disagree 2	Partly Disagree 3	Neither Agree nor Disagree 4	Partly Agree 5	Mostly Agree 6	Completely Agree 7

9. Veegaland/ Wonderla always treats me with respect

Completely Disagree 1	Mostly Disagree 2	Partly Disagree 3	Neither Agree nor Disagree 4	Partly Agree 5	Mostly Agree 6	Completely Agree 7

10. Veegaland/ Wonderla is the perfect company for people like me

Completely Disagree 1	Mostly Disagree 2	Partly Disagree 3	Neither Agree nor Disagree 4	Partly Agree 5	Mostly Agree 6	Completely Agree 7

11. I can't imagine a world without Veegaland/ Wonderla

Completely Disagree 1	Mostly Disagree 2	Partly Disagree 3	Neither Agree nor Disagree 4	Partly Agree 5	Mostly Agree 6	Completely Agree 7

12. How many times have you visited Veegaland/ Wonderla (including the present one)?

1	2	3	4	5	>5

13. What are the top 3 rides or facilities you like in Veegaland/ Wonderla (Use the cards)

Rating	Rides	FR / KR / WR /HR
1		
2		
3		

14. If you want to describe your engagement with Veegaland/ Wonderla in a few words, what would those be?

1
2
3

15. From where did you hear about Veegaland/ Wonderla? (Rank, if necessary)

Word of mouth	TV advertisement	Print advertisement	Hoarding	Social Networking Sites	Others (Specify)

DEMOGRAPHIC DATA

16. Your Name

17. Age group

8 -12	13 - 19	20 - 30	31 - 40	41 - 50	>50

18. Education

Below 10	10	12 or Pre Degree	Degree BSc, BA, BCom	Professional Degree	Post Graduation	PhD and above

19. Occupation

Student	Home maker	Govt. Service (State)	Govt Service (Central)	Quasi-Govt service	Private Sector job	Employed in the Middle East/ Abroad	Self-Employed	Retired / Unemployed

20. Monthly Family Income (Rs)

< 10,000	10,000 – 30,000	30,001 - 50,000	50,001 – 70,000	70,001 – 90,000	>90,000

21. Most watched TV Channels(Rank the Channels from top (1) to bottom (5)and the programmes

Asianet	Surya	Kairali	Manorama	Others(Malayalam)	Others (Non-Malayalam)

22. Most read Newspapers (Rank the News papers from top (1) to bottom (5)

Manorama	Mathrubhoomi	Deepika	Madhyamam	Others(Specify)

23. Most read Magazines

Manorama Weekly	Mathrubhoomi Weekly	Malayalam	Kalakaumudhi	Others(Specify)

24. Most used Social Networking sites

FaceBook	MySpace	Orkut	Twitter	Blogs	Others

25. Most Listened to FM Radio Stations

Radio Mango	Big FM	Radio Mirchi	Red FM	Others	Others

26. Motor vehicles you own or your family owns
27. Where are you coming from?
28. Which group are you part of?

Family	School	College	organisation	Friends	Lovers	Honeymooners	Others

29. When you travel by flight, the airline you like most

King Fisher	Jet Airways	Air India	Other Domestic Airlines (specify)	Foreign Airlines (Specify)

Your email id: Gender: M/F   Your mobile phone No.:

Thank you very much for your contributing to this study.

CAREER GOAL AND CAREER PREPARATION AMONG THE UNDER GRADUATE STUDENTS: A STUDY ON SELECTED HIGHER EDUCATION INSTITUTIONS AFFILIATED TO BHARATHIAR UNIVERSITY, COIMBATORE, TAMIL NADU

DR. VIJAYALAKSHMI
ASSOCIATE PROFESSOR
COIMBATORE INSTITUTE OF MANAGEMENT & TECHNOLOGY
NARASIPURAM

ABSTRACT

Today's generation is finding it increasingly difficult to make a career choice from the plethora of options available, choosing a career is one of the most important decisions, a student has to make. To enable them in this decision making process, a scientific process is needed to guide them in choosing a career that is in line with their interest, and to deal with careers that they are not likely to enjoy and to excel. The changing requirements in the corporate, altered market condition for professional manpower, the development of paraprofessional occupations and many other labor market trends, make occupational selection more difficult than ever. The young students in colleges and universities need to be informed about various job openings available to them along with the requirements, responsibilities and the nature of work involved in them, so that they can equip themselves for suitable careers. Out of all the affiliated colleges in Bharathiar University, the study covers samples of 11 colleges included in the Coimbatore District and Erode District. The sample size has been restricted to 300 respondents from first year students, 580 respondents from final year students out of which 300 respondents from the final year students for aptitude test. The study is limited only to Coimbatore district and Erode District

KEYWORDS

career goal, perception, assessment, analytical ability

INTRODUCTION

The major aspiration of today's youth pursing higher education in colleges (or Universities) is to find a lucrative career, which would enhance their socio economic status. Yet, on completing their respective courses, they find it very difficult to face the fierce competition prevailing in all available sectors; in spite of computer based sectors, IT, Management and other service providers, the students face the harsh reality of preparing themselves for suitable careers. The Board of studies of most universities designs a curriculum, hoping to cater to the expectations of the corporate world. In addition to the academic course design, all the colleges take special steps to prepare their students towards career orientation. The general challenges faced by arts and science colleges, particularly in today's education system is to enable them to translate their intelligence, skills, abilities towards matching the employment opportunities available within the country and outside the country.

To construct norms to develop career goal and career preparation. Norms means the optimum level of factors like his education status, family background, socio economic factor and communication skill etc. will relate with this study. The study highlights the career goal and career preparation by the students and their level of satisfaction with regard to the performance of their colleges. It also covers the constraints and efforts taken by the students in achieving their career goal and throws light on their opinion on the impact of globalization on education.

REVIEW OF LITERATURE

Conceptualization is an indispensable part in any research. The review of past studies helps the researcher to comprehend, adopt, modify and develop conceptual framework for the study. Hence an attempt is made in this chapter to review various concepts related to the study.

Thornton and George (1978)[1] devised a study to determine if career-planning workshops had differential effects on subjects who believed in internal vs. external locus of control of behavior. The participants of the study were 97 secretaries attending a one-day career growth and opportunities workshop. A modified version of the Internal/External Locus of Control Scale was administered to the secretaries when the workshop began. Four months later, subjects answered a follow-up questionnaire. Results indicated that internally oriented secretaries took more action to explore potential career goals and to identify the means of achieving them. There was a significant correlation between internality and the amount of career planning. The results suggest that administrators or career planning programs should encourage their participants to develop internal locus of control.

Odiorne and George (1979)[2] indicated that management by Objectives (MBO) could improve organizational results particularly in the area of establishing commitments to goals through the creation of new methods and innovations. Creative goal-setting is generally divided into 2 categories: 1. extrinsic creativity, which involves the introduction of new ideas from outside, and 2. intrinsic creativity, which is the discovery of new ways of doing the present job.

The introduction of new methods usually involves a 3-step process: 1. learning of the new idea and obtaining a lay knowledge of the technology involved, 2. feasibility study, and 3. installation of the new method. A well-run MBO program can facilitate creativity and innovation by: 1. asking for innovation, 2. working at encouraging people to be innovative, 3. getting commitment from individuals and teams, 4. communicating dissatisfaction with the status quo, 5. rewarding innovation, and 6. endorsing and supporting innovation.

Kirkham and Roger (1980)[3] stated that if productivity is to be improved, management must start by focusing on the desired results. Both efforts and resources must be geared toward the goals that are preset. The success of a manager depends upon how well his subordinates achieve these results, and he is accountable for results, not effort. Detroit Edison recently embarked on a productivity improvement program that achieved noteworthy success. It established productivity measurements for job positions at all levels. Department heads had to define their goals and establish measurable criteria to evaluate results. Employee input helped establish the criteria. Objectives that focus efforts on expected results: 1. should be stated in terms of expected results, 2. should be measurable, 3. should be stated in terms of a time period, and 4. should be realistic.

Rausch and Erwin (1980)[4] stated that the implementation of a goals system requires careful attention to minute details, with professional execution of each step. There are 8 areas where careful attention is essential to goal programs: 1. how many goals should be set for a particular person, 2. how to judge the quality of goals and goal statements, 3. the extent of management involvement so that subordinates are directed toward goal achievement, 4. frequency of goal progress reviews and setting of new goals, 5. evaluation of performance with respect to goal achievement, 6. subordinates' influence in goal setting, 7. the role of performance appraisal in a goals program, and 8. the role of personal development of subordinates and career planning. To be of high quality, a goal must be realistic, challenging, and appropriate for the mission. Regular reviews of goals enhance communications so that a better understanding can develop on what is expected of the subordinate.

NEED OF THE STUDY

Among all the resources available in a society, human resources are the most viable and valuable. These human resources are abundantly available with high potentiality in India. Many of the youth, despite their good knowledge and ability are unable to find the right job at the right time in the right place. This is possible only for few youths who are very clear in their mission and vision, to pursue jobs both in India and aboard. At this juncture, it is essential to analyze the causes and effects of unemployment and under employment among youth. The basic problem among the youth of today is the incapacity to decide upon a

definite career. This poses a major hurdle both in their professional and personal lives. In order to guide the indecisive youth, universities have to set up a career guidance cell with a professional counselor and a placement officer. In Bharathiar University, Coimbatore such arrangements are inherent in the university as well as in its affiliated institutions and these cells are highly student-centric (student-centric). Students are trained with the help of soft skill trainers, along with audiovisual programs, which are organized for successful placement in the arts and science colleges. The students in the arts and science colleges need to be helped in making meaningful occupational selection and preparation for an entry into them to have a fulfilling and rewarding career.

STATEMENT OF THE PROBLEM

A career is a set of goals to select from a variety of available occupations, which one undertakes through his lifetime. This career includes life roles, leisure activities, learning and work. Such opportunity are very freely available for the student community, particularly for engineering graduates and IT professions in engineering colleges. But in arts and science colleges affiliated to Bharathiar University such career opportunities are relatively insufficient. In the era of the Tech on savvy, industries need more and more scientists. Hence there is an increased focus on arts and science students due to their creative and diverse talents. Yet, lack of Communication skills deters them at interview sessions. The need for helping the students in the choice of a proper career is enhanced due to the fact that majority of these young graduates are the first generation learners and their family members have no vision and ability to guide them properly towards a right career. Thus it is the duty of the educational institutions and the universities to shape their personality and sharpen the minds of the young students of various colleges to meet the challenges of the career goals.

Through the efforts taken by the universities and the Placement cells in the colleges, a good majority of the students have got placed in suitable jobs till the recent collapse of the American economy. This sudden change in the American economy has changed the career path from IT sector to other fields. At present apart from the software industries more opportunities are available for embedded system mixing accounts with computers, biology with computer (Bio-technology, Bio-informatics) mathematics and physics, which have a wide scope for the youths. The universities are also directing the respective colleges to design Career-oriented subjects and make them optional to the student community on the Choice Based Credit system. Even though these facilities are organized centrally and do provide for the students studying in various geographical areas, students find it difficult to select an appropriate course. Further, due to pressure from parents, the students select a particular course with disinterest and at the time of completing their course they are highly indecisive in selection of their career. Inability to choose a right career stems from aimlessness and thus results in a general lethargy and lack of focus in students. Based on the above issues, the following questions are raised.

1. To what extent can the curriculum be re-structured to meet the corporate expectations?
2. What are the major problems faced by the students at the time of preparing for the career settlement?

OBJECTIVES

Taking with account the said problems, the following are the objectives are set for the study:

1. To study the perception of career goals of the students in the selected higher education institutions affiliated to Bharathiar University.
2. To analyze the steps taken by the individual students and the institutions in preparing towards achieving their career goals.
3. To find out the impact of training programs introduced /initiated by the institution to increase the employability of the students
4. To identify the common problems faced by the students and trainers to achieve their career goals.
5. To suggest better career strategies for the students and institutions.

HYPOTHESIS

Based on the above issues the following hypothesis were formulated

1. H_O: There is no significant relationship between sex of students and their career goal in first year.
H_1: There is significant relationship between sex of students and their career goal in first year.
2. H_O: There is no significant relationship between age of the students and their career goal in first year.
H_1: There is significant relationship between age of the students and their career goal in first year.
3. H_O: There is no significant relationship between type degree chosen by the respondents and their perception on career goal - first year.
H_O: There is no significant relationship between type degree chosen by the respondents and their perception on career goal - first year.
4. H_O: There is no significant relationship between 12th marks of students and their career goal in first year.
H_1: There is significant relationship between 12th marks of students and their career goal in first year.
5. H_O: There is no significant relationship between Income of parent's respondents and their career goal in first year.
H_1: There is significant relationship between Income of parent's respondents and their career goal in first year.
6. H_O: There is no significant relationship between sex of students and their career goal in final year.
H_1: There is significant relationship between sex of students and their career goal in final year.
7. H_O: There is no significant relationship between age of the students and their career goal in final year.
H_1: There is significant relationship between age of the students and their career goal in final year.
8. H_O: There is no significant relationship between type degree chosen by the respondents and their perception on career goal - final year.
H_O: There is no significant relationship between type degree chosen by the respondents and their perception on career goal - final year.
9. H_O: There is no significant relationship between 12th marks of students and their career goal in final year.
H_1: There is significant relationship between 12th marks of students and their career goal in final year.
10. H_O: There is no significant relationship between Income of parent's respondents and their career goal in final year.
H_1: There is significant relationship between Income of parent's respondents and their career goal in final year.
11. H_O: There is no significant relationship between Analytical ability and their career achievement.
H_1: There is significant relationship between Analytical ability and their career achievement.
12. H_O: There is no significant relationship between English assessment ability and their career achievement.
H_1: There is significant relationship between English assessment ability and their career achievement.

METHODOLOGY

Methodology is the key aspect, which governs the outcome of the study. It directs the researcher to conduct the study in a systematic process, which ensures and facilitates the accuracy of the findings and the outcomes. In order to arrive at conclusions with regard to the topic of study, it will be necessary to adopt a suitable mode of study. The simple random sampling method by using random numbers the respondents was selected.

DATA ANALYSIS AND INTERPRETATIONS
SECTION-I FIRST YEAR STUDENTS PROGRESS ON CAREER GOAL
SEX OF RESPONDENTS AND THE STUDENTS PERCEPTIONAL CAREER GOAL

Career goal for the students is the most important component during their study at college level. The faculty members of the college, and placement officers and parents create good awareness on career goal among the sample respondents.

TABLE 4.1: SEX OF THE RESPONDENTS AND THEIR PERCEPTION CAREER GOAL - FIRST YEAR

Sl. No.	Sex	No. of respondents	%	Average	Range		S.D.
					Minimum	Maximum	
1.	Male	180	60	17.78	16	19	0.6624
2.	Female	120	40	17.60	17	19	1.0404
	Total	300	100				

It could be observed from table 4.1 that the perception on career goal among the male students studying first year ranged between 16 and 19 with an average of 17.78 and for the female respondents it ranged from 17 to 19 with an average of 17.60. From the analysis, it is concluded that male respondents showed slightly high level of perception on career goal.

AGE OF THE RESPONDENTS AND THEIR CAREER GOAL SCORE-FIRST YEAR
Age is one of the crucial factors in decision making. It is believed that the young minds should be given a right direction to select their career goal.

TABLE 4.2: AGE OF THE RESPONDENTS AND THEIR PERCEPTION CAREER GOAL - FIRST YEAR

Sl. No.	Age (Years)	No. of respondents	%	Average	Range		S.D.
					Minimum	Maximum	
1.	17	145	48.3	17.61	16	19	0.7922
2.	18	135	45.0	17.78	17	19	0.8781
3.	19	20	6.7	17.95	16	19	0.8256
	Total	300	100				

It could be seen from the above table that maximum level of perception on career goal among the first year students of 19 years age group ranged between 16 and 19 with an average of 17.95. It is followed by the respondents of 18 years age group 17 and 19 with an average of 17.78. On the other hand, the respondents with 17 years age groups perception on career goal ranged between 16 and 19 with an average of 17.61

TYPE DEGREE CHOSEN BY THE RESPONDENTS AND THEIR PERCEPTION ON CAREER GOAL - FIRST YEAR
For the purpose of this study, degree of the respondents and their career Goal has been classified into 8 strata, viz, B.Sc.(Physics), B.Sc.(Maths), B.Sc.(CS), BA(English), B.Sc.(Electronics), BCom, BCA, B.Sc. (IT).

TABLE 4.3: DEGREE COURSES OF THE RESPONDENTS AND THEIR PERCEPTION ON CAREER GOAL - FIRST YEAR

Sl. No.	Degree courses	No. of respondents	%	Average	Range		S.D.
					Minimum	Maximum	
1.	B.Sc.(Physics)	15	5.00	17.93	16	19	0.8837
2.	B.Sc.(Maths)	23	7.67	17.70	17	19	0.7648
3.	B.Sc.(CS)	127	42.33	17.76	17	19	0.7607
4.	BA(English)	23	7.67	17.70	16	18	0.8869
5.	B.Sc.(IT)	18	6.00	17.78	17	19	0.8085
6.	BCom	81	27.00	17.46	16	19	0.8810
7.	BCA and B.Sc. (Electronics)	13	4.33	18.67	17	18	0.7071
	Total	300	100	17.80			

It could be seen from the above table that maximum level of perception on career goal among the first year students of B.Sc.(computer science) degree of respondents ranged between 17 and 19 with an average of 17.76, it is followed by the respondents of BCom degree ranged between 16 and 19 with an average of 17.46. On the other hand, the respondents of with B.Sc.(Maths) and BA(English) degree ranged between17 and 19, groups perception on career goal ranged between 16 and 18 with an average of 17.70.

XIITH MARKS OF THE RESPONDENTS AND THEIR CAREER GOAL - FIRST YEAR
The marks scored in the XIIth standard examination also influences their career dream. The qualification marks of standard XIIth is vital for career goal, as this score is the basic system to analyze the student's first step towards individual and overall performance.

TABLE 4.4: XIIth MARKS OF THE RESPONDENTS AND THEIR CAREER GOAL - FIRST YEAR

Sl. No.	XIIth Marks	No. of respondents	%	Average	Range		S.D.
					Minimum	Maximum	
1.	60 and below	19	6.33	19.00	19	19	0.0000
2.	61 to 70	171	57.00	18.47	17	19	0.7174
3.	71 to 80	103	34.33	17.50	16	19	0.9358
4.	81 to 90	2	0.67	17.74	16	19	0.8754
5.	91 to 100	5	1.67	17.52	16	19	0.6273
	Total	300	100	18.03			

It could be seen from the above table that maximum level of perception on career goal among the XII standard students scored marks 61 to 70 (57) percent of respondents ranged between 17 and 19 with an average of 18.47, it is followed by the 34.33 percent respondents scored marks 71 to 80 of ranged between 16 and 19 with an average of 17.50. On the other hand, 6.33 percent of the respondents of 60 and below marks groups perception on career goal ranged between 19 and 19 with an average of 19.00.

INCOME OF THE RESPONDENTS' PARENT'S AND THEIR CAREER GOAL SCORE – FIRST YEAR
Family income is one of the factors influencing the socioeconomic status of the student and may influence his decision making capacity.

TABLE NO. 4.5: INCOME OF THE RESPONDENT'S PARENT'S AND THEIR CAREER GOAL SCORE – FIRST YEAR

Sl. No.	Income	No. of respondents	%	Average score	Range		S.D.
					Minimum	Maximum	
1.	30,000 – 50,000	159	53.00	17.91	16	19	0.7745
2.	51,000 – 1,00,000	79	26.33	17.78	16	19	0.6133
3.	1,00,001-2,00,000	38	12.67	17.50	16	19	0.7969
4.	2,00,001-3,00,000	23	7.67	16.39	16	18	0.7827
5.	Above 3,00,000	1	0.33	18.00	18	18	0.0000
	Total	300	100	17.52			

The 300 respondents were stratified under 5 income groups viz, 30,000 to 50,000, 51,000 to 100,000, 100,001 to 200,000, 200,001 to 300,000 and above 300,000. The range of 53.00 percent and the average of 26.33 percent range of income shows 51,000 to 1, 00,000. From the analysis it is concluded that income of the father's respondents showing high level of perception on career goal.

SECTION-II FINAL YEAR STUDENTS PROGRESS ON CAREER GOAL
SEX OF RESPONDENTS AND THE STUDENTS PERCEPTIONAL CAREER GOAL

TABLE NO. 4.6: SEX OF THE RESPONDENTS AND THEIR CAREER GOAL - FINAL YEAR

Sl. No.	Sex	No. of respondents	%	Average	Range		S.D.
					Minimum	Maximum	
1.	Male	344	59.31	24.14	23	25	0.4725
2.	Female	236	40.69	24.31	23	28	1.0479
	Total	580	100	24.23			

The table reveals that the sex of the student and average career goal score of the the final year students. Out of 580 student respondents male and female constitute 59.31 percent and 40.69 respectively. The overall average score for the entire sample of 580 student is 24.23 while the average score for male and female group was 24.14 and 24.31 respectively.

AGE OF THE RESPONDENTS AND THEIR CAREER GOAL - FINAL YEAR

TABLE NO. 4.7: AGE OF THE RESPONDENTS AND THEIR CAREER GOAL - FINAL YEAR

Sl. No.	Age (Years)	No. of respondents	%	Average	Range		S.D.
					Minimum	Maximum	
1.	19	351	60.52	24.32	23	27	0.8568
2.	20	140	24.14	23.98	23	28	0.6677
3.	21	36	6.20	24.19	24	25	0.4014
4.	22	53	9.14	24.00	24	24	0.0000
	Total	580	100	24.23.			

It could be seen from the above table that maximum level of perception on career goal among the final year students of 19 years age group ranged between 23 and 27 with an average of 24.32. It is followed by the respondents of 20 years age group 23 and 28 with an average of 23.98. On the other hand, the respondents with 21 years age groups perception on career goal ranged between 24 and 25 with an average of 24.19 and the respondents with 22 years age groups perception on career goal ranged between 24 and 24 with an average of 24.00

TYPE DEGREE CHOSEN BY THE RESPONDENTS AND THEIR CAREER GOAL - FINAL YEAR

TABLE NO. 4.8: DEGREE OF THE RESPONDENTS AND THEIR CAREER GOAL - FINAL YEAR

Sl. No.	Degree	No. of respondents	%	Average	Range		S.D.
					Minimum	Maximum	
1.	B.Sc.(CS)	162	27.9	24.00	24	24	0.0000
2.	BCom	170	29.3	23.99	23	24	0.1118
3.	B.Sc.(physics)	55	9.5	24.16	23	28	1.0946
4.	BA(English)	47	8.1	24.19	23	27	0.6280
5.	B.Sc.(Maths)	62	10.7	24.25	23	27	0.9245
6.	BCA	42	7.2	24.45	23	26	0.7612
7.	B.Sc. (IT)	35	6.0	24.63	24	26	0.5973
8.	B.Sc.(Electronics)	7	1.2	24.00	24	24	0.0000
	Total	580	100	24.21			

It could be seen from the above table that maximum level of perception on career goal among the final year students of B.Sc. (computer science) degree of respondents ranged between 24 and 24 with an average of 27.9, it is followed by the respondents of BCom degree ranged between 23 and 24 with an average of 23.99. On the other hand, the respondents of with B.Sc. (Maths) degree ranged between 23 and 27, groups perception on career goal with an average of 24.25 and B.Sc. (physics) degree of respondents ranged between 23 and 28 with an average of 24.16.

XIITH MARKS OF THE RESPONDENTS AND THEIR CAREER GOAL - FINAL YEAR

TABLE NO. 4.9: XIIth MARKS OF THE RESPONDENTS AND THEIR CAREER GOAL - FINAL YEAR

Sl. No.	XIIth Marks	No. of respondents	%	Average	Range		S.D.
					Minimum	Maximum	
1.	Below 60	120	20.69	23.89	23	25	0.5345
2.	61 to 70	184	31.72	24.22	23	28	0.6300
3.	71 to 80	175	30.18	24.37	23	27	0.6771
4.	81 to 90	100	17.24	24.11	23	27	0.6206
5.	91 to 100	1	0.17	24.00	24	24	0.7003
	Total	580	100	24.21			

It could be seen from the above table that maximum level of perception on career goal among the XII standard students scored marks 61 to 70 (31.72) percent of respondents ranged between 23 and 28 with an average of 24.22, it is followed by the 30.18 percent respondents scored marks 71 to 80 of ranged between 23 and 27 with an average of 24.37. On the other hand, 20.69 percent of the respondents of 60 and below mark groups perception on career goal ranged between 23 and 25 with an average of 23.89.

INCOME OF THE RESPONDENTS' PARENT'S AND THEIR CAREER GOAL SCORE – FINAL YEAR

TABLE NO. 4.10: INCOME OF THE RESPONDENT'S PARENTS AND THEIR CAREER GOAL – FINAL YEAR

Sl. No.	Income	No. of respondents	%	Average	Range		S.D.
					Minimum	Maximum	
1.	30,000 – 50,000	49	8.45	23.98	23	25	0.2491
2.	51,000 – 1,00,000	107	18.45	24.13	23	26	0.6599
3.	1,00,001-2,00,000	182	31.38	23.95	23	26	0.5590
4.	2,00,001-3,00,000	129	22.24	24.33	23	27	0.8228
5.	Above 3,00,000	113	19.48	24.63	23	28	0.9825
	Total	580	100	24.27			

The 300 respondents were stratified under 5 income groups viz, 30,000 to 50,000, 51,000 to 1,00,000, 1,00,001 to 200,000, 2,00,001 to 3,00,000 and above 3,00,000. The range of parent's respondent's income 31.38 percent and the average of 23.95 percent range of income show 1, 00,000 to 2,00,000.

ANALYTICAL ABILITY AND THEIR CAREER ACHIEVEMENT

TABLE NO. 4.11: ANALYTICAL ABILITY

SEX		Analytical ability			Total
		Low	2	3	
Boys	Freq	38	62	4	104
	R %	36.54	59.62	3.85	100.00
	C %	33.93	34.83	40.00	34.67
Girls	Freq	74	116	6	196
	R %	37.76	59.18	3.06	100.00
	C %	66.07	65.17	60.00	65.33
Total	Freq	112	178	10	300
	R %	37.33	59.33	3.33	100.00
	C %	100.00	100.00	100.00	100.00

Chi Square (DF 2) = 0.1547   Pr = 0.926

ENGLISH ASSESSMENT ABILITY AND THEIR CAREER ACHIEVEMENT

TABLE NO. 4.12: ENGLISH ASSESSMENT TEST

SEX		Assessment test		Total
		1	2	
Boys	Freq	83	21	104
	R %	79.81	20.19	100.00
	C %	38.97	24.14	34.67
Girls	Freq	130	66	196
	R %	66.33	33.67	100.00
	C %	61.03	75.86	65.33
Total	Freq	213	87	300
	R %	71.00	29.00	100.00
	C %	100.00	100.00	100.00

Chi Square (DF 1) = 5.9974   Pr = 0.014

The aptitude of boys and girls will indirectly influence the career goal and the career preparation. The aptitude in this study has been divided into two dimensions as analytical ability and English assessment ability.

ANALYTICAL ABILITY

The analytical ability has been divided into three levels has low, medium and high and the sex as boys and girls. On the examination of cell frequencies the percentages of boys increased from low to high, whereas the percentages with regard to girls showed a declining trend. Therefore it was be inferred that at high level of analytical ability the boys recorded a higher percentage when compared to girls.

ENGLISH ASSESSMENT ABILITY

A similar analysis has also been done with regard to the assessment ability. Here the girls have recorded a higher percentage than boys.

FINDINGS- HYPOTHESES AND THEIR RESULTS

1) Calculated χ^2 – value(9.814) > Table χ^2 – value(9.210) at 1 percent significance level and d.f. at 2.
Hence, the null hypothesis H_0 is rejected and alternative hypothesis H_1 is accepted.

2) Calculated χ^2 – value(9.88) > Table χ^2 – value(9.488) at 5 percent significance level and d.f. at 4.
Hence, the null hypothesis H_0 is rejected and alternative hypothesis H_1 is accepted.

3) Calculated χ^2 – value(47.594) > Table χ^2 – value(29.141) at 1 percent significance level and d.f. at 14.
Hence the null hypothesis H_0 is rejected and alternative hypothesis H_1 is accepted.

4) Calculated χ^2 – value(83.054) > Table χ^2 – value(29.141) at 1 percent significance level and d.f. at 14.
Hence the null hypothesis H_0 is rejected and the alternative Hypothesis H_1 is accepted.

5) Calculated χ^2 – value(44.390) > Table χ^2 – value(20.090) at 1 percent significance level and d.f. at 8.
Hence the null hypothesis H_0 is rejected and alternative Hypothesis H_1 is accepted.

6) Calculated χ^2 – value(251.547) > Table χ^2 – value(9.210) at 1 percent significance level and d.f. at 2.
Hence the null hypothesis H_0 is rejected and alternative Hypothesis H_1 is accepted.

7) Calculated χ^2 – value(34.920) > Table χ^2 – value(20.090) at 1 percent significance level and d.f. at 6.
Hence the null hypothesis H_0 is rejected and alternative Hypothesis H_1 is accepted.

8) Calculated χ^2 – value(78.515) > Table χ^2 – value(29.141) at 1 percent significance level and d.f. at 14.
Hence the null hypothesis H_0 is rejected and alternative Hypothesis H_1 is accepted.

9) Calculated χ^2 – value(62.171) > Table χ^2 – value(29.141) at 1 percent significance level and d.f. at 14.
Hence the null hypothesis H_0 is rejected and alternative Hypothesis H_1 is accepted.

10) Calculated χ^2 – value(50.249) > Table χ^2 – value(20.090) at 1 percent significance level and d.f. at 8.
Hence the null hypothesis H_0 is rejected and alternative Hypothesis H_1 is accepted.

11) There is significant relationship between Analytical ability and their career achievement

12) There is significant relationship between English assessment ability and their career achievement

CONCLUSIONS

1. There is significant relationship between sex of respondents and the level of perception on career goal in the first year students
2. There is significant relationship between the age of respondents and its influence in the level of perception on career goal in the first year students
3. There is significant relationship between degree of respondents and the level of perception on career goal in the first year students
4. There is significant relationship between XII marks scored by the respondents and the level of perception on career goal among the first year students
5. There is significant relationship between parent's income of the respondents and the level of perception on career goal in the first year students
6. There is significant relationship between sex of respondents and the level of perception on career goal in the final year students
7. There is significant relationship between age of respondents and the level of perception on career goal in the final year students
8. There is significant relationship between degree of respondents and the level of perception on career goal in the final year students
9. There is significant relationship between XII marks of respondents and the level of perception on career goal in the final year students
10. There is significant relationship between income of the parents, respondents and the level of perception on career goal in the final year students

11. It was be inferred that at high level of analytical ability the boys recorded a higher percentage when compared to girls
12. It was be inferred that at high level of English assessment ability the girls recorded a higher percentage when compared to boys.

RECOMMENDATIONS

1. Teachers' guidance in career opportunity is very much required and also to develop the students' communication skills.
2. The institutions must take special efforts to train the students to face the interview, to write the Resume, to face the aptitude test and group discussion.
3. There must be good career counselling and also counselling regarding personal issues in institutions.
4. The young students in colleges and universities need to be informed about various job openings available to them along with the requirements, responsibilities and the nature of work involved in them, so that they can equip themselves for suitable careers.

REFERENCES

1. Thornton, George C.,1 " Differential Effects of Career Planning on Internals and Externals" Personnel Psychology. Durham: Autumn 1978. Vol. 31, Iss. 3; p 471.
2. Odiorne, George S, "Setting Creative Goals" Training and Development Journal. Madison: July 1979. Vol. 33, Iss. 7; P 14.
3. Kirkham, Roger L, "Set a Goal, Then Go for It!" Industrial Engineering. Norcross: Mar 1980. Vol. 12, Iss. 3; P 50
4. Rausch, Erwin, "How to Make a Goals Program Successful" Training and Development Journal. Madison: Mar 1980. Vol. 34, Iss. 3; p. 24.
5. Campbell, Donald J, "Determinants of Choice of Goal Difficulty Level: A Review of Situational and Personality influences", Journal. Leicester: -1982. Vol. 55, Iss. 2; p. 79-82
6. Stahl, Michael J.,Harrell, Adrian M. "Identifying Operative Goals by Modeling Project Selection Decisions in Research and Development" IEEE Transactions on Engineering Management. New York: Nov 1983. Vol. EM30, Iss. 4; p 223-242.
7. Austin, James T., Bobko, Philip, "Goal-Setting Theory: Unexplored Areas and Future Research Needs", Journal of Occupational Psychology. Leicester: Dec 1985. Vol. 58, Iss. 4; p289-295.

CORPORATE RESTRUCTURING: A CONCEPTUAL FRAMEWORK

SHAILAJA D.KELSHIKAR
ASST. PROFESSOR
SMT.M.P.PATEL COLLEGE OF COMMERCE & CENTER FOR PROFESSIONAL COURSES
KADI

DR. MANOJ SHAH
ASSOCIATE PROFESSOR
SCHOOL OF COMMERCE & MANAGEMENT
DR. BABASAHEB AMBEDKAR OPEN UNIVERSITY
AHMEDABAD

ABSTRACT

Corporate restructuring has become a key solution to overcome all extensive problems lying in Indian corporate sector and an extensive reform taken in the year 1991, Liberalization, Privatization and Globalization (LPG) in Indian economy led Indian corporate to gain more competitive edge opening up with great global opportunities. It has signaled the need for an extensive restructuring of an Indian corporate sector. The author has put in efforts to make it easier to understand the concept of corporate restructuring.

KEYWORDS

Corporate, Restructuring, stakeholders.

INTRODUCTION

Change is inevitable. In fact it has become a necessity for any corporate house or business organization to keep on changing their business performance or activities as per the call of dynamic economic environment. There are various external factors which force these business houses to keep themselves updated. Such as increased competition, emergence of new markets, emergence of new competing products, new class of consumers, demographic changes, business cycles, surge of new and efficient technology.

Some of the organizations acts proactive to these challenges and adopt the environment but those who fail to do so, later on forced to adopt changes. The organizations acting wisely are market leaders and the late comers are losers. Survival has become a challenge in today's global economy.

In the era of liberalization and globalization, entities compete in unfamiliar markets. In addition, the protection provided by high tariffs and other trade barriers are no longer available, making it difficult for an entity to yield a steady output of goods, services and even profits year after year. Mangers have to continuously work to improve quality of goods and services, reduction in costs, and keep the output prices at competitive levels.

With liberalization and opening up of the Indian economy since the middle of 1991, Indian corporate sector felt the need to reposition itself quickly in order to response effectively to the emerging competition and also exploit the opportunities that were expected to unfold in the coming years. Repositioning has become a necessity for the Indian corporate sector as there were lot many inadequacies like lack of customer focus, diversified portfolio, unprofitable product lines, outdated technologies, uneconomic capacities, poor productivity, inefficiency on front of asset utilization, slow business processes, high gearing, huge overheads etc.

Corporate restructuring became a key solution to overcome all extensive problems lying in Indian corporate sector and an extensive reform taken in the year 1991, Liberalization, Privatization and Globalization (LPG) in Indian economy led Indian corporate to gain more competitive edge opening up with great global opportunities. It has signaled the need for an extensive restructuring of an Indian corporate sector.

CONCEPT OF CORPORATE RESTRUCTURING

The concept of restructuring focuses on change. The Oxford Dictionary (2007) defines restructuring as "giving a new structure, to rebuild/ rearrange". (**Rajinder Aurora, 2011**)[1]. It means any inbuilt valid changes done in the structure of the corporate entity. It can be related to its capital formation (capital structure), ownership pattern, or business capacity. Corporate restructuring is the process of redesigning one or more aspects of a company.

In simple words, restructuring mean reorganizing a company or company's structure so as to make it more efficient that leads to more profitability. The change in ownership pattern, business mix, and change in control pattern are some of the symptoms of corporate restructuring. Corporate restructuring decisions are strategic decisions and also considered as capital budgeting decisions. The wave of corporate restructuring has started into India from 1994 as an effect of economic reforms taken place in the year 1991. The major restructuring in the history includes Ashok Leyland by Hinuduja's Shaw Wallace, Dunlop owned Falcon Tyres by Chabbaria Group, Ceat Tyres by Goenkas and Consolidated Coffee by Tata Tea, RIL and RPL merger, Tata Tea's leveraged buyout of Tetley and restructuring of Dabur India Ltd, Mahindra Satyam, ITC, GSK, Arvind Mills, Crompton Greaves, Voltas, Hindustan Unilever and many more.

The term corporate restructuring is a broad umbrella covering various aspects of changes taking place in an organization.

Corporate restructuring results into major changes like size of business, ownership of business, control or management of the business It is the process of redesigning one or more features of a business firm. Corporate restructuring is a crucial strategy implemented to remain relevant in the business world.

Crum and Goldberg (1998)[2] define restructuring as a set of discrete decisive measures taken in order to increase the competitiveness of the enterprise and thereby to enhance its value or performance.

Gibbs (2007)[3] defined restructuring as a change in the operational structure, investment structure, financing structure and governance structure of a company. Sterman (2002)[4] referred it as diverse activities such as divestiture of underperforming business, spin-offs, acquisitions, stock repurchases and debt swaps, which are all a onetime transaction, but also structural changes introduced in day to day management of the business.

Chandra (2007)[5] defines corporate restructuring to a broad array of activities that expand or contract a firm's operations or substantially modify its financial structure or bring about a significant change in its organizational structure or internal financing.

Bowman and Singh (1999)[6] classified restructuring activities into three categories namely portfolio restructuring, financial restructuring and organizational restructuring.

---

[1] Rajinder Aurora, K. S. (2011). *Mergers and Acquisitions.* India: Oxford University Press.

[2] R.Vadapalli. Mergers and Acquisitions. 2010.

[3] Bhaggban Das, Debdas Raskhit, Sathya Swaroop Debasish. Corporate Restructuring. Himalaya Publishing House, 2009.

[4] R.Vadapalli. Mergers and Acquisitions. 2010.

[5] R.Vadapalli. Mergers and Acquisitions. 2010.

- **Portfolio restructuring:** It entails significant changes in the asset mix of a firm or the lines of business which a firm operates, including liquidation, divestiture, asset sales and spin-of financial restructuring: it includes changes in the capital structure of a firm, including leverage buyouts, leveraged recapitalization and debt equity swaps. A common way for financial restructuring increases equity through issuing new shares.
- **Organizational restructuring:** It involves significant changes in the organizational structure of the firm, including redrawing of divisional boundaries, flattening of hierarchic levels, spreading of the span of control, reducing product diversification revising compensation, reforming corporate governance and downsizing employment.

So, Corporate Restructuring can be defined as any change in the business capacity or portfolio that is carried out by an inorganic route or a change in the capital structure of a company that is not a part of its ordinary course of business or any change in the ownership of or control over the management of the company or a combination thereof.

TYPES OF CORPORATE RESTRUCTURING

Restructuring is a strategic process that provides companies with the much needed launching pad to improve their performance and profitability. However, the objectives to improve performance do not always ensure success. While results have been mixed, companies have often found new directions and drive to perform. Restructuring can be carried out in any one the following lines.

- ➢ **Financial restructuring:** Financial restructuring involves changes in the capital structure and capital mix of the company to minimize its cost of capital. It deals with blend of financial resources to facilitate mergers, acquisitions, joint ventures, strategic alliances, LBOs, and stock buyback. It is to be noted that all these initiatives depend on availability of free cash flows, takeover threats faced by the company, and concentration of equity ownership. Indian steel companies namely SAIL, Jindal Vijaynagar Steel Limited, Jinadal Iron and Steel Limited Essar Steel Limited and Ispat Industries have undergone financial restructuring to rescue from the problem of heavy debt obligations.
- ➢ **Portfolio restructuring:** Portfolio restructuring involves divesting or acquiring a line of business perceived non essentials to the long term business strategy of the company. It represents the company's attempt to respond to the market needs without losing sight of its core competencies.

TATA GROUP PORTFOLIO: BUSINESSES IN AND OUT[7]

The group has aligned its businesses into seven core sectors namely: Engineering, Materials, Energy, Chemicals, Services, Consumer Products, and Information System & Communication. The table below shows the diversification pattern followed by the group, the business they exited and the new sectors they entered.

TABLE 1

Year	Industry Entered	Industry Exit
1874	Textile	
1902	Hospitality	
1907	Steel	
1910	Power	
1912	Cement	
1917	Soaps & Cooking Oils	
1931	Paper & Publishing	
1932	Aviation	
1939	Chemicals	
1940	Consumer Electronics	
1945	Locomotives & Commercial Vehicles	
1952	Cosmetics	
1953		Aviation
1954	Air-conditioning	
1958	Pharmaceuticals	
1962	Tea & Coffee	
1968	Software & Information Technology	
1970		Locomotives
1984	Watches	
1984	Financial Services	
1994	Auto Components	Soaps & Cooking Oils
1996	Telecom	
1998	Passengers Cars	Cosmetics
1998		Pharmaceuticals
1999	Retail	Bearings
2000		Cement
2001	Insurance	Oil Drilling & Textiles
2002		Paints
2006	Biotech & Drug R&D	

- ➢ **Organizational restructuring:** Organizational restructuring is a strategy designed to increase efficiency and effectiveness of personnel through significant changes in the organizational structure. It is a response to changes in the business and related environments. Such restructuring takes the form of divestiture and acquisitions.

[8]Hindustan Lever Limited (HLL), the largest FMCG (Fast Moving Consumer Goods) company in India, was struggling to increase its business by the late 1990s. To kick-start growth, HLL trimmed its brand portfolio of 110 brands to 30, initiated new business ventures and relaunched all its brands. But being caught up in price wars with its arch rival Procter & Gamble negated the gains it achieved. In March 2004, HLL announced a major top management reshuffle and reorganised its business portfolio under two divisions. The company officials maintained that the strategy was to provide a sharper focus on key brands and categories and to simplify the organisational structure.

FORMS OF CORPORATE RESTRUCTURING

Corporate restructuring involves changes in ownership structure or business mix or asset mix with a view to enhancing the shareholders wealth. Mergers and Acquisitions are often viewed as corporate restructuring decisions as they affect the ownership pattern.

- ▪ **Merger:** Merger is defined as a combination of two or more companies. Here two or more companies' combines into one company or one company purchases another company for cash and integrates the purchased company with itself. The former one survives and other loses their existence. The term merger refers to fusion between two or more enterprises, which results in the emergence of a single enterprise. Such a fusion involves the transfer of

[6] Bhaggban Das, Debdas Raskhit, Sathya Swaroop Debasish. Corporate Restructuring. Himalaya Publishing House, 2009.
[7] (Joshi, 2006)
[8] (Hindustan Lever Limited: The Organisational Restructuring, 2006)

assets and liabilities of the merging companies to the merged company. The shareholders of the merging company become the shareholders in the merged company. For example, absorption of Tata Fertilisers Ltd (TFL) by Tata Chemicals Ltd. (TCL). TCL, an acquiring company (a buyer), survived after merger while TFL, an acquired company (a seller), ceased to exist. TFL transferred its assets, liabilities and shares to TCL. The other example, merger of Hindustan Computers Ltd, Hindustan Instruments Ltd, Indian Software Company Ltd and Indian Reprographics Ltd into an entirely new company called HCL Ltd. The merger of Air Deccan by Kingfisher Airlines and Samruddhi's merger with UltraTech are some of the evidences of mergers.

➢ **Consolidation:** Consolidation involves creation of an altogether new company owning assets, liabilities of two or more companies, both of which ceases to exist. For example. A Limited and B Limited will cease to exist and C Limited will carry on the businesses of both A Limited and B Limited. Mixing up of two companies to make them into a new one in which both the existing companies lose their identity and ease to exist is called consolidation. For example, Companies of Germany namely Audi, DKW, Horch and Wanderes consolidated to form a new company Audi AG and then Hindustan Computers Ltd., Hindustan Instrument Ltd., Indian Software Company Ltd., Indian Reprographics Ltd. Into HCL Ltd.

➢ **Acquisition:** Acquisition results when one company purchase the controlling interest in the share capital of another existing company. In acquisition both the companies may continue to exist. It is also known as takeover. It is the buying of one company by another company. An acquisition may be friendly or hostile. In case of friendly acquisition, the companies engaged in the deal co-operate each other for negotiation. And when acquisition becomes hostile it is known as takeover because there can be unwillingness of target company to be bought by another company. For example, Tata Steel acquired 100% stake in Corus Group on January 30, 2007. It was an all cash deal which cumulatively amounted to $12.2 billion. And Tata Motors acquired Jaguar and Land Rover brands from Ford Motor in March 2008. The deal amounted to $2.3 billion.

➢ **Joint Venture:** Joint ventures are new enterprises formed by coming together of two or more participants, typically formed for special purposes for a limited duration. It is a combination of subsets of assets contributed by two or more business entities. Each of the partners in the venture continues functioning as a separate firm, and the joint venture represents a new business project. It can also be called a contract among participants who not only agree to work together and expect to gain from the venture, but also agree to make a contribution.

Levins defines a joint venture as a new firm formed to achieve specific objectives of a partnership like temporary arrangement between two or more firms. JV is advantageous as a risk reducing mechanism in new market penetration and in pooling of resource for large projects. They however, present unique problems in equity ownership, operational control, and distribution of profits. Research indicates that two out of five JV arrangements last less four years, and are dissolved in acrimony. **(R.Vadapalli)** [9] For example: GM -Toyota JV. General Motors hoped to learn from the new experience of management techniques of the Japanese in building high quality, low cost compact and subcompact cars. Toyota was seeking to learn the management traditions that had made GM the numero uno in the production of auto in the world. Moreover, they wanted to learn operating an auto company in the US, dealing with contractors, suppliers and workers.

➢ **Sell off:** Sell off means selling a part of or the whole of the firm through a sale, liquidation or spin off. For example: Coromandel Fertilizers sold its cement division to India Cements.

➢ **Spin off:** In a spin off also a new legal entity is created, but shares are issued to the existing stockholders on a pro rata basis. This means that the stockholder base in the new company is the same as that of the old company. Though the stockholders are the same the spun off firm has its own management team and its activities are carried out as a separate company. This form of restructuring creates a new publicly traded company that is separate from the former parent company. The Information Technology Division of WIPRO Limited was spun off as a separate company in the late 1980s.

Split up: A split up is defined as the separation of a company into two or more parts. This term is applied to a restructuring where the firm is not merely divesting a piece of the firm but is strategically breaking up the entire corporate body. Here the firm is broken up into a number of spin offs after which the parent company does not exist any longer, and only the newly formed companies exist. The shareholders in the companies may not be the same as the shareholders trade their shares in the parent company with shares in one or more of the units that are spun off. In a split up a company is split up into two or more independent companies. For example, the Ahmedabad advance Mills was split up into two separate companies, the New Ahmedabad Advance Mills and the Tata Metal Strips.

➢ **Divestiture:** Divestiture means sale of assets, but not in a piecemeal manner. Here in this type of restructuring, a company sells all or substantially all the assets of any one or more of its undertakings or divisions or of the company as a whole. So a transaction through which a firm sells a portion of its assets, all assets, a product line a subsidiary or a division to another company for cash or securities is called divestiture. Divestiture is a form of contraction. Mergers, asset purchase and takeovers lead to expansion and are based on the principle of synergy which says 2+2 = 5. Divestiture on the other hand is based on the principle of reverse synergy which says 5-3=3. Divestiture are simple exit routes and do not result in the creation of a new entity. A common motive for divestiture is to raise capital. CEAT for example sold its nylon tyre cord plant at Gwalior to SRF for Rs 3250 million so that it could settle its payments and raise funds to concentrate on tyre manufacturing.

➢ **Equity carves out:** Equity carves out involves the sale of equity interest in a subsidiary. It is not necessary to have the same shareholder base in case of newly created company. The shareholder base may be different from the parent company. The divested company will have a different management team and will be considered as a separate firm. This mode of restructuring creates a new publicly traded company with partial or complete autonomy from the parent firm. When a parent company exercises an equity carve out it may sell a 100% interest in the subsidiary, or it may choose to remain in the subsidiary's line of business by selling only a partial interest and keeping the remaining percentage of ownership. For eg. Lalbhai Group – Arvind Mills, Arvind Products Ltd., Anup Engineering and General Motors carved out Delphi Automotive

➢ **Leveraged Buyouts (LBO):** The most significant and the major use of debt or loan capital to acquire a company is known as "leveraged". And the term 'buy outs' signifies the gain of control of a majority of equity stake the target company. According to Miller, the leveraged buyout is "a financing technique of purchasing a private company with the help of borrowed or debt capital."

(Bhaggban Das) [10] In 2000, Tata Tea acquired the world's second largest tea brand Tetley at a price of £271 million, out of which £235 million raised in the form of borrowed capital. For such acquisition, Tata Tea has created a special purpose vehicle- Tata Tea(Great Britain) which is the 100% subsidiary of Tata Tea, in order to acquire the assets of the target company Tetley. Here, Tata Tea Ltd. Created the SPV with an aim to ensure that the balance sheet of Tata Tea does not affected by the additional funding costs, while the company can enjoy the benefits of such acquisition.

➢ **Management Buyout (MBO):** In a management buyout, the managers and or directors purchase all or part of the business from its owners. The management team will take substantial controlling interest from the existing owners who have control over the affairs of the company. The management team may consist of one or more directors, one or more employees either with or without external associates. It is a method of setting up of business by the management team itself. The cases of management buyout occur when the existing owners unable to run the company successfully and when the very existence of the company is at stake. It is a divestment technique to sell the business which does not fit in with the new strategic plan of the group. The management has an advantage of knowing the strengths and weaknesses of the business they are proposing to purchase from the owners and so that they can make a better negotiation. The insider information available with the managers will lead them to acquire substantial stake.

➢ **Employee Stock Ownership Plans (ESOP):** An Employee Stock Ownership Plan allows companies to share ownership with employees without requiring the employees to invest their own money. It is an extraordinary benefit to companies and their shareholders and employees. ESOPs provide a market for the shares of closely held businesses; motivate greater employee's productivity; and provide tax advantages in the financing of acquisitions, capital improvements, charitable giving and stock purchases from retiring owners. There are many companies into India like Arvind Mills, ONGC, HDFC Bank etc.

Here the author has made efforts to conceptualize the corporate restructuring. It's a theoretical attempt to understand the concept even better. The scope is to take individual aspect of corporate restructuring for detailed study with corporate houses in India.

---

[9] R.Vadapalli. Mergers and Acquisitions. 2010.

[10] Bhaggban Das, Debdas Raskhit, Sathya Swaroop Debasish. Corporate Restructuring. Himalaya Publishing House, 2009.

INTERNATIONAL JOURNAL OF RESEARCH IN COMPUTER APPLICATION & MANAGEMENT   38

A Monthly Double-Blind Peer Reviewed (Refereed/Juried) Open Access International e-Journal - Included in the International Serial Directories

http://ijrcm.org.in/

REFERENCES

1. Bhagaban Das, D. R. (2009). Corporate Restructuring. Mumbai: Himalaya Publishing House.
2. G.Godbole, P. Mergers, Acquisitions and Corporate Restructuring. Noida: Vikas Publishing House Pvt. Ltd.
3. Hindustan Lever Limited: The Organisational Restructuring, HRM0008 (2006).
4. Joshi, R. K. (2006). Cross Holding Strategy in Increase Control: Case of the Tata Group. XLRI Working Paper (2006), 21.
5. Rajinder Aurora, K. S. (2011). Mergers and Acquisitions. India: Oxford University Press.
6. Ranjan Das, U. K. (2004). Corporate Restructuring Enhancing the Shareholder Value. New Delhi: Tata McGraw-Hill Publishing Company Limited.

WEBSITES

7. http://www.crisil.com/Ratings/Commentary/CommentaryDocs/steel_nov02.pdf
8. http://www.citeman.com/3884-portfolio-restructuring.html#ixzz3WQeVBYbw
9. http://www.citeman.com/3884-portfolio-restructuring.html#ixzz3WQeLj01u
10. http://www.citeman.com/3884-portfolio-estructuring.html#ixzz3WQellGZQ

FACTORS INFLUENCING CORE QUALITY MANAGEMENT PRACTICES (THE CASE OF SOME SELECTED COLLEGES OF ETHIOPIAN MINISTRY OF AGRICULTURE)

DR. BREHANU BORJI AYALEW
ASSOCIATE PROFESSOR
SCHOOL OF MANAGEMENT AND ACCOUNTING
HAWASSA UNIVERISTY
ETHIOPIA

ABEL DULA WEDAJO
LECTURER
EMOA ATVET COLLEGES
ETHIOPIA

ABSTRACT

In this study the researcher empirically investigated factors influencing core quality management practice. Considerable effort has been devoted over the years by many organizations to adopt quality management practices, but few studies have assessed factors that influence core quality management practices in EMoA ATVET Colleges. The problem addressed in this study was to investigate the factors influencing core quality management practice in a single important ATVET projects (i.e., EMoA ATVET Colleges). A survey instrument was adapted from business quality literature and was sent to 120 functional managers in three EMoA ATVET colleges. All the questionnaires were responded with a 100% response rate. Factor analysis using confirmatory factor analysis was performed to assess 35 survey items designed to measure 7 dimensions of EMoA ATVET College quality management practices. The researcher is 95 percent confident to say that all loadings and correlations between the indicators and the latent variables are significant (p< 0.05) and all have a loading of 0.4 or greater with the exception of eight indicators (items) under five constructs. After examining the factor loading, the researcher analyzes the data for suggested modification indices, then model fit result for this study depicts a better improvement by comparing the parent model with a nested model. The framework was subjected to validity and reliability analysis and the result shows meeting the criteria satisfactorily. Finally, after confirming the measurement model used in this study, the researcher analyzed the relationship between top management commitment, information technology responsiveness, process management, employee management, suppliers quality management, information analysis and customer orientation. Out of 21 relationships only ten correlation results are statistically significant at (p=0.05) level. Also from the thirteen hypothesized relationships only five relationships were significant at (p=0.05) level. The results of this study showed that the pre-specified quality management practice constructs are resulted into the development of an instrument to assess quality management practices in EMoA ATVET Colleges. Furthermore, this study extended the scope of existing quality management literature to the education sectors in Ethiopia and contributed to theory about the nature of quality management practices.

KEYWORDS
Factor analysis, Quality Management Practices, Amos, Latent variables.

INTRODUCTION

With the greater successes of Japanese companies during the 1980s, companies all over the world found that it was necessary to have good quality management practices in order to stay competitive (lagrosen, 2002). The type of organizations that use Total Quality Management (TQM) varies from large to small, private to public and from manufacturing to service organizations. According to (hodgetts, 1999), all enterprises regardless of size and financial status, are involved in the quality revolution. Organizations need to understand how to implement Quality Management (QM) to achieve the maximum benefit. Taking a one-size fits all approach to QM may not lead to optimal outcomes. Different organizations may need different approaches to QM. A study on QM implementation in hospitals, found that hospitals that customized the QM practices had higher performance than hospitals that adopted standardized approaches to QM. However, their study did not provide an explanation about how organizations can customize QM practices (Westphal, Gulati, & Shortell, 1997).

Other researchers examined QM factors for ISO 9001:2000 implementation centered on eight quality principles that considered as critical for the TQM implementation outcomes. Based on deeper analysis they state the most critical factors for TQM implementation results as those related with quality data and reporting, customer satisfaction, human resource utilization, management of process control, training and education, management commitment, continuous improvement, leadership, strategic quality planning, performance measurement, customer focus, and contact with suppliers and professional associates (Lewis, Pun, & Lalla, 2006). Also it is obvious that IT has an important role to play in the area of quality management. According to (Pearson, Mccahon, & R.T, 1995), IT responsiveness to the needs of TQM is a critical success factor in the implementation of such an information-intensive management system.

According to (Kanji & Malek, 1999), there are ten TQM practices: top-management commitment, customer focus and satisfaction, quality information and performance measurement, human resource management, employee involvement, teamwork, process management, quality assurance, zero defects, and communication. According to (Toensmeier, 1997), the main obstacles or barriers that organizations face in implementing any quality system are lack of available resources to implement and maintain a quality assurance system, lack of financial capacity to meet the implementation and maintenance costs, lack of time, and a lack of experience amongst managers.

The aim and philosophy of quality management is not the measurement of quality performance as an end in itself, but the continual improvement of quality through a process of cultural and organizational change (Tesema, 2008). It is people-driven and results are evidenced in terms of improved teamwork, company morale and organizational climate, resulting in improved productivity and profitability (Birhanu, 2011).

Living behind the debate on applicability of quality management practices in all the sectors now it is understandable by most of the stakeholders in any organization that quality related problems are the stumbling block for the majority of the industries. Furthermore, quality related problems were apparent in all the sectors (Birhanu, 2011).According to (Birhanu, 2011), Quality awards and ISO 9000:2000 Quality Management System are the two major instruments or frameworks or models of quality management. In addition he reported that Ethiopian organizations competing for the Ethiopian Quality Award are evaluated on seven criteria: leadership, policy and strategy, resources management, process management, customer satisfaction, business performance and impact on the society.

LITERATURE REVIEW

According to (Pfeffer & Coote, 1991), the word "quality" has been derived from the Latin word qualis, meaning, "what kind of". With a wide variety of meanings and connotations attached to it, quality is a difficult and elusive term to define, having thus been referred to as a "slippery concept". It is slippery because it changes in meaning with the context or point of view. The word implies different things to different people. It has, thus, been defined with different

perspectives and orientations, according to the person, the measures applied and the context within which it is considered. Generally, quality is fitness for the intended purpose.

The theory of quality management has been developed from three areas: contributions from quality leaders (Deming, 1986; Juran J., 1986), formal evaluation models (e.g., Ethiopian Quality Award, EFQM, and MBNQA) and measurement studies (Flynn et al., 1994; Saraph et al., 1989). Based on these contributions, TQM consists of a number of elements, which may be grouped into two dimensions: the managerial system and the technical system (Yen-Yu, 2014) or the 'soft' and 'hard' parts (Ayman, 2013). Quality management is a method for ensuring that all the activities necessary to design, develop and implement a product or service are effective and efficient with respect to the system and its performance (Deming, 1986). Quality management (QM), also called total quality management, evolved from many different management practices and improvement processes. QM is not specific to managing people, but rather is related to improving the quality of goods and services that are produced in order to satisfy customer demands. According to (Bank, 1992), Total Quality Management (TQM) refers to management methods used to enhance quality and productivity in organizations, particularly businesses.

The ISO 9000 series of standards is the international standard for quality management. The objective of this series of standards is to aid supplier quality assurance and to provide a common, authoritative and widely accepted standard by which to evaluate and compare the potential of firms to meet acceptable levels of quality and reliability. The word potential is vital here, since it looks at the system and not the product (Gill, 2009). In addition, Gill stated that ISO 9000 series were harmonized with BS5750 in 1987 and have been revised twice up to their current state. ISO 9000 usage has more than doubled from 457,834 in December 2000 to 1,064,785 in December 2009. It is clearly popular, and there are a variety of possible reasons for individual organizations to adopt the standard (ISO, 2014).

Another researcher Kanji G., (2001) asserted that top-management commitment is the fundamental driver of business excellence. Further, studies showed that top-management commitment as one dimension of quality management practice (Arumugam V. O., 2008; Prajogo D. B., 2004).The leaders' role has become so important in successful implementation of quality initiatives in firm and most quality models take leadership as a separate variable to measure QM practices (Prajogo D. &., 2008). Leadership is very important. Any text on Quality Management or indeed any major initiative will confirm this fact.

According to Zakuan et.al., (2010), effective supplier quality management can be achieved by cooperation and long term relationship with the suppliers. This argument is also supported by(Zineldin, 2000), who found that developing supplier partnership and long-term relationships can increase the organization competitiveness and thus improve performance. Supplier quality management has been identified as an important dimension of quality management practices, especially with regard to the manufacturing firms (William, Andrew, & Richard, 2009).

Deming claimed that involvement and participation of employees at all level is must to improve the quality of the current and future product or service. Even non-managerial employees can make significant contributions when they are involved in quality improvement processes, decision making processes, and policy making issues (Sadikoglu E. &., 2010; Ooi K. A., 2007b). A research conducted by Prajogo D. I., (2005) revealed the importance of information and its contribution to quality performance. Similarly, Sit et al., (2009) also indicated that information and analysis have a significant effect on customer satisfaction. Information and analysis also helps an organization to ensure the availability of high quality, timely data and information for all users like employees, suppliers, and customers (Teh et al., 2009; Lee et al., 2003).

STATEMENT OF THE PROBLEM

According to(Engelkemever, 1993), QM can be applied as a means for improving student/ staff morale/ increasing productivity, and delivering higher quality services to both internal and external customers. This proposes the possible adoption of commercially based approaches such as TQM, ISO Series, BPR and kaizen in a service sector like Technical, Vocational, Educational and Training Colleges (Richard et.al., 2010). Although Educational Institutions are able to adopt many of the principles of QM, it is reasonable to expect some problems when applying them to a different organizational structure in the commercial environment(Tam, 2002).

According to(Daniel & Fasika, 2003), most literatures are revolved around manufacturing organizations and there are only few empirical researches available in Ethiopia concerning the study of factors influencing QM practices in service sector, particularly an educational institutions. Besides, a research conducted by Birhanu (2011) confirmed that the literature on quality management practice in Ethiopia is insufficient.

Important aspect to be recognized here is that although studies on factors influencing QM Practice were conducted for companies of all sizes in other countries, there is none actually focused on studying factors influencing core QM practices in Ethiopia, particularly in ATVET Colleges. In addition to this the researcher emphasized on factors that are considered to be a success factors in many other researches for successful implementation of core quality management practice in a way that fits the study area where clear failure of quality management implementation is observed. The colleges are rendering service through training and development agents to the country as a whole by engaging themselves simultaneously in production, which pose a big difficulty in coordinating quality management efforts designed to achieve customer orientation. So the researcher attempts to bridge the aforementioned empirical gap and mitigate the prevailing problems encountered by ATVET colleges by investigating factors influencing core quality management practice (customer orientation).

GENERAL OBJECTIVES

The general objective of this study is to assess factors influencing core quality management practice in MoA ATVET Colleges.

SPECIFIC OBJECTIVES

1. To investigate the underling structure of quality management practices constructs
2. To examine the relationship between quality management practices constructs.
3. To examine the influence of quality management constructs on core quality management practice construct

RESEARCH QUESTIONS

1. What is the underling structure of quality management practices constructs?
2. What is the relationship between quality management practices constructs?
3. Does quality management practice constructs influence core quality management practice?

SCOPE OT THE STUDY

This study was conducted on federally owned three MoA ATVET colleges in Ethiopia, namely, Ardaita, Alage and Agarfa from September to December 2014. The study focused on assessing factors influencing quality management practice through investigating the relationship between 35 observable exogenous items and endogenous latent variables constituting quality management practices constructs. The researcher delimits its scope only on seven constructs, which includes process management, employee management, supplier quality management, top management commitment, information technology responsiveness, information and analysis, where all this latent variables are measured using reflective measurement models.

The data for the study is collected from individual senior and functional managers of the colleges through a structured questionnaire. The population for this study encompasses only three ATVET colleges under the direct responsibility of MoA ATVET project office. This study area is purposively identified because the researcher acknowledges that they exhibit some level of implementation and initiatives on quality management systems using ISO 9001, 2008.

The researcher employed quantitative approach to deal with the analysis. The data obtained through a structured questionnaire were analyzed quantitatively. And the survey results were presented through descriptive and inferential statistics using IBM SPSS statistics software version 20 and IBM SPSS Amos version 20 employing Factor Analysis. Therefore, any of the analysis and finding of this research confined only to the selected study area.

INTERNATIONAL JOURNAL OF RESEARCH IN COMPUTER APPLICATION & MANAGEMENT   41

A Monthly Double-Blind Peer Reviewed (Refereed/Juried) Open Access International e-Journal - Included in the International Serial Directories

http://ijrcm.org.in/

LIMITATIONS OF THE STUDY

➢ All primary data were obtained from respondents through questionnaire so Response were based on the managers perception, thus research findings might have been biased. However these limitations in the study leave future ground for explorations and research on the subject.

➢ Because of time and financial constraints, the area coverage of this study was delimited to only three MoA ATVET Colleges. The targeted population numbers for this study is large. But the researcher tried to estimate a representative sample size for the purpose of maximizing the credibility of the study.

➢ On top of this, the conclusions and recommendations drawn by this study will be applicable only for Ministry of agriculture ATVET Colleges incorporated in the study.

RESEARCH METHODOLOGY

The type of research employed in this investigation is decripto-explanatory research. This type of research is used because it enables the researcher to carry out survey strategy. Survey strategy is usually associated with the deductive approach survey strategy is a popular and common strategy in business and management research and is most frequently used to answer who, what, where, how much and how many questions. Surveys are popular as they allow the collection of a large amount of data from a sizeable population in a highly economical way and it is, often obtained by using a questionnaire administered to a sample, allowing easy comparison. In addition, the survey strategy is perceived as both comparatively easy to explain and to understand (Jelke, 2009). In this research both primary and secondary data were used. Primary data were collected from the target respondents using structured questionnaire whereas the secondary data were gathered from the secondary sources such as reports, manuals, internal publications and books which help the researcher to gather theories and principles related to the topic of the research.

The total population of this study is 175 constituting three ATVET colleges' functional managers in MoA. To determine an appropriate sample size from the three strata of population, the researcher used stratified sampling technique provided by *Cochran (1977)* to determine a sample size from strata.

$$n_0 = \frac{(t)^2 * (s)^2}{(d)^2}$$

$$n = \left(\frac{(1.96)^2 * (1.25)^2}{(0.25)^2} \right)$$

Where

n = 96

n_0 = the required sample size: (?)

t = value for selected alpha level of 0.05 = 1.96 (the alpha level of 0.05 indicates the level of risk the researcher is willing to take that true margin of error may exceed the acceptable margin of error.)

s = estimate of standard deviation in the population = 1.25 (estimate of variance deviation for 5 point scale calculated by using 5 [inclusive range of scale] divided by 4[number of standard deviations that include almost all (approximately 98%) of the possible values in the range])

d = acceptable margin of error for mean being estimated = 0.25 (number of points on primary scale * acceptable margin of error; points on primary scale = 5; acceptable margin of error = .05 [error researcher is willing to except]) Taking into account previous research on this line of study area the researcher assumes 80 percent response rate and the researcher determine the drawn sample size required to produce the minimum sample size as 96/0.80 which results a *120 sample size.*

After identifying the sample size using the above equation the researcher need to allocate the estimated sample size to each strata college under the study to maximize the predictive power of the model. One method is proportional allocation. Thus the proportional allocation was done using the formula adapted from Kothari (2004). The formula is as follows:

$$N_{h =} \frac{nN_h}{N}$$

Where:

N_h = Proportional sample to the strata

n = Sample size determined using the formula provided by (Cochran, 1977)

N = target population

TABLE 1: SAMPLE SIZE DETERMINATION FOR EACH STRATUM

ATVET Colleges'	Number of managers	Proportional size
Ardaita	43	30
Alage	74	50
Agarfa	58	40
Total	**175**	**120**

Source: *Field Survey, (2014)*

As the table 3, in Appendix B indicates, Bartlett's test of sphericity is significant (p<0.05), which indicates the appropriateness of factor analysis. It was also suggested in different statistical books that Kaiser Meyer measure of sampling adequacy should be greater than 0.07(Tabachnick, 2007). In this study the measure indicates a value of 0.790 which indicates the achievement of the minimum suggested value for good factor analysis. So the researcher specified all this latent variables as it was suggested in (Lassaad, 2006; William et al., 2009; Kanagi, 2009). Therefore, the sampe size drawn by the researcher is adequate to represent the study population.

DATA COLLECTION METHOD

A structured interview questionnaire/ schedule/ was designed to gather primary data from senior and functional mangers of the selected colleges to collect the desired information within a limited period of time. To maintain the reliability and validity of the data, the researcher provided proper insight about the purpose of the study to the individuals from whom the data were collected.

Moreover, the researcher conducted a pilot survey by distributing the instrument to academicians and practitioners knowledgeable about the management of quality in order to assure the validity of the instrument developed. Participants in the pilot study constituted eight instructors from Ardaita ATVET College, one former ISO/ 9001 2008 team coordinator of Ardaita ATVET College and one employee of Ethiopian conformance assessment enterprise. The researcher asked these respondents to assess each item on the survey and to identify items that need to be reworded, items that have to be eliminated if they did not add value and items that should be added in order to adequately measure quality management in EMoA ATVET Colleges. Even though the researcher incorporated 43 items, according to the responses from pilot respondents only 35 items were into the final version. At the end, the study also used Cronbach's alpha to the

INTERNATIONAL JOURNAL OF RESEARCH IN COMPUTER APPLICATION & MANAGEMENT 42

A Monthly Double-Blind Peer Reviewed (Refereed/Juried) Open Access International e-Journal - Included in the International Serial Directories

http://ijrcm.org.in/

validity of instrument used to collect the data. As the results of Cronbach's alpha for all seven variables is more than 0.70, internal consistency of latent variables is strong (see table 2, in appendix A).

Many of the published studies assessed quality management practices using different instruments developed by such researchers as Saraph et al. (1989). However, the researcher of this study adapted the instrument from the works done by Lassaad et al., (2006); Zakuan et al., (2007); Kanagi (2009); William et al., (2009); Ayman (2013); Yen-Yu, (2014) because of lack of access to the original work of Sarpha et al.,(1989). To this effect, close-ended questions format with five-points Likert Scale was used (i.e., 1, 2, 3, 4 and 5), which indicates 'strongly disagree', 'disagree', 'undecided', 'agree' and 'strongly agree' respectively. The final questionnaire used in this study contained two sections. Section one contained questions regarding demographic characteristics which included (occupation, gender, and number of subordinates under their function). Section two consisted of statements relating to the latent variables of the study and it has 35 items related to: *Leadership, Information and analysis, Process management, Employee Management, Supplier quality management, Customer orientation and information technology responsiveness.*
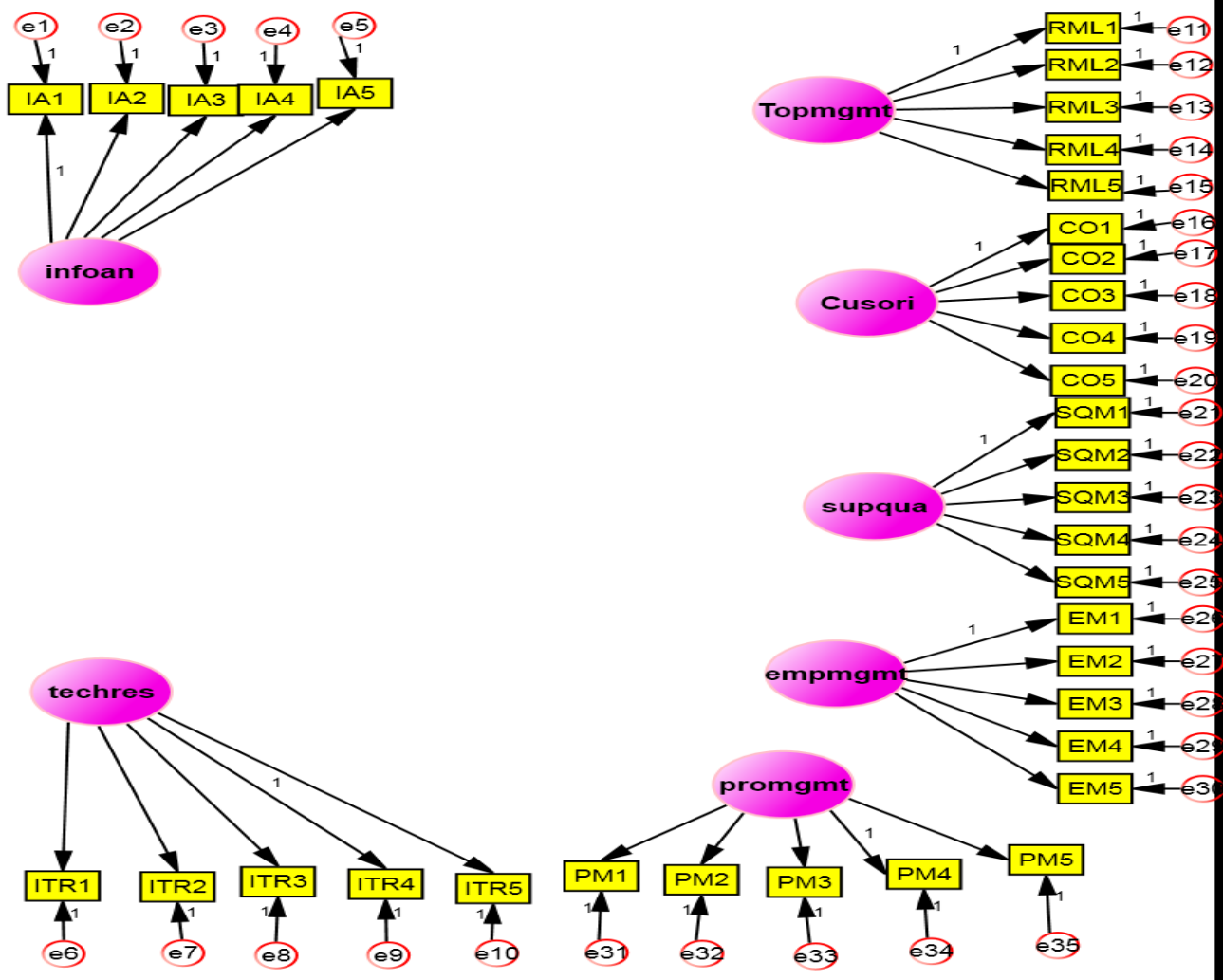
METHOD OF DATA ANALYSIS

To analyze the factors that influence core quality management practice, it is important that the measures should reflect the theoretical concept that underlies quality management and cover all the domains of its implementation. To analyze the collected data in line with the overall objective of the research undertaken, statistical procedures were carried out using SPSS statistics and SPSS Amos version 20.00. In all cases alpha (significance value) is set at 0.05, to test at 95 percent confidence level. Using this software, analysis was performed by employing factor analysis. Factor analysis is an interdependent technique and it is essential in several stages of development and assessment of measures.

DATA ANALYSIS AND INTERPRETATIONS

INITIAL SPECIFICATION

Amos Graphics follows the conventions of structural equation modeling (SEM) diagrams. The ovals represent latent (or unobserved) variables. In this case, Top Management Commitment (represented by items coded as RML1- RML5), Employee Management (represented by items coded as EM1- EM5), Process Management (represented by items coded as PM1- PM5), Information and Analysis (represented by items coded as IA1- IA5), Supplier Quality Management (represented by items coded as SQM1- SQM5), Information Technology Responsiveness (represented by items coded as ITR1- ITR5) and Customer Orientation (represented by items coded as CO1- CO5) represent the seven subscales of the quality management practices construct. The rectangles represent observed variables, which are the actual Quality Management Practices Construct items indicated above in bracket. The curved double-headed arrows represent the correlations or covariance's among the latent variables (for the standardized and unstandardized solutions, respectively), and the straight single-headed arrows represent the factor loadings of the observed variables on the latent variables. The small circles with arrows pointing from the circles to the observed variables represent errors or unique factors that each latent variable has a 1 next to the path from it to one observed variable (e.g., from top management commitment to RML1). This serves to constrain the parameter and define the scale of the latent variable as it was suggested by (Arbuckle, 2012), each latent variable must be scaled. So all the procedures are performed with due considerations pertinent to the quality management literatures and analysis was done according to Arbuckle (2012) manual. The figure below depicts the initial graphical input used for specification search, where yellow colored rectangles represent observable variables, pink colored circles represent latent variables and red circles represent measurement error for each observable variables incorporated in this study. Here the researcher wants to stress that the specification of the model at this time have no implications to the order of the latent as well as the observable variables. Generally in this study, there are 35 loading estimates, 35 error estimates, 7 variance and 21 correlation estimates between construct. The estimate for each arrow linking a construct to a measured variable is an estimate of a variable's loading-the degree to which that item is related to the construct. So totally there are 99 parameters to be estimated in this study. But for the purpose of identification, one parameter was fixed at one. Accordingly, these results estimate 98 free parameters. The model does not deny the existence of variables such as organizational context, organizational structure and culture, which may play an important role in the explanation of quality management practices. Despite that, these variables are not included in this model explicitly. Their effects will be considered by the error terms specified in the structural model.

INTERNATIONAL JOURNAL OF RESEARCH IN COMPUTER APPLICATION & MANAGEMENT   43

A Monthly Double-Blind Peer Reviewed (Refereed/Juried) Open Access International e-Journal - Included in the International Serial Directories

http://ijrcm.org.in/

FIGURE 1: MEASUREMENT MODEL OF THE STUDY, AMOS GRAPHICS INPUT

Source: Survey Data (2014)

The above figure 4.1 shows the raw input to be used for the proceeding analysis which is imported from SPSS version 20. According to (hair et al., 2010) the SEM program used for this analysis have the capability to compute a model solution directly from raw data, without the researcher computing a correlation or covariance matrix separately. Also they pointed out that, the alternatives between correlations versus covariance matrix used is a statistical and interpretation issue. To aid interpretation and show the procedures clearly, the researcher presented the curved double-headed arrows which represent the correlations or covariance's among the latent variables.

TABLE 2: AMOS RESULTS OF COVARIANCE AMONG CONSTRUCTS

Covariance			Estimate	S.E.	C.R.	P
supqua4	<-->	empmgmt3	.037	.024	1.551	.121
Cusori5	<-->	supqua4	.173	.083	2.074	.038
Cusori5	<-->	empmgmt3	.111	.049	2.266	.023
empmgmt3	<-->	Topmgmt6	.112	.041	2.731	.006
supqua4	<-->	Topmgmt6	.080	.039	2.031	.042
Cusori5	<-->	Topmgmt6	.164	.063	2.602	.009
promgmt2	<-->	Topmgmt6	.107	.034	3.185	.001
promgmt2	<-->	techres1	-.056	.029	-1.919	.055
techres1	<-->	infoan7	-.014	.053	-.266	.790
Topmgmt6	<-->	techres1	-.016	.036	-.433	.665
Cusori5	<-->	techres1	-.068	.077	-.892	.372
supqua4	<-->	techres1	-.283	.060	-4.687	***
empmgmt3	<-->	techres1	-.022	.021	-1.083	.279
Cusori5	<-->	infoan7	-.006	.088	-.063	.950
promgmt2	<-->	infoan7	.057	.033	1.753	.080
promgmt2	<-->	empmgmt3	.076	.031	2.429	.015
promgmt2	<-->	supqua4	.058	.031	1.883	.060
promgmt2	<-->	Cusori5	.108	.050	2.159	.031
supqua4	<-->	infoan7	.113	.059	1.915	.055
empmgmt3	<-->	infoan7	-.019	.023	-.849	.396
Topmgmt6	<-->	infoan7	-.044	.041	-1.061	.289

Source: Survey Data (2014)

The second estimate displayed is of the covariance between customer orientation and suppliers quality management. The covariance is estimated to be 0.173. Right next to that estimate, in the S.E. column, is an estimate of the standard error of the covariance, 0.083. The estimate 0.173 is an observation of an approximately normally distributed random variable, centered around the population covariance with a standard deviation of about 0.083. The researcher used these figures to construct a 95 percent confidence interval on the population covariance by computing $0.173 + 1.96*0.083 = 0.173 + 0.16268$. Next to the standard error, in the C.R. column, is the critical ratio obtained by dividing the covariance estimate by its standard error $0.173/0.083 = 2.074$. This ratio is relevant to the null hypothesis, that is, in the population from which this survey subjects came, the covariance between customer orientation and suppliers quality management is 0. If this hypothesis is true and considering distribution assumptions for Amos Models, the critical ratio is an observation on a random variable that has an approximate standard normal distribution. Thus, using a significance level of 0.05, any critical ratio that exceeds 1.96 in magnitude would be called significant (Arbuckle, 2012). In this study, since 2.074 is greater than 1.96, the researcher would say that the covariance between customer orientation and suppliers quality management is significantly different from 0 at the 0.05 level. The P-column, to the right of C.R., gives an approximate two-tailed p-value for testing the null hypothesis that the parameter value is 0 in the population. The table shows that the covariance between customer orientation and suppliers quality management is significantly different from 0 with p = 0.038. So both tests agree in rejecting the null hypothesis at the 0.05 level. In addition the results in table above shows the covariance between customer orientation and employee management is significantly different from zero at p = 0.023, employee management and top management is significantly different from zero at p = 0.006, suppliers quality management and top management is significantly different from zero at p = 0.042, customer orientation and top management is significantly different from zero at p = 0.009, process management and top management is significantly different from zero at p = 0.001, suppliers quality management and information technology responsiveness is significantly different from zero at p = 0.001, process management and employee management is significantly different from zero at p = 0.015 , process management and customer orientation is significantly different from zero at p = 0.031. Generally of the 21 covariance's tested 10 parameters found to be significantly different from zero and 11 parameters are found to be not significantly different from zero. So it poses a limitation for the finding to be generalized for the entire study population concerning the parameters found to be not significant.

FIGURE 2: AMOS RESULTS OF ESTIMATED MEANS AMONG INDICATORS
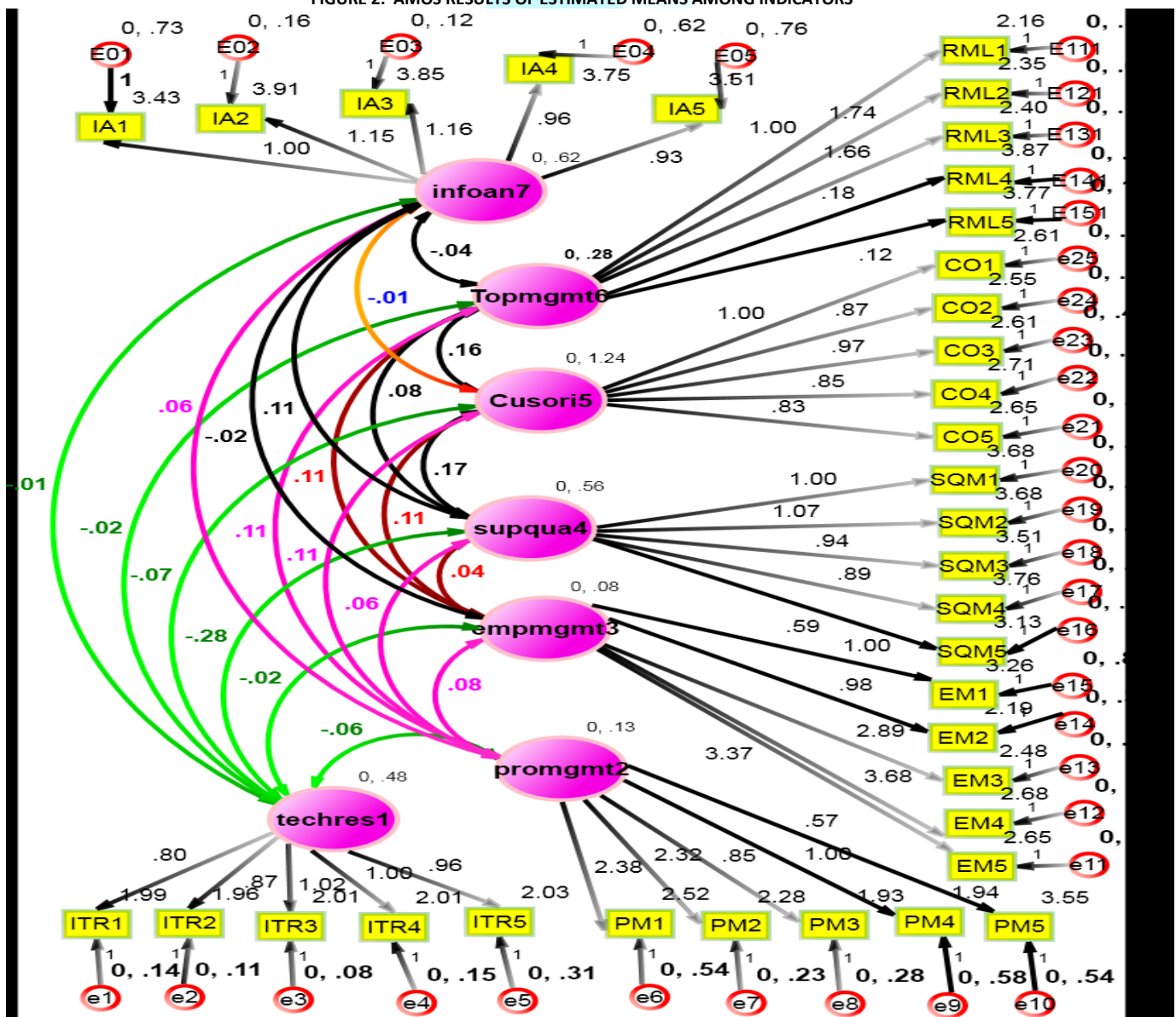
Source: Survey Data (2014)

Figure 2, here above, shows estimated population mean for all the indicators. This results are shown at the right top corner of each small rectangle boxes, where almost all the indicators of customer orientation, employee management, process management and information technology responsiveness constructs are rated by respondents as disagree, strongly disagree or undecided options on the five point Likert scales. On the other hand indicators associated with information analysis, suppliers quality management are rated as agree, strongly agree or undecided options on the five point Likert scales. Since sample mean is recognized as unbiased estimator of the population mean (Larson & Farber, 2013), the researcher becomes 95% confident to infer that all the sample mean results of each indicators exhibited lower rating. So as the literatures for assessing the level of quality management practices suggested that each construct indicators scored below average requires managerial attention for successful implementation and realization of quality management initiatives.

AMOS RESULTS OF CORRELATION AND FACTOR LOADING

The standardized estimates output provided by Amos version 20.0 using ML estimation is presented in Figure 3 here under. The results presented in Amos Table 3 are similar to the results presented in Figure 3. In other words, Table 3 is prepared based on the results presented in Figure 3.

FIGURE 3: AMOS RESULTS OF CORRELATION AND FACTOR LOADING
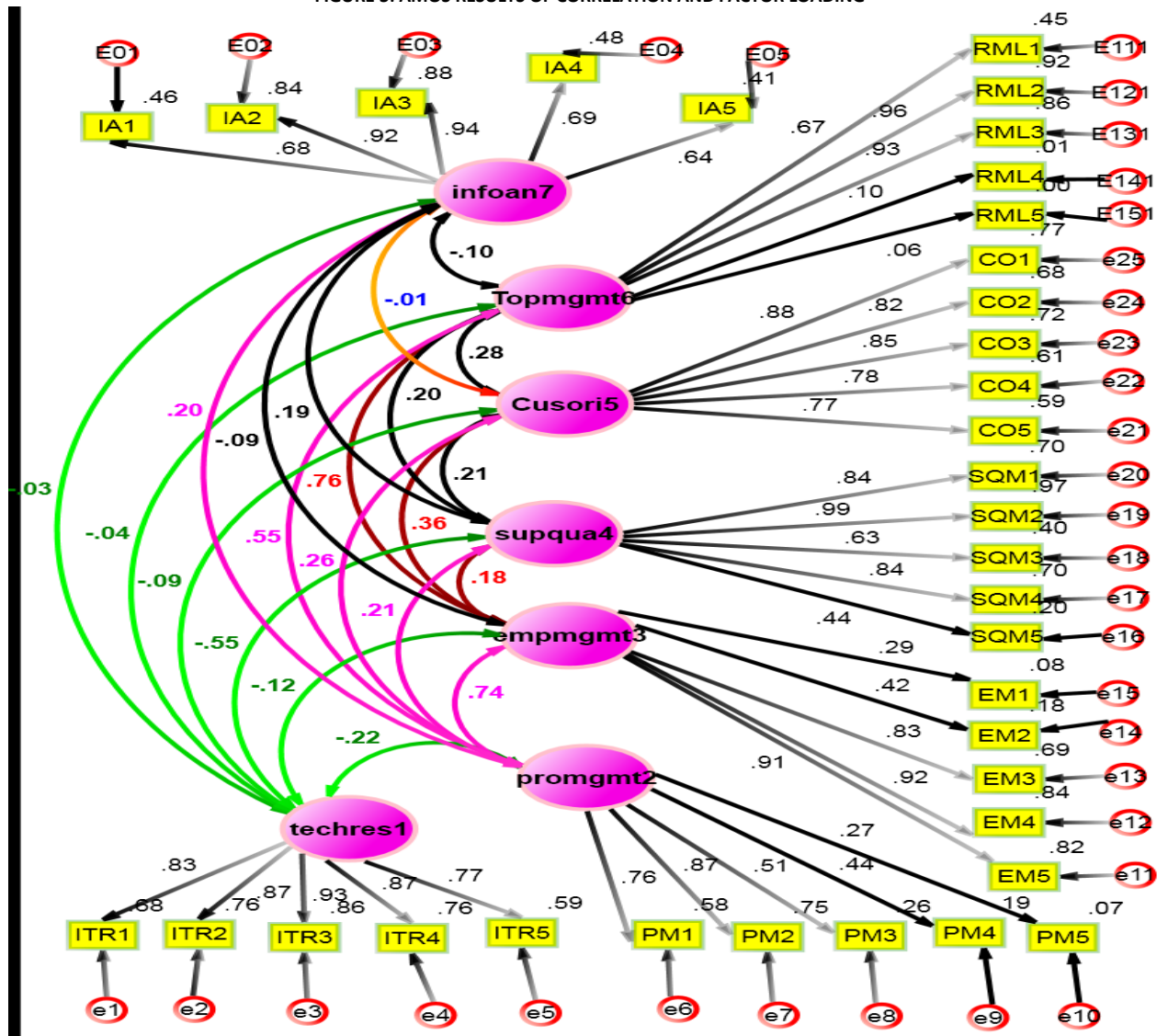
Source: Survey Data (2014)

TABLE 3: STANDARDIZED CORRELATION BETWEEN CONSTRUCTS AMOS TEXT RESULTS

Path	Correlation
Supplier quality management <-->Employee management	.177
Supplier quality management<-->Top management	.203
Supplier quality management<-->Technology responsiveness	-.548
Supplier quality management<-->Information and analysis	.192
Supplier quality management<-->Process Management	.212
Customer orientation<-->Supplier quality management	.208
Customer orientation<-->Employee management	.356
Customer orientation<-->Top management	.277
Customer orientation<-->Technology responsiveness	-.089
Customer orientation<-->Information and analysis	-.006
Customer orientation<-->Process Management	.263
Employee management<-->Top management	.759
Employee management<-->Technology responsiveness	-.115
Employee management<-->Information and analysis	-.087
Employee management<-->Process Management	.738
Top management<-->Process Management	.551
Top management<-->Technology responsiveness	-.042
Top management<-->Information and analysis	-.105
Technology responsiveness <-->Process Management	-.220
Technology responsiveness<-->Information and analysis	-.026
Process Management<-->Information and analysis	.197

Source: Survey Data (2014)

The above table shows the correlations among the latent variables next to each double arrow. The correlation between suppliers' quality management and (employee management, Top management commitment, Information technology responsiveness, information and analysis and process management) is 0.177, .203, -0.548, 0.192 and 0.212 respectively. The correlation between customer orientation and (Suppliers' Quality management, Employee management, Top Management, Information Technology responsiveness, Information and analysis and process management) is 0.208, 0.356, 0.277, -0.089, -0.006 and 0.263 respectively. The correlation between Employee management and (Top management, Information Technology Responsiveness, Information and analysis and Process management) is 0.759, -0.115, -0.087 and 0.738 respectively. The correlation between Top Management commitment and (Process Management, Information Technology Responsiveness and Information and analysis) is 0.551, -0.042 and -0.105 respectively. The correlation between Information Technology Responsiveness and (Process Management and information analysis) is -0.220 and -0.026 respectively. The correlation between Process Management and Information analysis is 0.197. These all correlations suggest that the latent variables are somewhat related, as would be expected given that they are all hypothesized to be aspects of one construct, however, the correlations are not so high as to suggest that they are all measuring the same construct.

TABLE 4: FACTOR LOADING OF THE CONSTRUCTS

Constructs	Items	Factor Loading	Constructs	Items	Factor Loading
Top Management Commitment	RML1	.671	Information Technology Responsiveness	ITR1	.825
	RML2	.959		ITR2	.875
	RML3	.928		ITR3	.925
	RML4*	.100		ITR4	.872
	RML5*	.062		ITR5	.768
Employee Management	EM1*	.290	Customer Orientation	CO1	.877
	EM2*	.422		CO2	.822
AVE=	EM3	.829		CO3	.851
	EM4	.917		CO4	.781
	EM5	.906		CO5	.769
Supplier Quality Management	SQM1	.839	Information and Analysis	IA1	.679
	SQM2	.986		IA2	.916
AVE=	SQM3	.629		IA3	.937
	SQM4	.837		IA4	.694
	SQM5*	.443		IA5	.643
Process Management	PM1	.764			
	PM2	.869			
AVE=	PM3	.511			
	PM4*	.435			
	PM5*	.272			

Source: Survey Data (2014)

The factor loadings are shown on the arrows from the latent variables to the observed variables in Figure 4.3. The same can be observed from the table above where Amos do the Algorithm to come up with the standardized regression weight where it indicates the direct relationship between each observed variables and the construct it was supposed to measure (indicated by a single arrow). So, Table 4 Shows the loadings for the five variables on Customer Orientation ranging from 0.769(CO5) to 0.877 (CO1). The loadings for the five variables on Suppliers' Quality Management from 0.443 (SQM5) to 0.986 (SQM2), the loadings for the five variables on Employee Management are 0.290 (EM1) to 0.917 (EM4), the loadings for the five variables on Top Management commitment ranges from 0.100 (RML4) to 0.959 (RML2), the loadings for the five variables on Information Technology Responsiveness ranges from 0.768 (ITR5) to 0.925 (ITR3), the loadings for the five variables on Process Management ranges from 0.272 (PM5) to 0.869 (PM2) and the loadings for the five variables on Information and analysis ranges from 0.643 (IA5) to 0.937 (IA3). Indicators with weaker outer loadings are sometimes retained on the basis of their contribution to content validity. Indicators with very low outer loadings (below 0.40) should, however, always be eliminated from the scale (Hair et al., 2014).

The researcher is 95 percent confident to say that all loadings and correlations among the latent variables are significant (p< 0.05) and according to (Donna, 2009), all have a loading to be considered as above excellent and very good with the exception of PM4 (customer needs and expectations are considered while designing the process), PM5 (the work process of our department is flexible to make change easily), RML4 (Top management incorporate quality issues on performance evaluation) RML5 (top management consider quality as first priority), EM1 (employee participation in decision making is encouraged), SQM5 (long term relations are offered to suppliers), and EM2 (Employees are recognized for superior quality improvement performance). According to (Tabachnick & Fidell, 2007) in general, the higher the factor loading the better, and typically loadings below 0.30 are not interpreted. Also according to (Donna, 2009)general rules of thumb, loadings above 0.71 are excellent, 0.63 very good, 0.55 good, 0.45 fair, and 0.32 poor. These rules of thumb are based on factor analyses, where factor loadings are correlations between the variable and factor, so squaring the loading yields a variance accounted for as the researcher performed in the next section. According to (Hair et al., 2010), the size of path estimate and statistical significance confirmed that the indicators are strongly related to their associated constructs and are one indication of construct validity.

DISCRIMINANT AND CONVERGENT VALIDITY

Discriminant validity is the extent to which a construct is truly distinct from other constructs by empirical standards, thus, establishing discriminant validity implies that a construct is unique and captures phenomena not represented by other constructs in the model (Hair, G, Christion, & Marko, 2014). In this study, Fornell-Larcker criterion which is more conservative approach to assessing discriminant validity was used according to the suggestions' given by (hair et al., 2014). The researcher compares the square root of the AVE values with the latent variable correlations. As they pointed out specifically, the square root of each construct's AVE should be greater than its highest correlation with any other construct (Note: This criterion can also be stated as the AVE should exceed the squared correlation with any other construct).

TABLE 5: CONSTRUCTS AVERAGE VARIANCE EXTRACTED AND SQUARE ROOT OF AVE

Constructs	Items	VE, AVE & √AVE	Constructs	Items	Factor Loading
Top Management Commitment	RML1	VE=2.231106 AVE= .743702 √AVE=0.862381	Information Technology Responsiveness	ITR1	VE=3.652083 AVE=0.7304166√AVE=0.854644
	RML2			ITR2	
	RML3			ITR3	
Employee Management	EM3	VE=2.348966 AVE=0.7829886√√AVE =0.884866		ITR4	
	EM4			ITR5	
	EM5		Customer Orientation	CO1	VE=3.370336 and AVE=0.6740672 √AVE=0.8210
Supplier Quality Management	SQM1	VE=2.772327 AVE= 0.69308175 √AVE= 0.832515		CO2	
	SQM2			CO3	
	SQM3			CO4	
	SQM4			CO5	
Process Management	PM1	VE=1.599978 AVE=0.533326 √AVE=0.7302917	Information and Analysis	IA1	VE=3.073151 and AVE=0.6146302 √AVE=0.7839
	PM2			IA2	
	PM3			IA3	
				IA4	
				IA5	

Source: Survey Data (2014)

The numbers at the upper right hand corner of each observed variable in Figure 3 are the squared multiple correlations for each observed variable. A common measure to establish convergent validity on the construct level is the average variance extracted (AVE) (Hair, G, Christion, & Marko, 2014). Also they defined this criterion as the grand mean value of the squared loadings of the indicators associated with the construct (i.e., the sum of the squared loadings divided by the number of indicators).

For this study, the AVE values of Top management commitment (0.743702), Information Technology responsiveness (0.7304166), Employee management (0.782988), Suppliers quality management (0.69308), Process management (0.533326), Information and analysis (0.61463) and Customer Orientation (0.7471) are well above the required minimum level of 0.50. Thus, the measures of the seven reflective constructs have high levels of convergent validity. Overall, the square roots of the AVEs for the reflective constructs: Top management commitment (0.862381), Information Technology responsiveness (0.854644), Employee management (0.884866), Suppliers quality management (0.832515), Process management (0.7302917), Information and analysis (0.7839) and Customer Orientation (0.8210) are all higher than the correlations of these constructs with other latent variables as shown in figure 3. According to (Hair et al., 2010), an AVE of 0.5 or higher is a good rule of thumb suggesting adequate convergence. So in this study the result shows that the measurement model has adequate convergence validity.

SUMMARY OF FINDINGS

In this study the researcher provided empirical evidence for factors influencing core quality management practices in EMoAATVET colleges. The 35 items of the seven constructs used in this study were subjected to CFA using SPSS. Prior to performing CFA, the suitability of data for factor analysis and internal consistency analysis was assessed. This result corroborates the studies of (William, Andrew, & Richard, 2009) and (Ooi K. B., 2010). Note that all of the studies conducted before this study operationalize QM as a single construct, in contrast with this study,which operationalizes it as a multiple construct. This approach is therefore inspired by (Kanagi, 2009) and (Lassaad , Federico, & Mohamed, 2006), who underscored the importance of obtaining consistent results among multiple studies that use different methodologies. The result elucidated that the prior assumptions of the underling structure of the constructs' measurement model confirmed that the indicators are strongly related to their associated constructs and are one indication of construct validity. In this study, Fornell-Larcker criterion which is more conservative approach to assessing discriminant validity was used according to the suggestions' given by hair et al., (2014). The researcher compared the square root of the AVE values with the latent variable correlations (Table 5). Thus, the measures of the seven reflective constructs have high levels of convergent validity and exhibited discriminant validity, which is supported by studies of Ooi K. A., (2008) and Prajogo and Hong (2008). In order to examine the underlying structure of each indicator of the latent variables, the researcher performed confirmatory factor analysis and the result suggested that the initial seven-factor CFA model did not fit well. But with critical considerations of the literature, the researcher proceed with modification indices which resulted in noticeably better than the earlier parent model. Generally of the 21 covariance's tested 10 parameters found to be significantly different from zero and 11 parameters are found to be not significantly different from zero. So it posed a limitation for the finding to be generalized for the entire study population concerning the parameters found to be not significant. In this study as part of the confirmatory factor analysis, the researcher performed correlation analysis to examine the relationship between latent variables the result of which suggested that the latent variables are somewhat related to each other.

As the result of the structural model depicts, in this study five hypothesized relationship between constructs representing the paths from (top management commitment-→employee management, top management commitment-→process management, top management commitment-→ suppliers quality management, IT responsiveness-→suppliers quality management, IT responsiveness-→process management) are supported in this study with a significance value of (p=0.01, p=0.01, p=0.05, p=0.01 and p=0.05) respectively. While all the other six hypothesized relationships are not significant at either 5 percent or one percent level of significance. This result is consistent with the finding of (Lassaad et al., 2006; Kanagi, 2009).

Besides, the results highlight the crucial role played by top management commitment and support. Specifically, top management commtment has a statistically significant and positive relatioship with suppliers quality manamgent, employee manamgent and process manamgent. These conclusions corroborate previous studies by (Adam E. C., 1997; Flynn et al., 1995; Lassaad et al., 2006). Moreover, the results of this empirical study clarify the relative importance and the interplay between the indicators of each constructs incorporated in this study.

After examining the significance of relationships, it is important to assess the relevance of significant relationships. Many studies do not undertake this important step in their analyses but simply focus on the significance of effects. However, the path coefficients in the structural model may be significant, but their size may be so small that they do not warrant managerial attention. An analysis of the relative importance of relationships is crucial for drawing conclusions (Joseph et al., 2014).

CONCLUSION

The result of this study demonstrated that quality management practices could be assessed in ATVET Colleges utilizing a valid and reliable instrument which was developed from a previous survey conducted by many researchers which measured business quality management practices. The findings of this study add support for previous theory as to the underlying factors of quality management practices, by operationalizing it as a multiple construct. After performing analysis, the researcher addressed main objectives of this study by investigating the relationship between all the constructs in the study with core quality management practice (Customer orientation).

The results highlighted the crucial role played by top management commitment and clarified the relative importance and the interplay between process management, employee management, suppliers quality management, information analysis and core quality management practices (customer orientation). In this respect, future research focusing on applying the proposed model in new industrial contexts would be helpful. Besides, there is also a need to refine and clarify the relative importance and the interplay between the constructs in determining core quality management practices.Researchers in the area of quality management have used different combinations of critical factors or constructs to design questionnaires to measure quality management practices in different parts of the world. The inconsistency in the critical factors developed and used by international researchers made it difficult to make good comparisons of the

INTERNATIONAL JOURNAL OF RESEARCH IN COMPUTER APPLICATION & MANAGEMENT   48

A Monthly Double-Blind Peer Reviewed (Refereed/Juried) Open Access International e-Journal - Included in the International Serial Directories

http://ijrcm.org.in/

research findings. Based on the literature reviewed, it is recommended that the critical factors of quality management used in research questionnaires be standardized so that a sound comparison can be made between research findings of studies conducted in various countries of the world. The utilization of the same critical factors in research questionnaires will lead to a standardized method of evaluating the implementation of quality management in organizations. In line with this notion, the seven most common critical factors of quality management identified in this paper can be used by researchers and practitioners who intend to study or evaluate the implementation of quality management in organizations.

The result highlighted the relationship between information technology responsiveness with all the other constructs suggests inverse relationships or logically by examining the underling indicators of this construct. The researcher identified that functional managers of the college argued that their organizations level of being responsive towards information technology influences their level of managing the employees, process and suppliers. Here the most fascinating result of the study highlighted that information technology responsiveness has both direct and indirect influences on core quality management practice: customer orientation. But with regard to the generalizability of the result, the researcher confounded only on the selected study area. This is because the result provided by the covariance suggests that many of the parameters used to test the relationship between information technology responsiveness and all other latent variables are not significant to infer the result to the study population.

RECOMMENDATIONS

1. Several practical recommendations can be made from this study. The study has provided empirical support for the presence of the critical factors which could foster employee management, process management, suppliers' quality management and information analysis which in turn would influence core quality management practice. In this sense, the information obtained through this study could be of primary assistance especially to EMoA ATVET colleges that plan to stimulate or foster the kinds of organizational development strategy such as customer orientation in their organizations at individual, group and organizational level. The managers, as leaders in these organizations, could focus more on the critical factors which are top management commitment and information technology responsiveness employed in this study to promote and influence quality improvement. The managers can use the results of this study to prioritize the implementation of these critical factors in their organizations. The quality promoters, particularly government and development partners should give special attention to ATVET colleges. Furthermore, they have to work more to develop teams of quality consultants among the institutions.
2. In addition to the limitations already mentioned, the researcher acknowledged the fact that the sample size is relatively small as ompared to the study population. The results of this study, therefore, should not be generalized beyond the study area as each study area has its own objective reality.
3. The future studies, in order to increase the generalizability of findings, should consider substantially larger samples including greater representation of industries and countries.
4. In this study, the researcher has taken the cross-sectional survey because of shortage of time to conduct longtudinal research. In the future, it is better to conduct longtudinal research to see whether the findings of it fits to the findings of this study which is resulted from cross-sectional study
5. Even though this study is cross-sectional by nature, it enabled the researcher to observe an association between top management, information technology responsivenes, process management, suppliers quality management, information analysis, employee management and customer orientation. More detailed and integrated longitudinal studies should be conductedd in all industrial sectors to assess the factors affecting the quality management practices in the industries. may be appropriate for assessing causality.This contribution enables researchers to use similar methodologies to measure quality management practices in other industries. Other colleges and institutions also pursue similar investigations to examine the factors affecting the quality of their management practices.

REFERENCES

1. A; Brown; T; A. (2000). "Continuously struggling with TQM". Proceedings of the. Milwaukee: American Society.
2. AbdulTalib, B., & Esam, M. M. (2013). Impact of Total Quality Management on Innovation in Service Organizations: Literature review and New Conceptual Framework. Procidia Engineering, 53, 516-529. Retrieved from www.sciencedirect.com
3. Adam, E. C. (1997). An International Study of Quality Management Approach and Firm Performance. International Journal of Operations and Production Management, 17(9), 842-873.
4. Adam, E. J. (1994). Alternative Quality Management Practices and Organization Performance. Journal of Operations Management, 12(1), 27-44.
5. Agarfa ATVET College. (2014). Annual Report. Agarfa.
6. Ahire, S. L. (1995). Total Quality Management A Litrature Review and an Agenda for Future Research. Production and Operations Management, 4(3), 277-306.
7. Ahire, S. L. (1996). Development and Validation of TQM Implementation Constructs. Decision Science, 27, 23-56.
8. Ahire, S. L., Golhar, D. Y., & Waller, M. W. (1996). Development and Validation of TQM Implementation Constructs. Decision Sciences, 27(1), 23-56.
9. Alage ATVET College. (2014). Annual Report. Alage.
10. Aldridge, S., & Rowley, J. (1998). "Measuring customer satisfaction in higher education". Quality Assurance in Education, 6(1/4), 197-204.
11. Ali, B. J., & Abedalfattah, A.-a. Z. (2013). The Effect of Quality Management Practices on Organizational Performance in Jordan: An Empirical Study. International Journal of Financial Research, 4(1), 93-109. Retrieved from http://dx.doi.org/10.5430/ijfr.v4n1p93
12. Amer, A.-K., Mohammad, I., & Anas, A. (2013). Evaluation Tools of Total Quality Management in Business organizations. European Journal of Business and Management, 5(6), 41-51. Retrieved from http://www.iiste.org
13. Arbuckle, J. L. (2012). IBM SPSS Amos 21 User's Guide. Chicago, USA: IBM Software Group.
14. Ardaita ATVET College. (2014). Annual Report. Ardaita.
15. Arumugam, V. C. (2009). Self-Assessment of TQM Practices: A Case Analysis. The TQM Journal, 21(1), 46-58.
16. Arumugam, V. O. (2008). TQM Practices and Quality Management Performance: An Investigation of their Relationship Using ISO 9001:2000 Firms in Malaysia. The TQM Magazine, 20(6), 636-650.
17. ASQ. (2002, July 3). info: ASQorgmanual. Retrieved July 5, 2014, from American Standard for Quality: www.asq.org
18. ASQ. (2013). Glossary. Retrieved july 6, 2014, from American Society for Quality: http://www.asq.org
19. ASQC: American Society for Quality Control. (2014). Retrieved from ASQC.
20. Ayman, B. A. (2013). The influence of "Soft" and "Hard" Total Quality Management Practices on total Productive maintenance (TPM) in Jordanian manufacturing companies. International Journal of Business and Management, 8(21), 1-13. doi:10.5539/ijbm.v8n21p1
21. Badri, M. A., D, D., & D, D. (1995). A study of measuring the critical factors of quality management. International Journal of Quality and Reliability Mnagement, 12, 36-53. doi:10.1108/02656719510080604
22. Bank, J. (1992). The Essence of Total Quality Management. Hemel Hempstead: Prentice-Hall.
23. Bassioni, H. A., Price , A. F., & Hassan, T. M. (2004). Theoretical Formulation of A Framework for Measuring Business Performance in Construction. Loughborough University, Department of Civil and Building Engineering. Leicestershire: Loughborough.
24. Bayraktar, E. E. (2008). An instrument for measuring the critical factors of TQM in Turkish higher education. Total Quality and Business excellence, 551-574. doi:10.1080/14783360802023921
25. Bayraktar, E., Tatiglu, E., & Zaim, S. (2008). An instrument for measuring the critical factor of TQM in Turkish higher education. Total Quality Management and Business Excellence, 19(6), 551-554.
26. Becket, N., & Brookes, M. (2008). Evaluating Quality Management in University Departments. Quality Assurance in Education, 14(2), 123-142. doi:10.1108/09684880610662015

27. Bhatt, G. &. (2010). An Emperical Examination of the Relationship Between IT Infrastructure Customer Focus, and Business Advantages. Journal of Systems and Information Technology, 12(1), 4-16.
28. Bin Abdullah, M., & Juan, J. T. (2012). The Influence of Soft and Hard Quality Management Practices on. Asia Pacific Management Review, 17(2), 177-193. Retrieved from www.apmr.management.ncku.edu.tw
29. Birhanu, B. (2011, October 2011). Quality Management and Engineering Practices and Challenges in Ethiopia. Addis Abeba, Addis Abeba, Ethiopia.
30. Black, S., & Porter, L. (1996). Identification of the Critical factors of TQM. Decision Science, 27(1), 1-21. doi:10.1111/1540-5915.1996.tb00841.x
31. Bose, R. (2004). Knowledge Management Metrics. Industrial Management & Data Systems, 104(6), 457-468.
32. Bou-Llusar, J. C., Escrig-Tena, A. B., Roca-Puig, V., & Beltra-Martin, I. (2009). An Emperical Assessment of the EFQM Excellence Model: Evaluation as a TQM framework Relative to the MBNQA Model. Journal of Operations Management, 27, 1-22.
33. Bou-Llusar, J. E.-T.-P.-M. (2005). To What Extent do Enablers Explain results in the EFQM Excelence Model? An Emperical Study. Journal of Quality and Reliability Management, 22(4), 337-353.
34. Brah, S. &. (2002). Relationship between TQM and Performance of Singapore Companies. International Journal of Quality and Reliability Management, 19(4), 356-379.
35. Brah, S. W. (2000). TQM and Business Performance in the Service Sector A Singapore Study. International Journal of Operations and Production Management, 20(11), 1293-1312.
36. Brown, J. W., & Churchill, R. V. (n.d.). Complex Variables and Applications (7th ed.). Boston: MCGrawHill.
37. Cardoso, R. A. (2010). Implementing Quality Management Systems in Higher education Institutions. Journal of Total Quality Management, 5, 13-17.
38. Castresana Ruiz-Carrillo, J. a. (2005). Theoretical Foundation of the EFQM Model. Total Quality Management, 16(1), 31-55.
39. Catell, R. L. (1966). The scree test for number of factors. Multivariate Behavioral Research, 1, 245-276.
40. Chase, R. B., Jacobs, R. F., & Aquilano, N. J. (2008). Operations Management. McGram-Hil.
41. Cheng, T., & Tam, W. (1997). Multi Models of Quality in Education. Journal of Education, 5(1), 22-31.
42. Churchill, G. &. (2002). Marketing Research: Methodological Foundations (8th ed.). Mason: Harcourt College Publisher.
43. Cochran, W. G. (1977). Sampling techniques (3rd ed.). New York: Jhon Wiley & Sons.
44. Corbett, L. &. (2000). Quality Performance and Organizational Culture. International Journal of Quality and Reliability Management, 17(1), 14-26.
45. Cragg, P. B. (2005). The information systems content of the Baldrige and EFQM Model. Total Quality Management & Business Excellence, 16(8/9), 1001-1008.
46. Cronbach, L. &. (1995). Construct Validity in Psycological Tests. Psychological Bulletin, 52(4), pp. 281-302.
47. Crosby. (1979). Quality is Free:- The Art of Making Quality Certain. New York: New American Library.
48. Cruickshank, M. (2003). "Total quality management in the higher education sector: a literature review from an international and Australian perspective". TQM & Business Excellence, 14(10), 1159-1167.
49. CSAE. (2006/7). A Survey of Ethiopian Manufacturing Industries. Addis Ababa, Ethiopia: Central Statistics Agency of Ethiopia.
50. Cua, K. M. (2001). Relationship Between Implementation of TQM, JIT and TPM and Manufacturing Performance. Journal of Operations Management, 19, 675-694.
51. Cullen, J., Joyce, J., Hassall, T., & Broadbent, M. (2003). "Quality in higher education: from monitoring to Management. Quality Assurance in Higher Education, 11(1), 30-34.
52. Curry, A. &. (2002). Focusing on Key Elements of TQM Evaluation for Sustainability. The TQM Magazine, 14(4), 207-216.
53. Daniel, K., & Fasika, B. (2003). Efforts and Problems in Ethiopian Manufacturing Industries. ZEDE Journal of EAEA, 20.
54. Das, A. P. (2006). A Measurement Instrument for TQM Implementation in the Thai Manufacturing Industry. International Journal of Innovation and Technology Management, 3(4), 361-377.
55. Davies, C. A. (1979). Organization for Program Management. John Wiley and Sons.
56. De Jong, J. &. (2007). How Leaders Influence Employees' Innovative Behaviour. European Journal of Innovation Management, 10(1), 41-64.
57. Dean, J. &. (1994). Management Theory and Total Quality Improving Research and Practice through theory Development. Acadamy of Management Review, 19(3), 392-418.
58. Deming, W. (1986). Out of Crisis. Cambridge: MA:- Massachusetts Institute of Technology, Center for Advanced Engineering Study.
59. Derebssa , D. (n.d.). Quality of Teaching and Learning in Ethiopian Primary Schools Tension between Traditional and Innovative teaching-learning Approaches.
60. Deros, B. Y. (2006). A Benchmarking Implementation Framework for Automotive Manufacturing SMEs. Benchmarking An International Journal, 13, 396-430.
61. DeVaus, D. (2002). Surveys in Social Research (5th ed.). London: Routledge.
62. Donna, H. (2009). Confirmatory Factor Analysis: Pocket guides to Social work Research Methods. (T. Tony, Ed.) New York: Oxford University Press, Inc.
63. Dow, D., Samson, D., & Ford, S. (1999). Exploding the Myth: Do All Quality Management Practices Contribute to Superior Performance? Production and Operations Management, 8(1), 1-27.
64. Easterby Smith, M., Thorpe, R., Jackson, P., & Lowe. (2008). Management Research (3rd ed.). London: Sage.
65. Encyclopedia of Management (6th ed.). (2009). Gale: Cengage Learning.
66. Engelkemever, S. (1993). TQM In Higher Education. The Center for Quality Management Journal, 2(1), 28-33.
67. Eskilden, J. a. (2000). A causal model for employee satisfaction. The TQM Magazine, 11(8), 1081-1094.
68. European Foundation For Quality Management . (2014, july 25). Retrieved from EFQM Web Site: http://www.efqm.org
69. Ezinga, D. H. (1995). Business Process Management: Survey and Methodology. IEEE Transactions on Engineering Management, 24(2), 119-28.
70. Farrar, M. (2000). Structuring Sucess: a case study in the use of the EFQM Excellence Model in school Improvement. Total Quality Management, 11(4/5/6), 691-676.
71. FDRE, Ministry of Information. (2009/10). Industrial Development Strategy. Addis Abeba.
72. Feng, J. P. (2006). The Impact of TQM Practices on Performance: A Comparative Study Between Australian and Singaporean Organizations. European Journal of Innovation Management, 9(3), 269-278.
73. Flor Mónica ,, G. (2013). Building a Performance Measurement Internal Auditing Framework for the ISO 9001 Quality Management System. 13.
74. Flynn, B. S. (1994). A framework for quality management practice research and an associated measurement instrument . Journal of Operation Management, 11(4), 339-366.
75. Flynn, B. S. (1995). The Impact of Quality Management Practices on Performance and Competitive advantage. Decision Science, 26(5), 659-692.
76. Ford, J. B., Joseph, M., & Joseph, B. (1999). "Importance-performance analysis as a strategic tool for service marketers: the case of service quality perceptions of business students in New Zealand and the USA". The Journal of Services Marketing, 13(2), 171-186.
77. Gavin, D., & Juan, J. T. (2013, June). A Review of Quality Management Research in Higher Education Institutions. Working Paper Series University of Kent, 1-37. Retrieved from http://www.kent.ac.uk/kbs/research-information/index.htm
78. Gill, J. (2009). quality follows quality: add quality to the business and quality will multiply the profit. the TQM journal, 21(5), 530-539.
79. Gore Jr., E. (1999). Organizational Culturre, TQM, and Business Process Reengineering: An Emperical Comparision. Team Performance Management: An International Journal, 5(5), 164-170.

80. Goris, J. V. (2000). Effects of Communication Direction on Job Performance and Satisfaction: a Moderated Regression Analysis. Journal of Business Communication, 37(4), 341-368.

81. Gray, J. &. (2002). Part Time Employement and Communication Satisfaction in an Australian Retail Organization. Employee Relations, 24(2), 211-228.

82. Hackman, J. &. (1995). Total Quality Management: Emperical, Conceptual, and Practical Issues. Administrative Science Quarterly, 40, 309-342.

83. Hair, J. A. (1995). Multivariate data analysis (4th ed.). Englewood-Cliffs: Prentice Hall.

84. Hair, J. F., Black, B., Babin, B., & Anderson, R. E. (2010). Multivariate Data Analysis (7th ed.). Harlow: Pearson Education.

85. Hair, J. F., G, T. H., Christion, M. R., & Marko, S. (2014). A Primier on Partial Least Squares Structural Modeling (PLS-SEM) (1st ed.). Thousand Oaks, California, United States of America: SAGE Publications, Inc.

86. Hiroshi , O., & Fasil, T. (2010, March 14). Process Techno - Innovation Using TQM in Developing Countries Empirical Study of Deming Prize Winners. Journal of technology Managment and Inovation, 5(2), 46-65. Retrieved from http://www.jotmi.org

87. hodgetts, R. (1999, january 28). A conversation with michael E. Porter: a "significant extension" toward operational improvement and positioning. organizational dynamics, pp. 24-32.

88. Hosseini, M. H., Forozandeh, L., & Motamedi, N. (2012). Comprehensive model of business intelligence: A case study of Nano's companies. Indian Journal of Science and Technology, 5(6), 2851-2859. Retrieved from http://www.indjst.org

89. Industrial management--Encyclopedias. I. Gale (Firm). (2009). Encyclopedia of management . New York: Gale Cengage learning .

90. Info: Ethiopian Conformance Assessment . (2014, June 11). Retrieved from Ethiopian Conformance Assessment Website: www.eca-e.com

91. ISO. (2014). International organization for standardization. Retrieved from http://www.iso.org/iso/iso_catalogue/management_standards/iso_9000_iso_14000/qmp.htm

92. Israel, G. D. (1992). Sampling The Evidence of Extension Program Impact. IFAS. University of florida.

93. J, M. P., C , S. M., & R, T. H. (1995). Total quality management: Are information systems managers ready? Information and Management, 29, 252- 163.

94. Jackson, S. (2000). Achieving clinical governance in women's services through the use of the EFQM Excellence Model. International journal of Health Care Quality Assurance, 13(4), 182-190.

95. Jackson, S. a. (2002). Transforming a run down general practice into a leading edge primary care organization with the help of the EFQM Excellence Model. International journal of Health Care Quality Assurance, 15(6), 255-267.

96. Jain , R., Sinha, G., & Sahney, S. (2011). Conceptualizing service quality in higher education. Asian Journal on Quality, 12(3), 296-314.

97. Jelke, B. (2009). Applied Survey Method; A statistical Perspective. New Jersey, Hoboken, United States of America: A Jhon Willey & Sons, Inc., Publication.

98. Jim Nunnally. (1967). Psychometric Theory. New York: McGraw-Hill.

99. Juneja, D., Ahmad, S., & Kumar, S. (2011). Adaptability of Total Quality Management to Service Sector. International Journal of Computer Science and management, 11(2), 93-98.

100. Juran, J. (1986). The Quality Trilogy. Quality Progress, 9.

101. Juran, J. (1995). A History of Managing for Quality. Milwaukee: ASQC Quality Press.

102. Kamyar, G., Mahmood, Z., Seyed, J. H., & Shabnam, M. (2014, June 26). Relationship between Total Quality Management, Innovation and Customer satisfaction in Service Organizations. Topclass Journal of Business Management and Innovations, 1(2), 61-66. Retrieved from http://www.topclassglobaljournals.org

103. Kanagi, K. (2009). Critical Factors of Quality Management Used in Research Questionnaires: A Review of Literature. Sunway Academic Journal, 20-30.

104. Kanji, G. (2001). Forces of Excellence in Kanji's Business Excellence Model. Total Quality Management, 12, 259-272.

105. Kanji, G. k., & Malek, A. T. (1999). Total Quality Management in UK Higher Education Institutions. Total Quality Management, 10, 125-153.

106. Kanji, G. K., & Yui, H. (1997). Total Quality Culture. Total Quality Management, 10, 417-428.

107. Kanji, G., Tambi, A., & Wallace, W. (1999). A Comparative Study of Quality Practices in Higher Education Institutions in the US and Malaysia. Total Quality Management, 10, 357-371.

108. Khalid I, A. (2014). An Instrument for Measuring Perception Levels on TQM Practices among R&D Center Employees in Saudi Arabia. (M. Elspeth, Ed.) Communications of the IBIMA, 2014(2014), 1-56. doi:DOI: 10.5171/2014.473436

109. Kim, J. S., & Arnold, P. (1996). Operationalizing manufacturing strategy. International Journal of Operations and Production Management, 16(12), 45-73.

110. Kothari, C. R. (2004). Research Methodology (Methods and Techniques) (2nd ed.). New Delhi: New Age International Publishers. Retrieved from www.newagepublishers.com

111. Kumar, V. C. (2009). Impact of TQM on Company's Performance. International Journal of Quality and Reliability Management, 26(1), 23-37.

112. lagrosen, S. (2002, may 14). Quality management in europe. A cultural perspective, pp. 275-283. doi:10.1108/09544780210439707

113. Lakhal, L. P. (2006). Quality Management Practices and Their Impact on Performance. International Journal of Quality and Reliability Management, 23, 625-646.

114. Larson, R., & Farber, B. (2013). Elementary Statistics; Picturing the world (6th ed.). Boston: Pearson Education Inc.

115. Lassaad , L., Federico, P., & Mohamed, L. (2006). Quality Management Practices and their Impact on Performance. International Journal of Quality and Reliability Management, 23(6), 625-646.

116. Lee, S. M. (2003). Impact of MBNQA Criteria on Organizational Quality Performance. International Journal of Production Research, 41(9), 2003-2020.

117. Lenka, U., Suar, D., & Mohapatra, P. K. (2010). Soft and Hard Aspects of Quality Management Practices Influencing Service Quality and Customer Satisfaction in Manufacturing-oriented Services. Global Business Review, 11(1), 79-101.

118. Lewis, R. G., & Smith, D. H. (1994). op. cit, 2.

119. Lewis, R. G., & Smith, D. H. (1994). Total Quality in Higher Education. FL: St Lucie Press.

120. Lewis, W. G., Pun, K. F., & Lalla, T. R. (2006). Exploring Soft versus Hard Factors for TQM Implementation in Small and Medium-sized enterprizes. International Journal of Productivity and performance, 55(7), 539-554.

121. Li, M., & Yang, J. B. (2003). A decision model for self-assessment of business process based on the EFQM excellence model. International Journal of Quality & Reliability Management, 16(1), 164-168.

122. Madu, K. C. (1995). A Comparative analysis of quality practice in manufacturing firms in the US and Taiwan. Decision Science, 26, 621-635. doi:10.1111/j.1540-5915.1995.tb01443

123. Malhorta, N. K. (2006). Common Method Variance in IS Research: A Comparision of alternative Approaches and a Reanalysis of Past Research. Management Science, 52, 1865-1883.

124. Martin-Casilla, J. (2002). Posible Ethical Implications in the Deployment of the EFQM Excellence Model. Journal of Business Ethics,, 39(1/2), 125-134.

125. Martinez-Lorente, A. A.-R. (1998). Total Quality Management and company characterstics. Quality Management, 5, 59-71. Retrieved from http://www.asq.org/qic/displayitem/index.pl?item=12150

126. Masood ul, H., Aaman , M., Saif Ullah, q., & Sidra, S. (2012, october). The Impact of TQM Practices on Firm's Performance of Pakistan's Manufacturing Organizations. international journal of Acadamic Research in Business and Social Sciences, 2(10), 232-259.

127. McCarthy, G. a. (2006). Impact of EFQM Excellence Model on leadership in Germany and UK organizations. International journal of Quality and Reliability Management, 23(9), 1068-1091.

128. Min, H. &. (2002). Dynamic Benchmarking of Hotel Service Quality . Journal of Service Marketing , 302-321.

129. Monge, C. R. (2006). Performance Measurement of AMT: A Cross Regional Study. Benchmarking An International Journal, 13, 135-146.

130. Motwani, J. (2001). Critical Factors and Performance Measures of TQM. The TQM Magazine, 13(4), 292-300.

INTERNATIONAL JOURNAL OF RESEARCH IN COMPUTER APPLICATION & MANAGEMENT 51

A Monthly Double-Blind Peer Reviewed (Refereed/Juried) Open Access International e-Journal - Included in the International Serial Directories

http://ijrcm.org.in/

131. Nair, A. (2006). Meta-Analysis of the Relationship Between Quality Management Practices and Performance Implications for Quality Management Theory Development. Journal of Operations Management, 24, 948-975.

132. Nunnally, J. (1978). Psychometric Theory (2nd ed.). New York: McGraw-Hill.

133. Oldfield, B., & Baron, S. (1998). "Is services cape important to student perceptions of service quality?"Research Paper, .

134. Ooi, K. (2009). TQM and Knowledge Management: Litrature Review and Proposed Framework. African Journal Of Business Management, 3(11), 633-643.

135. Ooi, K. A. (2007). HRM and TQM: Association with Job Involvement. Personnel Review, 36(6), 939-960.

136. Ooi, K. A. (2008). TQM Practices and its association with Production Workers. Industrial Management and Data Systems, 108(7), 909-927.

137. Ooi, K. B. (2007). Does TQM Influence Employees' Job Satisfaction? An Emperical Case Analysis. International Journal of Quality and Reliability Management, 24(1), 62-77.

138. Ooi, K. B. (2010). TQM Practices and Knowledge Sharing: An Emperical Study of Malaysia's Manufacturing Organizations. Asia Pacific Journal of Management. doi:10.1007/s10490=009-9185-9

139. Osseo-Asare, A. E., & Longbottom, D. (2002). "The need for education & training in the EFQM model for quality management in UK higher education institutions". Quality Assurance in Education, 10(1), 26-36.

140. Owlia, M. S., & Aspinwall, E. M. (1998, August). "A framework for measuring quality in higher education". Total Quality Management, 9, 501-518.

141. Owlia, M. S., & Aspinwall. (1996). "A framework for the dimensions of quality in higher education". Quality Assurance in Education, 4(2), 12-20.

142. Pallant, J. (2001). SPSS: Survival Manual: A Step By Step Guide To Data Analysis Using SPSS for Windows. st Edn: Open University Press.

143. Pallant, J. (2003). SPSS: Survival Manual: A Step By Step Guide To Data Analysis Using SPSS Version 10 & 11. Maidenhead, Philadelphia, USA: Open University Press. Retrieved from http://www.openup.co.uk/spss

144. Parasuraman, A. (1996, October 5). Understanding and Leveraging the Role of Customer Service in External Interactive and International Marketing. Paper Presented at Fifth Annual Frontier in Service Conference, p. TN.

145. Parasuraman, A. V. (1985). A Conceptual Model of Service Quality and Its Implications for Future Research. Journal of Marketing, 49(4), 41-50.

146. Parasuraman, A. Z. (1988). SERVQUAL:-A Multiple Item Scale for Measuring Consumer Perceptions of Service Quality. Journal of Marketing, 64(1), 12-40.

147. Pearson, Mccahon, & R.T. (1995). "Total quality management: Are information systems managers ready?". Information and Management, 29, 252- 163.

148. Peterson, R. (1994). A Meta Analysis of Cronbach's Coefficient alpha. Journal of Consumer Research, 21(2), 381-391.

149. Pfeffer, N., & Coote, A. (1991). Is Quality Good for You? Acritical Review of Quality Assurance in the Welfare Service. London: Institute of Public Policy Research.

150. Porter, L. J., & Parker, A. J. (1993). Total Quality Management the Critical Factors. Total Quality Management, 4(1), 810-829.

151. Powell, C. (1995). Total Quality Management as Competitive Advantage A Review and Emperical Study. Strategic Management Journal, 16(1), 15-37.

152. Prajogo, D. &. (2008). The Effect of TQM on Performance in R & S Environment: A Perspective From South Korean Firms. Technovation, 28, 855-863.

153. Prajogo, D. B. (2004). The Relationship Between TQM Practices and Quality Performance and the role of formal TQM programs: An Australian Emperical Study. Quality Management Journal, 11, 31-43.

154. Prajogo, D. I. (2003). The Relationship between TQM practices, Quality Performance and Innovation Performance. International Journal of Quality & Reliabiity Management, 20(8), 901-9018.

155. Prajogo, D. I. (2005). The comparative Analysis of TQM Practices and Quality Performance between Manufacturing and Service Firms. International Journal of Service Industry Management, 16(3), 217-228.

156. Prajogo, D. S. (2004). Transitioning from Total Quality Management to Total Innovation Management: An Australian Case. International Journal of Quality and Reliability Management, 21(8), 861-875.

157. Prajogo, D. S. (2006). The Integration of TQM and Technology/ R & D Management: in Determining Quality and Inovation Performance. Omega: The International Journal of Mnagement Science, 34, 296-312.

158. Prajogo, D. S. (2006). The Relationship between Organization Strategy, Total Quality Management (TQM) and Organization Performance- The mediating role of TQM. European Journal of Operation Research, 168(1), 35-50.

159. Pratasavitskava, H., & Stensaker, B. (2010). Quality Management in Higher Education: Towards A Better Understanding of an Emerging Field. Quality In Higher Education, 16(1), 37-50.

160. Prybutok, V. Z. (2008). Evaluating Leadership, IT Quality and Net Benefit in an E-Governance Environment. Information Management, 45, 143-152.

161. Psychogios, A. a. (2007). Understanding Total Quality Management in Context:- Qualitative Research on Managers' Awareness of TQM Aspects in the Greek Service Industry. The Qualitative Report, 12(1), 40-66. Retrieved from http://www.nova.edu/ssss/QR/QR12-1/psychogios.pdf

162. Quazi, H. A., & Padibjo, S. R. (1998). A Journey toward Total Quality Management through ISO 9000 Certification- Astudy on Small and Medium Sized Enterprizes in Singapore. International Journal of Quality and Reliability Management, 15, 489-508.

163. Quazi, H. J. (1998). Critical factors in quality management and quidelines for self-assessment: The case of Singapore. Total Quality Management, 9, 35-55. doi:10.1080/0954412989252

164. Quraishi, U., Hussain, I., Syed, M. A., & Rahman, F. (2010). Faculty Satisfaction in Higher Education: A TQM Approach. Journal of College Teaching and Learning, 7(6), 31-34.

165. Raghunathan, Rao, S. S., & Solis, L. E. (1997). A Comparative Study of Quality Practices: USA, China and India. Industrial Management and Data Systems, 97, 192-200.

166. Rahman. (2001). A comparative study of TQM practice and organizational performance of SMEs with and without ISO certification. International Journal of Operations Management, 18, 35-49.

167. Reed, R. L. (2000). Total Quality Management and Sustainable Competittive Advantage. Journal of Quality Management, 5(1), 5-26.

168. Rencher, A. C., & Christensen, W. F. (2012). Methods of Multivariate Analysis (3rd ed.). Hoboken, New Jercy, USA: A Jhon Wiley & Sons Inc.

169. Richard , B. N., Onserio , N., Richard, N. O., Thomas , O. O., & Prof.Isaac , M. M. (2010, March 24). QUALITY MANAGEMENT PRACTICES IN KENYAN EDUCATIONAL INSTITUTIONS:THE CASE OF THE UNIVERSITY OF NAIROBI. African Journal of Business & Management (AJBUMA), 1, 15. Retrieved from http://www.aibuma.org/journal/index.htm

170. Roffe, M. (1998). "Conceptual problems of continuous quality improvement and innovation in higher education". Quality Assurance in Education, 6(2), 74-82.

171. Rusjan, B. (2005). Usefulness of the EFQM Excellence Model: Theoretical explanation of some conceptual and methodological issues. Total Quality Management & Business Excellence, 16(3), 363-380.

172. Sadikoglu, E. &. (2010). Investigating the Effect of Innovation & Employee Performance on the Relationship Between TQM Practices and firm Performance: An Emperical Study of Turkish Firms. International Journal of Production Economics, 127, 13-26.

173. Sadikoglu, E. (2008). Total Quality Management Practices and Performance. The Business Review, 10(2), 60-68.

174. Samson, D., & Terziovski, M. (1999). The relationship between total quality management practice and operational performance. Journal of Operations Management, 17, 393-409.

175. samuelsson, P. a. (2002). Self-assessment practices in large organizations: Experience from using the EFQM excellwnce model. International Journal of Quality & Reliability Management, 19(10), 10-13.

176. Sanchez-Rodriguez, C. D.-L. (2006). IT Use in Supporting TQM Initiatives: An Emperical Investigation. International Journal of Operations and Production Management, 26, 486-504.

177. Sangeeta , Sahney, D., & Banwe, K. (2004). "Conceptualizing total quality management in higher education". The TQM Magazine, 16(2), 145-159.

INTERNATIONAL JOURNAL OF RESEARCH IN COMPUTER APPLICATION & MANAGEMENT   52

A Monthly Double-Blind Peer Reviewed (Refereed/Juried) Open Access International e-Journal - Included in the International Serial Directories

http://ijrcm.org.in/

178. Saraph, J. G., Benson, & Schroeder, R. (1989). An instrument for measuring the critical factors of Quality Management. Decision Science, 810-829. doi:10.1111/j.1540-5915.1989.tb01421

179. Saravanan, R., & Rao, K. S. (2007). The Impact of Total Quality Service age on Quality and Operational: An Emperical AStudy. The TQM Magazine, 19(3), 197-205.

180. Saunders, M. P. (2009). Research Methods for Business Students (4th ed.). Edinburgh: Pearson Education.

181. Saunders, M., P, L., & A, T. (1997). Research Methods for Business Students (1st ed.). London: Pitman Publishing.

182. Scheymann, L. Z. (1997). TQM Sucess Efforts: Use More Quantitative or Qualitative Tools. Industrial Management and Data Systems, 97(7/8), 264-271.

183. Schneider, B. &. (1995). Winning the Service Game. Boston: Harvard School Press.

184. Semler, R. (1993). Maverick! The Success Story Behind The World's Most Unusual Workplace. London: Arrow Business Books.

185. Seymour, D. T. (1992). On Q: Causing Quality in Higher Education. New York: Macmillan.

186. Sila, I. &. (2002). An Investigation of the Total Quality Management Survey based Research Published Between 1989 and 2000: A Literature Review. International Journal of Quality and Reliability Management, 19(7), 902-970.

187. Sila, I. &. (2003). An Examination of Quality Management in Luxury Hotels. International Journal of Hospitality and Tourism Administration, 4(2), 33-59.

188. Sila, I. (2005). The Influence of Contextual Variables on TQM Practices and TQM Organizational Performance Relationships. The Business Review, 4, 204-209.

189. Silos, I. (1999). Employee Involvement A Component of Total Quality Management. Production & Inventory Management Journal, 40(1), 56-65.

190. Sit, W. Y. (2009). TQM and customer Satisfaction in Malaysia's Servise Sector. Industrial Management and Data Systems, 109(7), 957-975.

191. Srikanthan, G. &. (2003). Developing alternative perspectives for quality in higher education,. International Journal of Education Management, 17(3), 126-136.

192. Srikanthan, G. a. (2007). A Conceptual Overview of a Holistic Model for Quality in Higher Education. The International Journal of Educational Management, 21(3), 173-193.

193. Srikanthan, G., & Dalrymple, J. (2003). Developing Alternative Perspective for Quality in Higher Education. The international Journal of Educational Management, 17(3), 126-136.

194. Stewart, A. (2003). An investigation of the suitability of the EFQM Excellence Model for a Pharmacy department within an NHS Trust. International Journal of Health Care Quality Assurance, 16(2), 65-76.

195. Suby, K., Jamshed, S., & Faisal , T. (2013, August). Role of Information Technology in Total Quality Management: A Literature Review. International Journal of Advanced Research in Computer Engineering &Technology (IJARCET), 2(8), 2433-2445. Retrieved from http://www.ijarcet.org

196. Tabachnick, B. &. (2007). Using Multivariate Statistics (5th ed.). Boston: Pearson Education.

197. Talib, F., Rahman, Z., & Qureshi, M. N. (2011b). Assessing the Awareness of Total Quality Management in Indian Service Industries: An emperical investigation. Asian Journal on Quality, 21(3), 228-243.

198. Talib, F; Rahman, Z. (2010). Critical Sucess Factors of Total Quality Management in Service Organization a Proposed Model. Service Marketing Quarterly, 31(3), 363-380.

199. Talib, F; Rahman, Z; Qureshi, M N. (2011a). A study of Total Quality Managemnt and Supply Chain Managemnt Practices. International Journal of Productivity and Performance Management, 60(3), 268-2888.

200. Talib, F; Rahman, Z; Qureshi, M N. (2012). Total Quality Management in Service Sector A Literature Review. International Journal of Business Innovation and Research:, 6(3), 259-301.

201. Tam, M. (2002). University Impact on Student Growth a Quality Measure? Journal of Higher Education Policy and Management, 24(2), 211-218.

202. Tamimi, N. G., Tamimi, N., & Gershon, M. (1995). A Tool for Assessing Industry TQM Practice Versus Deming Philosophy. Production and Inventory Management Journal, 36(1), 27-32.

203. Tari, J. (2005). Components of Successful Total Quality Managemnt. The TQM Magazine, 17(2), 182-194.

204. Tari, J. (2006). An EFQM model Self-assessment excercise at a Spanish University. Journal of Educational Administration, 44(2), 170-188.

205. Teh, P. O. (2008). Does TQM Impact on the role Stressors? A Conceptual Model. Industrial Management and Data Systems, 108(8), 1029-1044.

206. Teh, P. Y. (2009). Total Quality Management Reduce Employes' role Conflict? Industrial Management and Data Systems, 109(8), 1118-1136.

207. Tesema, B. (2008). Quality Related Problems in Large Ethiopian Manufacturing Firms. Implications for Competency. South African Journal of Indestrial Engineering.

208. Teshome Kebede., T. (n.d.). Challenges and Opportunities in Ethiopia. Ethiopian Export Promotion .

209. Thurstone, L. L. (1947). Multiple factor analysis . Chicago: University of chicago press.

210. Toensmeier, P. A. (1997, September). "ISO certification doesn't need to be expensive for small processors" . Modern Plastics, 74(10), 40-3.

211. Tribus, & M. (1993, 5 14). "Quality management in education". Journal of Quality and Participation, 16(1), 12-21.

212. U, H., & B, K. (2000). TQM as a Management System Consisting of Values, Techniques and Tools. The TQM Magazine, 12(4), 238-255. doi:doi:10.1108/09544780010325822

213. Unesco. (2003). Measuring Education Quality, Ministerial Round table on the Quality of Education. Paris: Unesco Institute of Statistics.

214. UNESCO. (2004). Indicators of Quality and Facilitating Acadamic Mobility through Quality Assurance Agencies in the Asia-Pacific Region. Bangkok: UNESCO and Thailand National Acreditation Council.

215. UNIDO. (2009). IndustrialDevelopment Report.

216. Vermeulen, W. &. (2000). Training and Education for TQM in the Commercial Banking Industry of South Africa. Managing Service Quarterly, 10(1), 61-67.

217. Walta Information Center (WIC). (2014, 22 May). Third quality awards to honor 12 organizations with excellence. Addis Abeba, Addis Abeba, Ethiopia.

218. Westlund, A. H. (2001). Measuring environmental impact on society in the EFQM system. Total Quality Management, 12(1), 125-135.

219. Westphal, J. D., Gulati, R., & Shortell, S. M. (1997). customization or conformity? An institutional and network perspective on the content and consequence of TQM adoption. Administrative Science Quarterly, 42, 366-394.

220. Wiklund, H., & Edvardsson, B. (2003). Innovation and TQM in Swedish Higher Education Institutions Possibilities and Pittfalls. The TQM Magazine, 15(2), 99-107. doi:10.1108/09544780310461116

221. William, J. M., Andrew, T. S., & Richard, H. D. (2009). Assessment of Quality Management Practices within the Healthcare Industry. American Journal of Economics and Business Administration, 1(2), 105-113.

222. Wongrassamee, S., Simmons, J. E., & Gardiner, P. D. (2003). Performance Measurement tools: the Balanced Scorecard and the EFQM Excellence Model. Measuring Business Excellence, 7(1), 14-29.

223. yamane, T. (1967). Statistics, An Introductory Analysis. (2nd, Ed.) New York: Harper and Row.

224. Yang, C. (2006). The Impact of Human Resource Management Practices in the Implementation of TQM: An Emperical Study on High-Tech Firms. The TQM Magazine, 18(2), 162-173.

225. Yen-Yu, C. (2014, September). Does TQM affect indigenous Community Development? A Case Study in Pingtung County. (C. YEN-YU , Ed.) International Review of Social Sciences, 2(9), 360-373. Retrieved from http://www.irss.academyirmbr.com

226. Yusof, A. &. (1999). Critical Success Factors for TQM In Implementation in Small and Medium Enterprizes. Total Quality Management, 10(4), 803-809.

227. Yusof, A. &. (2000). Managing Culture in Organization. Malaysian Management Review, 35(2), 60-65.

228. yusuf, Y., Gunasekaran, A., & Dan, G. (2007). Implementation of TQM in China and Organaizational Performance: Am Emperical Investigation. Total Quality Management, 18(5), 509-530.

INTERNATIONAL JOURNAL OF RESEARCH IN COMPUTER APPLICATION & MANAGEMENT 53

A Monthly Double-Blind Peer Reviewed (Refereed/Juried) Open Access International e-Journal - Included in the International Serial Directories

http://ijrcm.org.in/

229. Zairi, M. (1997). Business Process Management: A Boundary Less Approach to Modern Competitiveness. Business Process Management Journal, 3(1), 64-80.
230. Zakuan , N., Yusof, S. M., & Shamsudin, S. (2007). Implementation of Quality Management Practices in Malaysian Automotive Industries: A Review. In N. M. al (Ed.), Regional Conference on Engineering Mathematics, Mechanics, Manufacturing & Architecture (EM*ARC) (pp. 105-116). Advanced Processes and Systems in Manufacturing (APSIM).
231. Zakuan, N. Y. (2010). Proposed relationship of TQM and organizational performance using structured equation modelling. Total Quality Management and Business Excellence, 21(2), 185-203.
232. Zhang, Z. H. (2000). Implementation of Total Quality Management: An Emperical Study of Chinese Manufacturing Firms.
233. Zineldin, M. a. (2000). An Examination of the Main Factors Affecting Trust/Commitment in Supplier-Dealer Relationships: An Emperical Study of the Swedish Wood Industry. The TQM Magazine, 12(4), 245-265.

APPENDIX

APPENDIX A

TABLE 2: INTERNAL CONSISTENCY OF LATENT VARIABLES

Factors	Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	Number of items
Top Management	0.686	0.688	5
Employee Management	0.809	0.803	5
Process Management	0.710	0.714	5
Information and Analysis	0.883	0.888	5
Supplier's Quality Management	0.856	0.869	5
Customer Orientation	0.911	0.911	5
Information technology Responsiveness	0.926	0.929	5

Source: Survey Data (2014)

APPENDIX B

TABLE 3: KMO AND BARTLETT'S TEST

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.790
Bartlett's Test of Sphericity	Approx. Chi-Square	3617.818
	df	630
	Sig.	.000

Source: Survey data (2014).

APPENDIX C

FIGURE 4: ITEMS AND LATENT VARIABLES USED FOR STRUCTURAL MODEL AMOS GRAPHICS

Source: Survey data (2014).

APPENDIX D
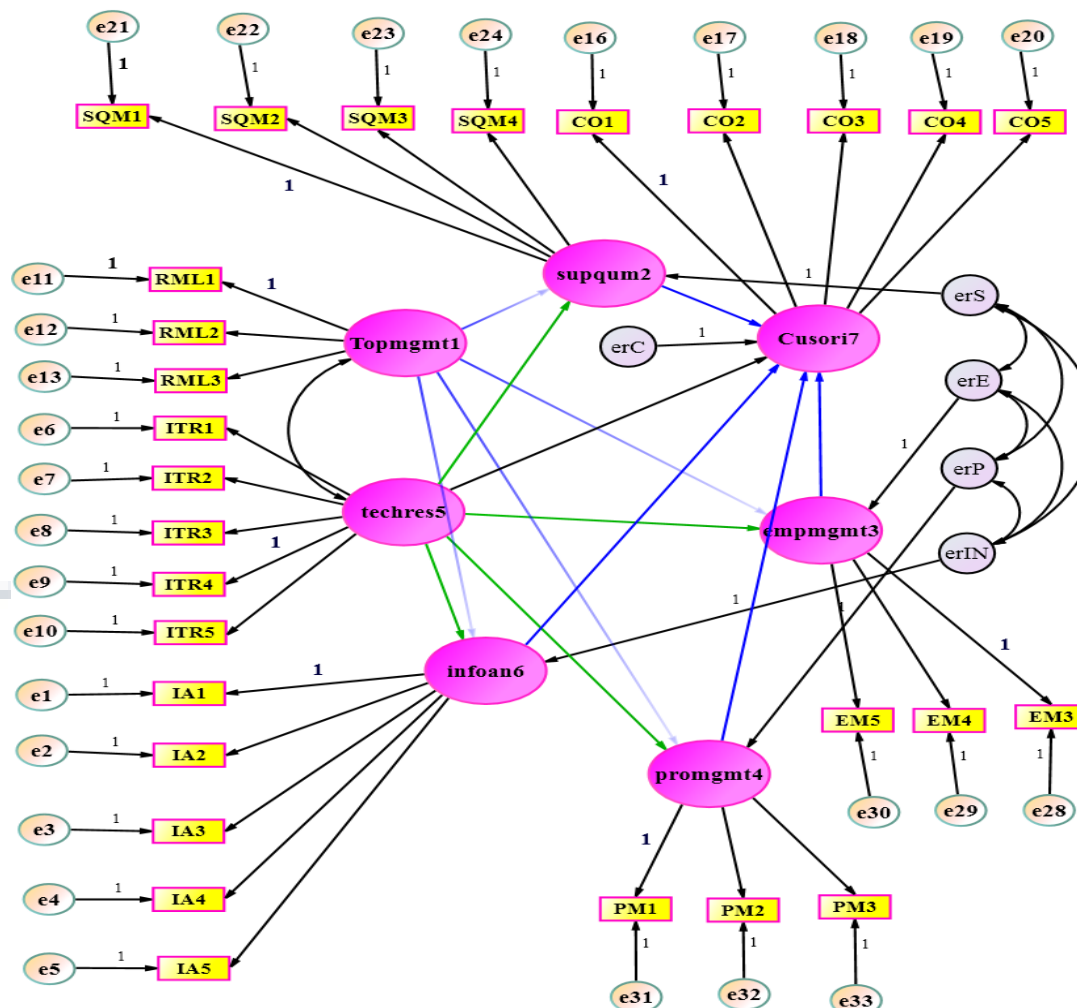
FIGURE 5: STRUCTURAL MODEL STANDARDIZED ESTIMATE AMOS GRAPHIC OUTPUT RESULT

Source: Survey data (2014).

APPENDIX E
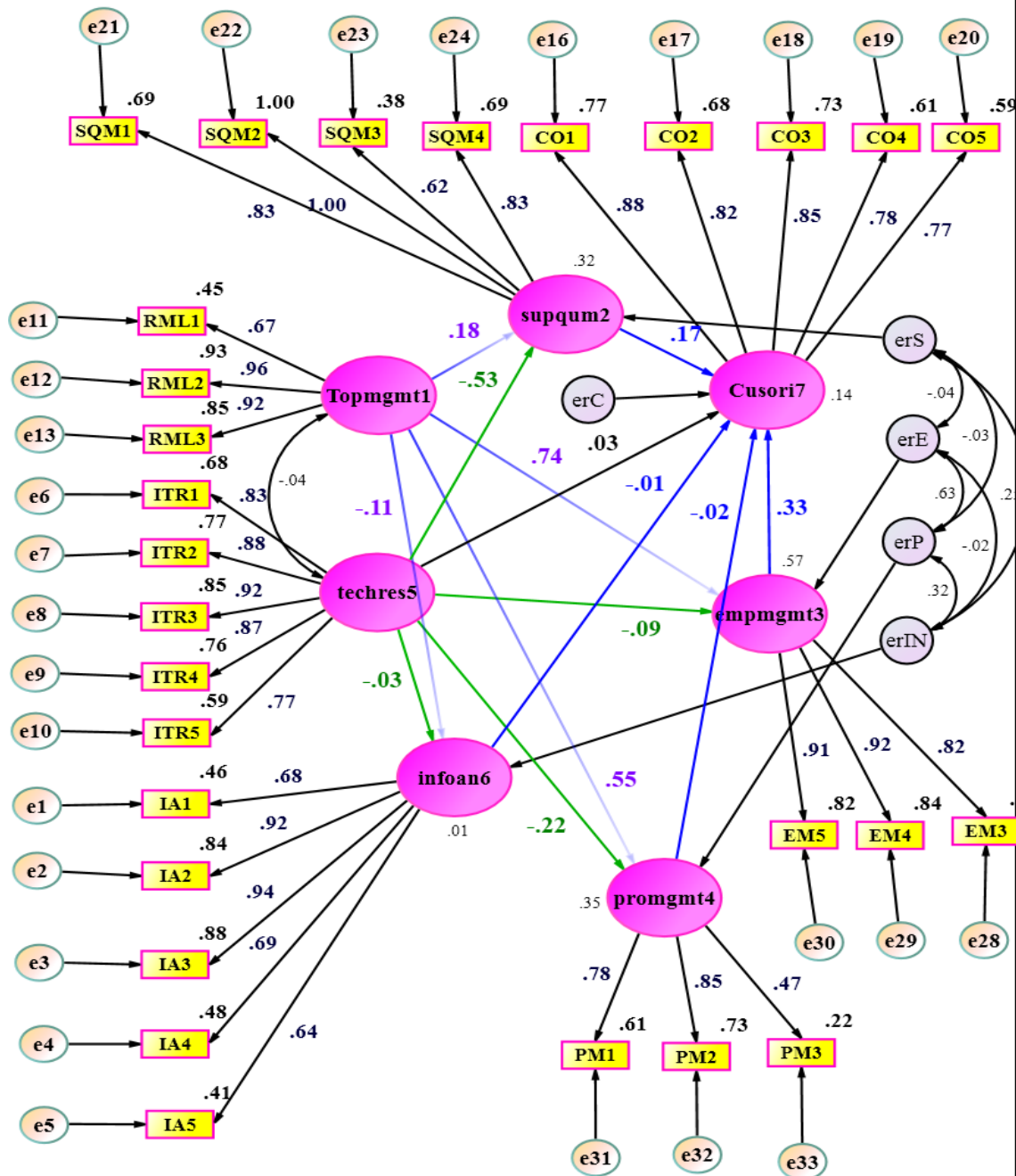
TABLE 4: REGRESSION WEIGHTS: AMOS TEXT RESULT FOR THE STRUCTURAL MODEL SUMMARY

Path	Estimate	S.E.	C.R.	P	hypothesis	Standardized
EM<---RML	1.128	.174	6.491	***	H1d-supported	(0.745)
PM<---RML	.923	.189	4.888	***	H1c-supported	(0.546)
IA<---RML	-.157	.145	-1.080	.280	H1b-not supported	(-0.105)
SQM<---RML	.255	.114	2.243	.025	H1a-supported	(0.184)
SQM<---ITR	-.563	.100	-5.629	***	H2a-supported	(-0.528)
IA<---ITR	-.034	.111	-.308	.758	H2b-not supported	(-0.030)
EM<---ITR	-.101	.082	-1.239	.215	H2e-not supported	(-0.087)
PM<---ITR	-.283	.121	-2.350	.019	H2d--supported	(-0.219)
CO<---EM	.459	.293	1.565	.118	H3d-not supported	(0.351)
CO<---PM	-.023	.283	-.083	.934	H3c-not supported	(-0.043)
CO<---IA	-.010	.168	-.057	.954	H3b-not supported	(0.003)
CO<---SQM	.254	.175	1.446	.148	H3a-not supported	(0.149)
CO<---ITR	.055	.195	.283	.777	H2c-not supported	(0.034)

Source: survey Data (2014)

INTERNATIONAL JOURNAL OF RESEARCH IN COMPUTER APPLICATION & MANAGEMENT

A Monthly Double-Blind Peer Reviewed (Refereed/Juried) Open Access International e-Journal - Included in the International Serial Directories

http://ijrcm.org.in/

55

TABLE 5: GUIDELINES FOR ESTABLISHING ACCEPTABLE AND UNACCEPTABLE FIT

Structural Equations Modeling Overview

TABLE 4 Characteristics of Different Fit Indices Demonstrating Goodness-of-Fit Across Different Model Situations

No. of Stat. vars. (m)	N < 250			N > 250		
	m ≤ 12	12 < m < 30	m ≥ 30	m < 12	12 < m < 30	m ≥ 30
χ^2	Insignificant p-values expected	Significant p-values even with good fit	Significant p-values expected	Insignificant p-values even with good fit	Significant p-values expected	Significant p-values expected
CFI or TLI	.97 or better	.95 or better	Above .92	.95 or better	Above .92	Abo e 90
RNI	May not diagnose misspecification well	.95 or better	Above .92	.95 or better, not used with N > 1,000	Above .92, not used with N > 1, 00	Above .90, not used with N > 1,000
SRMR	Biased upward, use other indices	.08 or less (with CFI of .95 or higher)	Less than .09 (with CFI above .92)	Biased upward; use other indices	.08 less (with CFI above .92)	.08 or less (with CFI above .92)
RMSEA	Values < .08 with CFI = .97 or higher	Values < .08 with CFI of .95 or higher	Values < .08 with CFI above .92	Values .07 wi h C I f .97 o higher	Values < .07 with CFI of .92 or higher	Values < .07 with CFI of .90 or higher

Note: m = number of observed variables; *N* applies to number of observations per gr   p when applying CFA to multiple groups at the same time.

APPENDIX G: CONFIRMATORY FACTOR ANALYSIS

TABLE 6: NORMALITY CHECKING USING KURTOSIS AND SKEWNESS

Variable	min	max	skew	c.r.	kurtosis	c.r.
IA5	1.000	5.000	-.433	-1.938	-.895	-2.001
PM5	2.000	5.000	-1.185	-5.301	-.059	-.133
ITR5	1.000	5.000	1.402	6.269	2.213	4.949
IA4	1.000	5.000	-1.038	-4.644	.161	.359
IA3	2.000	5.000	-.787	-3.518	-.301	-.674
IA2	2.000	5.000	-.842	-3.763	-.268	-.600
IA1	1.000	5.000	-.459	-2.054	-1.145	-2.561
PM1	1.000	5.000	.887	3.966	-.397	-.887
PM2	1.000	5.000	1.266	5.661	1.106	2.472
PM3	1.000	4.000	1.374	6.146	4.733	10.583
PM4	1.000	5.000	1.884	8.427	4.756	10.635
ITR1	1.000	4.000	1.372	6.137	3.435	7.681
ITR2	1.000	4.000	1.283	5.736	2.981	6.666
ITR3	1.000	5.000	1.477	6.606	3.212	7.182
ITR4	1.000	5.000	1.402	6.271	2.637	5.898
RML5	2.000	5.000	-.779	-3.483	-.478	-1.069
RML4	2.000	5.000	-.964	-4.310	.072	.162
RML3	1.000	5.000	1.272	5.689	.612	1.369
RML2	1.000	5.000	1.036	4.634	.119	.267
RML1	1.000	4.000	1.263	5.648	1.369	3.061
EM5	1.000	5.000	1.005	4.495	-.444	-.994
EM4	1.000	5.000	.985	4.404	-.548	-1.225
EM3	1.000	5.000	1.205	5.390	.240	.537
EM2	1.000	4.000	1.981	8.858	3.461	7.739
EM1	1.000	5.000	-.479	-2.140	-1.414	-3.162
SQM5	1.000	5.000	-.151	-.675	-.981	-2.194
SQM4	2.000	5.000	-1.406	-6.286	1.202	2.688
SQM3	1.000	5.000	-.368	-1.645	-1.069	-2.390
SQM2	2.000	5.000	-1.370	-6.128	.648	1.449
SQM1	2.000	5.000	-.781	-3.492	-.200	-.447
CO5	1.000	5.000	.259	1.158	-1.329	-2.973
CO4	1.000	5.000	.292	1.306	-1.245	-2.785
CO3	1.000	5.000	.322	1.439	-1.260	-2.817
CO2	1.000	5.000	.311	1.393	-1.335	-2.986
CO1	1.000	5.000	.297	1.329	-1.329	-2.972
Multivariate					137.226	14.769

Source: survey Data (2014)

APPENDIX H: EXPLORATORY FACTOR ANALYSIS

TABLE 7: SPSS PARTIAL RESULTS OF TOTAL VARIANCE EXPLAINED

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	8.049	22.360	22.360	8.049	22.360	22.360	4.694	13.039	13.039
2	5.442	15.116	37.476	5.442	15.116	37.476	4.536	12.600	25.639
3	4.359	12.108	49.584	4.359	12.108	49.584	4.455	12.375	38.014
4	3.291	9.143	58.727	3.291	9.143	58.727	4.192	11.645	49.659
5	2.285	6.346	65.072	2.285	6.346	65.072	3.361	9.336	58.995
6	1.765	4.903	69.975	1.765	4.903	69.975	2.287	6.353	65.349
7	1.372	3.812	73.788	1.372	3.812	73.788	2.228	6.188	71.536
8	1.095	3.043	76.830	1.095	3.043	76.830	1.906	5.294	76.830
9	.798	2.217	79.048						
10	.747	2.076	81.123						
11	.697	1.937	83.060						
Extraction Method: Principal Component Analysis.									

Source: survey Data (2014)

INTERNATIONAL JOURNAL OF RESEARCH IN COMPUTER APPLICATION & MANAGEMENT   57

A Monthly Double-Blind Peer Reviewed (Refereed/Juried) Open Access International e-Journal - Included in the International Serial Directories

http://ijrcm.org.in/

EXPLORING BUYING BEHAVIOUR OF URBAN CONSUMERS TOWARDS SHAMPOOS: EMPIRICAL EVIDENCES FROM INDIA

S M FATAHUDDIN
RESEARCH SCHOLAR
DEPARTMENT OF BUSINESS ADMINISTRATION
FACULTY OF MANAGEMENT STUDIES & RESEARCH
ALIGARH MUSLIM UNIVERSITY
ALIGARH

MOHAMMED NAVED KHAN
ASSOCIATE PROFESSOR
DEPARTMENT OF BUSINESS ADMINISTRATION
FACULTY OF MANAGEMENT STUDIES & RESEARCH
ALIGARH MUSLIM UNIVERSITY
ALIGARH

AYESHA ANUM
STUDENT
DEPARTMENT OF BUSINESS ADMINISTRATION
FACULTY OF MANAGEMENT STUDIES & RESEARCH
ALIGARH MUSLIM UNIVERSITY
ALIGARH

ABSTRACT

The global shampoo industry is an attractive business opportunity in the context of emerging economies like India. This paper aims to study the effect of attributes of shampoo brands on brands choice and to explore the brand preference of Indian consumers towards shampoo. The paper also focuses on exploring gender difference on the various dimensions affecting the consumer behaviour regarding brands of shampoo and concludes with marketing implications. A questionnaire was administered to 103 consumers to test six hypotheses concerning the impact of gender. The data confirmed that there are significant differences in the perception of college going male and female urban consumers regarding the features like package design etc. The study revealed that purchase is driven either by practical objectives such as benefits or by individual perceptions. These individual perceptions can be altered with the help of suitable advertising campaigns and marketing strategies. Findings and implications of the study will help not only Indian marketers but also international marketing practitioners to develop appropriate promotional tools to extend their product coverage. The study provides valuable insight into one growth area and indicates that more research in this area would be of value.

KEYWORDS
Shampoo industry, buying behaviour.

1. INTRODUCTION

The cosmetics and personal care products industry depicts a huge opportunity with estimated sales over US$ 200 billion in the year 2003 and the growth is expected at a rate of 4 per cent per year (Briney, 2005). Over all the personal care industry is classifies into sub sectors namely face care, hand and foot care, hair care, skin care, oral hygiene, fragrances and cosmetics. Hair care makes the largest sub-segment in this industry with a 22 per cent share of total consumer expenditure followed by skin care (16 percent) and make up (13 percent), oral hygiene (12 percent), fragrances (12 percent) and other (25 percent) (Weber and Capitant de Villebonne, 2002).. The shift in personal care and cosmetics markets from developed to emerging markets has not only proposed new objectives with the purpose of extending the customer base but also meeting the demands of those new bases (Ortega, 1998). The major demand is for the products that are of basic need for the consumers like soap, shampoo, hair oil etc. A notable limitation in the academic literature, however, and one that has some importance to FMCG marketing practitioners, specially the shampoo industry, relates to the attributes and features explaining the purchasing of shampoo brands. Only few studies included the measures of variables affecting the shampoo brand preference which helps in understanding the reasons for purchase of low involvement product like shampoo. Better knowledge of the impact of demographic of the consumers on the psychographic factors of the brand can help in dovetailing the final purchase behaviour to the consumer choices and preferences. This study focuses on exploring key drivers influencing the reasons for buying various brands of shampoo. The study followed with examining the association of gender on those key drivers and the impact of gender too.

2. LITERATURE REVIEW

2.1 INDIAN SHAMPOO INDUSTRY

The exercise of shampooing (derived from the Hindi word *champi*) became popular during the British colonization in India, hence well translated to London too (Mahomet, 1997). Gradually the "idea of shampooing for health" made the practice quite popular in the field of medical sciences too, where the concept got some vital changes and employed for several uses within a period of few decades while the product later named as shampoo (Mahomet 1997).The shampoo market is deeply disjointed in terms of huge number of manufacturers, suppliers, brands, and trade channels. In the past decade, India's cosmetic market has undergone the biggest ever evolution, providing the Indian consumers more choices of branded shampoos. At present, the Indian shampoo market has a penetration level of 14 per cent and is estimated to have a value of around Rs. 2,700 Cr (Business standard, Friday, 2012).Following is the list of top five most popular brands of shampoo in India:

1. L'Oreal

L'Oreal is the most popular brand of shampoo brand among Indian consumers. It is a French cosmetics company which got established in the year 1909 by Eugene Schueller. The Head quarter of the company is situated in Paris. Variants of L'Oreal shampoo are total repair, fall repair, oil nourish, colour protect and nutri gloss.

2. Dove

Dove is a brand of Unilever in the category of personal care. Unilever is a multinational company established in 1929 after the merger of Lever Brothers and Margarine Unie. The brand offers various products like shampoo, hair conditioner, deodorant, body wash, face wash and lotions.

3. Pantene

Pantene is ranked 3rd in the list of five best shampoo brands in India on the basis of popularity. This brand of shampoo is owned by Procter & Gamble which is an American multinational consumer goods company founded in the year 1837 by William Procter and James Gamble.

4. Sunsilk

Another brand of shampoo owned by Unilever is Sunsilk. Presently covering the market in 80 countries, Sunsilk was launched in the year 1964. Some popular variants of Sunsilk Shampoo are Hair fall solution, Radiant shine etc.

5. Head & Shoulders

The brand is owned by the parent company Proctor & Gamble. The brand was launched in the year 1961 in North America, introducing ZPT (Zinc pyrithione) to treat dandruff. As an anti-dandruff agent, the brand got huge popularity along with other variants like cool menthol and anti-hair fall.

Source: Listz (Dec 2014)

2.2 THEORETICAL BACKGROUND

Authors have reported various reasons affecting the consumer inclination towards a particular brand. Ragavendran (2009) concluded that consumer consider the package design to be one of the reasons for choosing the shampoo along with the benefits offered. Psychographic attributes were found to be connected with the demographics of the shampoo consumers (Zbib et.al, 2010). The study found some significant differences between the demographic variables and the evaluation the consumers perception about overall performance of shampoo brands obtained from various countries. Marketers have used gender as one of the most common criteria for segmentation of consumers. The concept makes sense, given that the gender split can be easily identified and the results can be implied to earn profits (Putrevu, 2001,).

Sharma and Mehta (2012) reported that frequency of shampoo use in males is very less as compared to females and the consumers use it only for the purpose of cleaning, not for making their hair healthier or stronger. Whereas, Wells et.al (2010), concluded that demographic variables are not helpful in explaining the brand choice instead benefits are the powerful basis for describing consumer inclinations towards shampoo brands. Studies in the past have revealed the effect of gender on expenditure revealing women can go even in debt but they won't stop shopping (Weeks, 2004). Akarta and Arora (2012) opined that Indian consumers are less aware about the brands of shampoo irrespective of gender and so is the expenditure in such low involvement products. Thapa (2012) explored consumer switching behaviour and the findings suggested the impact of packaging, brands benefits, advertisement source etc. are the reasons of switching or continuing behaviour of shampoo consumers. Authors posit that brand commitment is highly associated with brand loyalty (Kim et al., 2008); even some argue that it is an essential and adequate condition for brand loyalty (e.g. Knox and Walker, 2001).While brand loyalty is a function of brand attributes (Kim et al., 2008), it may also be related to consumer demographic characteristics and traits. For example, brand loyalty is associated with risk aversion and females were found to be more risk averse than men (Matzler et al., 2006). Though there is substantial work on gender differences in the literature, still not much research has been done on gender differences in consumer behaviour regarding shampoo brands. That is quite shocking as researchers believe that today's men have taken on many of the shopping responsibilities that women predominantly performed in the past (Harnack et al., 1998).

On the basis of extant literature and considering objectives in mind, we proposed the following null hypotheses:

H_{01}: *There is no significant association between gender and brand preference of shampoo.*

H_{02}: *There is no significant association between gender and brand loyalty of shampoo.*

H_{03}: *There is no significant association between gender and expenditure on shampoo.*

H_{04}: *Significant differences do not exist between males and females in terms of fragrance as an attribute.*

H_{05}: *Significant differences do not exist between males and females in terms of package design as an attribute.*

H_{06}: *Significant differences do not exist between males and females in terms of variety as an attribute.*

3. RESEARCH METHODOLOGY

The data for the study was collected from a convenience sample of 103 respondents out of which 53 were males and 50 were females representing close to that of the general population. Around 74 per cent of the respondents were in the age band of 21-25 years while rest of respondents were in the age group of 18-21 (~26 %). 95 respondents were post graduates and the remaining 8 respondents were graduates enrolled in an esteemed university near capital region of the country. Monthly family income of majority of the respondents ranged between 15,000 to 25,000 INR. A self-structured questionnaire was employed in order to collect data regarding consumer buying behaviour towards shampoo.

The data was obtained with the use of self- administered questionnaire which comprises of two sections: first section includes the demographic information of the respondents while the second section includes questions related consumer brand preference, expenditure and attitude towards various attributes of shampoo. The second section also includes consumer opinion regarding the three attributes of brands of shampoo namely: fragrance, variety and package design.

3.1 BRAND PREFERENCE AND CUES

As noted in the literature, there are varied choices of consumers regarding buying of shampoo brand and there are several reasons affecting the inclination towards particular brand of the shampoo. The current study revealed that 88 per cent consumers find pricing of their brand as optimum and reasonable while 12 per cent said that the brand is priced higher than expected. The response of shampoo users to product cues and their evaluation of important attributes are vital towards purchase behaviour. In the context of Indian shampoo users, Head & Shoulders was found to be the most preferable brand followed by Dove and Sunsilk (See Table 1).

TABLE 1: BRAND PREFERENCE

Shampoo brand	Frequency	Per cent
Head & Shoulders	26	25.2%
Dove	25	24.3%
Sunsilk	16	15.5%
L'Oreal	13	12.6%
Others	23	22.3%
Total	103	100 %

Good R&D emerged to be one of the most important factors which convince Indian consumers to use a particular brand. Recommendations from family member is the second reason for choosing a shampoo while the suitability of a particular brand of shampoo is the third most important factor for choosing it.(Please refer to Table2)

TABLE 2: REASONS FOR CHOOSING A BRAND OF SHAMPOO

Reason for choosing a brand	Per cent
Good R&D	24.0%
Recommended by Family Member/Friends	22.3%
Promotions and Offers	15.7%
Suits my hair type	14.0%
Influenced by brand Ambassador/Ad	10.7%
Others	13.3%

3.2 TYPES OF SHAMPOO AND MONTHLY EXPENDITURE

Consumers provide some interesting results about their choice of shampoo brand on the basis of utility and characteristics. Hair fall control was found to be the prime reason for choosing a particular brand of shampoo, closely followed by anti-dandruff shampoo which is evident with the high number of respondents using Head & Shoulders. Third and fourth are closely ranked with 18.6% responses for dry and damaged and 16.7% for silky straight respectively.

Also the shampoo consumers provided the information regarding their monthly expenditure on the brand of shampoo they use. As it can be inferred from the data, 45 respondents spend less then Rs. 100 monthly on shampoo. The second most common group was of Rs. 100-300 which is the price of premium shampoo brand. Then a relatively smaller group was that of Rs. 300-500 and the smallest group was the Rs. 500-1000 range. (See Table 3)

TABLE 3: MONTHLY EXPENDITURE

Monthly Expenditure	Frequency	Per cent
<100	45	43.7%
100-300	36	35.0%
300-500	14	13.6%
500-1000	8	7.8%
Total	103	100%

3.3 BRAND EXPOSURE AND USAGE

Sources of brand exposure towards shampoo were also examined. The most common method of brand exposure of respondents was Television (32%). Next is exposure through friends and family. Around 7% consumers said they are exposed to their preferable brand of shampoo through internet. 65 per cent consumers said that are using the brand for the past 2-4 years while 34 per cent consumers are using for less than a year. A huge percentage (90 per cent) of shampoo buyers revealed that they have their preferable brand available almost everywhere. Hence brand availability also has an impact towards choice of brand.

3.4 HYPOTHESES TESTING

A series of six hypotheses were developed based on the literature. With the purpose of testing the proposed hypotheses and considering the suitability of data, chi-square test and Independent samples t-test were operationalized. The test reveals interesting results about the affect of gender on the attributes relevant in explaining the inclination towards a particular brand among both the genders.

3.4 (A) CHI-SQUARE TEST

Hypotheses H_{01}- H_{03} was tested by applying chi-square test at 95 per cent confidence level of significance. The results were significant in explaining the association of gender towards the considered attributes. (Refer to Table 4)

TABLE 4: CHI-SQUARE STATISTICS

Attribute	χ2	df	p value	Remark
Brand Preference	23.506	7	.001	Not Accepted
Brand Loyalty	7.961	1	.005	Not Accepted
Expenditure	17.132	3	.001	Not Accepted

The results of chi-square test revealed that there is a significant association of gender with respect to brand preference and brand loyalty, as well as expenditure on brand. Hence H_{01}- H_{03} were failed to be accepted as the significant value was lower than 0.05 (p>0.05).

3.4 (B) INDEPENDENT SAMPLES T- TEST

In order to test H_{04}-H_{06}, independent T-test was conducted where in gender differences were examined on the attributes fragrance, package design and variety of brand of shampoo. (Table 5)

TABLE 5

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means		
		F	Sig.	t	df	Sig. (2-tailed)
Fragrance	Equal variances assumed	1.273	.262	-1.395	101	.166
	Equal variances not assumed			-1.389	96.481	.168
Package Design	Equal variances assumed	5.167	.025	.096	101	.924
	Equal variances not assumed			.097	96.561	.923
Variety	Equal variances assumed	1.288	.259	-1.371	101	.174
	Equal variances not assumed			-1.376	100.557	.172

GROUP STATISTICS (FIG. 1)

Attribute	Gender	N	Mean	Std. Deviation	Std. Error Mean
Fragrance	Male	53	3.42	.819	.112
	Female	50	3.66	.961	.136
Package Design	Male	53	3.72	1.007	.138
	Female	50	3.70	.763	.108
Variety	Male	53	3.47	.973	.134
	Female	50	3.72	.858	.121

As it can be observed by the tables above, no significant differences were found to exist between males and females in context of the attributes namely Fragrance and Variety. Hence, H_{04} and H_{06} failed to be rejected. But the results also revealed that there is significant difference vis-à-vis package design in the minds of male and female consumers. Hence H_{05} was not accepted as the significant value was found to be lower than 0.05 at 95 per cent level of significant.

4. DISCUSSION AND MARKETING IMPLICATIONS

In a low consumer involvement category such as shampoo, purchase is either driven by practical objectives such as usage benefits, or by experiential pleasures. Generally, as a low involvement product, shampoo has low loyalty rates; but the current study revealed that Indian consumers are quite loyal to the brand they prefer as they were using the brand of shampoo for the past 3-4 years continuously. This result is a bit different to what is experienced by researchers in other countries (Zbib et.al, 2010), where 90 percent of consumers shift from one brand to another every month. The results of the chi-square test reveal the association of gender with the brand preference, brand loyalty and expenditure. Hence marketers should strive to develop a leadership position in the minds of the consumer as it will help in gaining consumer surplus with an extended loyalty for coming years. Studies in the past have revealed the effect of gender on expenditure (Weekes, 2004). Hence, Gender specific products can be developed which should promote ideas like "Only for men" or "Women worth it" can be of immense help.

Indian consumers will stick to the brand if promoted through suitable media like television and internet as the results showed that television is the prime source through which their purchasing behaviour is getting influenced a lot. This means shampoo brands must focus their marketing on television advertisements and make them as appealing as possible. The internet is also an upcoming medium for targeting consumers, it can help in brand recall and brand presence as social networking sites and online shopping are gaining popularity .This is also more important for the shampoo industry because it is a low involvement product and brand loyalty is therefore not too high; consumers may switch from one brand to another easily so retaining consumers as well as acquiring new ones can be accomplished by affective advertising Peer influence was also found to be a source of exposure towards shampoo brands in the form of word of mouth. This very impact of social influence is in line with studies conducted on the interpersonal and peer influence (Lee, 2008; Khare, 2013).

The research found a significant difference on the attribute package design. It might an attractive tool to promote the brand. Marketers can exploit the product design and its packaging to reach the market which has not been covered by them. Indian consumers found to be indifferent on the aspects fragrance and variety, which is quite shocking. It requires further examination to make it more conclusive.

The results revealed that 43.7 per cent spend less then Rs. 100 monthly on shampoo indicating the two trends prevalent in the Indian Shampoo Industry: popularity of shampoo sachets, as well as low frequency of shampoo use. The second most common group was of Rs. 100-300 which is the price of premium shampoo brand bottles. This more economical mind set is prevalent due to the fact that the respondents of this questionnaire were all students. Hence marketers can focus on developing wide assortment for their shampoo in all sizes. Shampoo users believe that the pricing is reasonable for the brand they and most of them were found satisfied with the shampoo they use. Most shampoo users were willing to continue using same brand of shampoo; only 7 per cent were found to discontinue the current brand. Hence, marketers should also focus in exploring the causes for satisfaction and dissatisfaction among Indian consumers regarding purchase of shampoo.

5. LIMITATIONS AND FUTURE RESEARCH DIRECTIONS

There is limited generalizability of the research findings as the study was conducted in a particular setting with a particular sample namely, Indian students. India is occupied with a fairly mixed culture that affects the consumer pattern and usage of products. It may be that our findings would be less relevant to other settings, such as older shoppers. Future research could replicate the study across several other countries which would help to validate our findings. More research should be done to develop a detailed understanding of the perceptions and the psychological influences that affect the purchasing behaviour. Linking other demographic variables might reveal some valuable inputs.

REFERENCES

1. Akarte, A. and Arora, A. (2012), "A study on consumer behavior with respect to various brands of shampoo in Nagpur city", International Journal of social sciences & Interdisciplinary research, Vol.1, No.4, pp. 51-57.
2. Briney, C. (2005), "Industry growth on the horizon", Global Cosmetic Industry, Vol. 173, No. 6, pp. 41-2.
3. Business standard, "The Indian shampoo and hair conditioner market" Friday, July13, 2012
4. Harnack, L., Story, M., Martinson, B., Neumark-Sztainer, D. and Stang, J. (1998), "Guess who's cooking? The role of men in meal planning, shopping, and preparation in US families", Journal of the American Dietetic Association, Vol. 98, No. 9, pp. 995-1000.
5. Khare, A. (2013), "Consumers' susceptibility to interpersonal influence as a determining factor of ecologically conscious behaviour", Marketing Intelligence & Planning, Vol. 32 No. 1, pp. 2-20.
6. Kim, J., Morris, J.D. and Swait, J. (2008), "Antecedents of true brand loyalty", Journal of Advertising, Vol. 37, No. 2, pp. 99-117.
7. Knox, S. and Walker, D. (2001), "Measuring and managing brand loyalty", Journal of Strategic Marketing, Vol. 9, No. 2, pp. 111-28.
8. Lee, K. (2008). "Opportunities for green marketing: young consumers", Marketing Intelligence & Planning, Vol. 26, No.6, pp.586-573.
9. Lin, C.F. (2002), "Segmenting customer brand preference: demographic or psychographic", Journal of Product & Brand Management, Vol. 11, No 4, pp. 249–268.
10. Listz (2014, Dec 23). Top 10 Best Shampoo Brands in India. Retrieved 10 May 2015 from http://listz.in/top-10-shampoo-brands-in-india.html
11. Mahomet, Dean. 1997. The Travels of Dean Mahomet: An Eighteenth-Century Journey through India. Edited with an introduction and biographical essay by Michael H. Fisher. Berkeley, CA: University of California Press.
12. Matzler, K., Bidmon, S. and Grabner-Krauter, S. (2006), "Individual determinants of brand affect: the role of the personality traits of extraversion and openness to experience", Journal of Product & Brand Management, Vol. 15, No. 7, pp. 427-34.
13. Ortega, T. (1998), "Making global formulas", Chemical Market Reporter, Vol. 253 No. 19, pp. 3-4.
14. Putrevu, S. (2001), "Exploring the origins and information processing differences between men and women: implications for advertisers", Academy of Marketing Science Review, Vol. 10, pp. 1-14.
15. Raghavendra, G.P., Devakumar, G. and Upadhyay, S. (2009), "A Study on Brand Awareness of Shampoo Products for CavinKare Pvt. Ltd.", SASTECH Journal, Vol. 8, No.2, pp. 33 - 40.
16. Sharma, H. and Mehta, S. (2012), "Customer attitude towards the use of shampoos: A case study of Sirsa city", International Journal of Research in Finance & Marketing, Vol. 2, Issue 2, pp. 267-278.
17. Thapa, A. (2012), "Consumer switching behavior: A Study shampoo brands", Abhinav National Monthly referred journal of research in commerce and management, Vol.1, Issue 9, p 98-106.
18. Weber, M. and Capitant de Villebonne, J. (2002), "Differences in purchase behavior between France and the USA: the cosmetic industry", Journal of Fashion Marketing & Management, Vol. 6, No. 4, pp. 396-407.
19. Weekes, T., (2004), "Spending on clothing and attitudes to debt in the UK", Journal of Fashion Marketing and Management, Vol. 8, No 1, pp. 113–122.
20. Wells, V.K., Chang, S.W., Oliveira-Castro, J., and Pallister, J. (2010), "Market Segmentation from a Behavioral Perspective", Journal of Organizational Behavior Management, Vol. 30, Issue 2, pp. 176-198.
21. Zbib, I.F., Wooldridge, B.R., Ahmed, Z.A., and Benlian, Y. (2010), "Purchase of global shampoo brands and the impact of country of origin on Lebanese consumers", Journal of Product & Brand Management, Vol. 19, No 4, pp. 261–275.

INTERNATIONAL JOURNAL OF RESEARCH IN COMPUTER APPLICATION & MANAGEMENT 61

A Monthly Double-Blind Peer Reviewed (Refereed/Juried) Open Access International e-Journal - Included in the International Serial Directories

http://ijrcm.org.in/

PRODUCT PLACEMENT IN MOVIES AND TV SERIES: CONCEPT, EXAMPLES AND BEST PRACTICES

PRAMA VISHNOI
ASST. PROFESSOR
KESHAV MAHAVIDYALAYA
DELHI UNIVERSITY
DELHI

NAMITA PADHY
ASST. PROFESSOR
KESHAV MAHAVIDYALAYA
DELHI UNIVERSITY
DELHI

ABSTRACT

If the mention of your dream phone by your favorite sitcom character ever caught you by alarm then, you have been hit by the product placement bug. Product placement is an embedded marketing technique in which marketers constantly use to excite customer attention in the most subtle and surprising manner. This syndrome is most common to be found at places where conventional advertising doesn't have a major role to play. From the use of Coca-Cola in American Idol to the overuse of exotic locations by bollywood films, all collectively constitute to what we attempt to define as product placements. And as with any marketing some of them are destined to fail. By the end of this paper, we attempt to derive some of the best practices to be looked at while indulging in product placements.

KEYWORDS
Product placement, Brand placement, Product placement advertising, Product placement in movies, TV product placement.

INTRODUCTION
"… A martini shaken not stirred -- with Smirnoff vodka. "

Everyone remembers seeing the classic scene in almost all bond movies where bond orders his favorite drink, or when he gets his new Aston martin from Q. It is common knowledge that Bond wears an omega! And this is the world of product placements.

Product placement is often described as embedded marketing. Using this marketing tool, brands are placed context/scenario in which advertising isn't generally expected. The product placement is often not disclosed at the time that the good or service is featured. Product placements further enhance television/other media's ability to deliver integrated branding campaigns for advertisers.

In this new age, people have become fed up with the constant bombardment of advertising, and are finding ways to avoid it. Ways which are further being aided by technology like TiVo and other DVR devices which allow a user to skip over commercials. Thus as the public finds new ways to avoid advertisements advertising firms must figure out ways to enable their customers (brands) and their messages to reach the public. This is where product placements come into picture. The knight in Armani clad armor.

Product placement is perfect for advertisers because it's almost impossible to avoid it. James Bond smoking Lark Cigarettes in License to Kill, Michael J. Fox drinking Pepsi in the Back to the Future series, or Reese's Pieces being used to lure an alien in the movie E.T. are a few examples.

Not only are products being placed in the background of movies and shows etc., product placements these days are more and more frequently being worked into the plots of movies. For example, the movie Cast Away featured FedEx throughout the entire movie.

Once the importance of product placements is highlighted we can broadly classify the reasons for their usage as:
- Stronger emotional connection
- better dovetailing with relevant content
- targeting a specific group

Companies may benefit from placements because primarily it helps them to correct or extend an existing image of a product. A product is shown in many ways and maybe in connection with unusual usage scenarios in order to extend its area of use.

There might be certain falls of product placements. One of the major disadvantages of product placements is that sometimes spectators do not recognize a brand because it is portrayed either for a small duration or at an unfit moment. In case of film or TV show promotion, the brand might suffer if the film/show is bad or a failure. Another issue that may arise is the one pertaining to portrayal which may happen when the product is presented in a very unrealistic way and spectators feel teased or annoyed by an exaggerated or repeated representation of a branded product.

METHODOLOGY
The paper makes extensive use of secondary research and the recent examples of the brands which have used product placement in the movies, TV. Series, etc.

OBJECTIVES
The objective of this paper is to understand the concept of product placement as a tool of advertising by looking into the examples of the movies, TV series where it has been used. Also, the paper in the end derives the best product placement practices which a brand can use.

DISCUSSION
A scenario of product placements may arise when:
- **PRODUCTS ARE USED AS PROPS:** These products are an integral part of the sequence and are not intended to be advertised. They are used to convey certain attributes of a sequence. For example, RAID, a famous rat-kill is commonly used as a substitute for denoting poison. Such placements are involved primarily to add a more realistic appeal to the sequence.
- **PRODUCTS ARE DELIBERATELY ADVERTISED IN PRODUCTIONS IN EXCHANGE FOR FEES:** This is the most common form of product placement wherein the manufacturer/owner attempts to advertise his product by placing it in a production sequence wherein the meaning derived from the product's placement matches with some of the product attribute that are required to be conveyed.
- **UNINTENDED PUBLICITY:** This comprises the cheapest and the most cost effective form of product placement wherein a product accidentally features in a production sequence. Though it seems to be lucrative enough for the brand owners but such form of placements usually go un-noticed by the audience and are thus not very effective. Besides, if placed in a negative/derogatory sequence, these might have a negative impact on the brand image.

Some commonly placed product categories are:
- Automobiles
  - X-files used Ford
  - GM in Transformers
  - Nissan in Heroes
- Consumer electronics and computers
  - Casino Royale featured various Sony products
- Food and beverages
  - Godzilla featured Pepsi, Hershey's, Taco Bell
  - American Idol portrays Coca-Cola
  - Coke Studio by MTV
  - Need For Speed: Most Wanted has various ads for Burger King
- Travel
  - Yeh Jawaani hai Deewani featured Make My Trip
- Tobacco
  - Slumdog Millionaire featured Marlboro

PRODUCT PLACEMENT TYPES

Product placement can be divided on basis of either on the category of program/media utilized or on the basis of the way the product is placed inside the media/program.

On the basis of the way product is placed inside the program/media placement can take several forms such as:
- Visual imagery in which the product appears within the entertainment program
- Actual product use by an actor in the program
- Dialogue spoken by an actor that contains product information -

On the basis of the media utilized product placement could be categorized as:
- **MUSIC** – The product is either a part of the lyrics of the song or is displayed used in the music video. In 2010, video for Lady Gaga's "Telephone" featured nine brands in nine minutes. In 2011, PlentyOfFish and Sony were advertised in Britney Spear's music video for "Hold It against me".
- **COMIC BOOKS** – To allow for its free distribution, South African comic book "Supa Srtikas" accepts product placements. It occurs on player's shirts, billboards, through branding of scenarios or locations etc. The team depicted in the comic is often seen eating at the Spur Steak Ranches in its South African edition. Chevron is the comic's global headline sponsor. Besides Chevron, VISA, Henkel and GT bank are the other headline sponsors of the comics.
- **MOVIES** – A feature film reaches out to millions of viewers and hence attracts marketers. Among some recent products placements in Bollywood, in the movie Mary Kom, more than a dozen products were placed including the likes of TATA Salt, Mother Dairy, Sugar free, Iodex etc.
- **TV SERIALS** - The emergence of reality television programs has given a huge boost to the product placement market within TV shows.
- **SPORTS** - Product placement has long been prevalent in sports as well, from professional sports to college sports, and even on the local level with high school sports. Sports being prevalent on television lead to an increase in product exposure. Product placement in sports began to rise in the 1970s, when NASCAR began to allow sponsors to cover the cars they were sponsoring with their logos. This has subsequently followed with the uniforms the drivers themselves wear having sponsor logos. Something so heavily copied by other sports like formula one and football etc.

There are three major product placement strategies
- **IMPLICIT PRODUCT PLACEMENT** - An implicit Product placement is not expressed formally. The brand name or the name of the firm appears without a clear demonstration of product benefits. It plays a passive, contextual role. For e.g., in the Bollywood movie Mary Kom, actress Priyanka Chopra is seen using TATA salt while cooking, without explicitly mentioning the name of the brand.
- **INTEGRATED EXPLICIT PRODUCT PLACEMENT**- In this type of Product placement, the attributes and benefits of the product are clearly demonstrated: it plays an active role. For e.g., in the Bollywood movie Chalte Chalte, actor Shah Rukh Khan is seen asking his employee to fill 'Castrol' in his truck.
- **NON-INTEGRATED EXPLICIT PRODUCT PLACEMENT**- In a non-integrated product placement the product or the brand is not integrated in the program or movie. The company/brand name may appear in the beginning of the program (this program is brought to you by) or the brand or company name appears on the screen. For e.g., Mahabharata TV series on Indian television had Fortune Oil as its title sponsor.

LEGAL ISSUES

Product placements are not without their set of legal issues. Public emotions ran high in the United Kingdom during the run-up leading to the legalization of the practice. Since May 2011, product placement has been authorized nearly everywhere in the EU.

A common moral and legal issue encountered with this regard is how do people get to know whether a programme contains product placement? UK seems to have found a unique solution for this. If a UK programme contains product placement, the TV channel has to show a special logo. This will let viewers know that the TV channel or the programme-maker has been paid to include products in that programme.

The logo has to be shown at the beginning of the programme, and repeated after any advertising break during the programme. It also has to be shown again at the end of the programme.

USE OF NEWER FORMS OF PRODUCT PLACEMENTS

- **ATM'S** – in ATM machines outside the Indian subcontinent, the user is often exposed to an infomercial which is a kind of product placement during his transaction. This is mainly static image based product placement and has the primary motive to enlighten the customer about the existence of a product/service.
- **VIDEO GAMES** - Traditionally, advertisers have not paid video game makers for product placement. As an early controversial example of product placement in games, in 1990 a group of doctors found billboard signs with Marlboro and Budweiser logos in video arcade games. It was later found that this was a purely unintentional occurrence resulting because of the game maker's (Sega) commitment towards building a realistic in game environment. Nielsen ratings in 2003 showed a 7% decline in television viewing among 18 to 34 year-old males. This decline was directly attributed to the growing popularity of video games. A very unique thing about gamers is that they seem to respond positively to product placement. In one study, 70% of gamers surveyed considered product placement a positive feature that increased the realism of the game. Product placement in video games can be very diverse. Streetscapes in the game can contain billboards with advertisements for products. Products can also be woven into the story of a game.
- **REVERSE PRODUCT PLACEMENTS** - In traditional product placement a real brand is integrated into a fictional environment, in case of a reverse product placement a fictional brand is created in a fictional environment and then it is released into the real world. The restaurant chain Bubba Gump Shrimp Co. was brought to life through its association with the film Forrest Gump. Reverse product placement can also be used to generate buzz about a product before its launch. American Apparel launched a line of jeans in the virtual world Second Life several months before launching them in its real-world stores.

PRODUCT PLACEMENT EXAMPLES

MOVIES

A. WILSON IN CAST AWAY: A BRAND PORTRAYED AS A CHARACTER

When Chuck (Tom Hanks), the main character from the movie crashed on the island, he was there alone. But somehow he got company … from the unlikeliest source. When he opened boxes from the plane, he found Wilson volleyball. That ball eventually became "Wilson", Chuck's only company on the island. This product placement is very interesting and special for one particular reason: product was not just visible and used, and Chuck didn't just speak about it – the product became a character. It "listened" and provided company to Chuck.

INTERNATIONAL JOURNAL OF RESEARCH IN COMPUTER APPLICATION & MANAGEMENT   63

A Monthly Double-Blind Peer Reviewed (Refereed/Juried) Open Access International e-Journal - Included in the International Serial Directories

http://ijrcm.org.in/

As a result of product placement Wilson Sporting Goods Company created a promotional ball, complete with the facial markings as seen in the film. This is the best form of product placement. Hanks' and Wilson's relationship was genuine and as a viewer perceives Wilson as a character, not some branded product. From a brand's point of view that's even better than highly visible placement or heavy usage. And in case of Wilson it was for free.

B.   CALIFORNIA WINES IN SIDEWAYS

Sideways (2004) is an American comedy-drama, directed by Alexander Payne. It follows two forty-something year old men Miles (Paul Giamatti) and Jack (Thomas Haden Church), who take a week-long road trip to the wine country of Santa Barbara.

Wine is a central element of the movie screenplay, and tasting sessions often provide the opportunity for a central close-up on the bottles and brands. In the movie Miles often spoke fondly of Pinot noir, but he didn't like Merlot that much. Following the movie's release in October 2004, Merlot sales dropped 2 per cent while Pinot noir sales increased 16 per cent in the Western United States. In the following months sales of Pinot noir rose by 22 per cent on the whole US market. Pinot noir brand Blackstone achieved even bigger boost – its sales increased by almost 150 per cent. The wine-growing valley of Santa Ynez in California also received a boost in tourism and at the restaurant 'The Hitching Post' which also appeared in the movie, business increased by 30 per cent.

TELEVISION SERIES

A.   APPLE IPAD IN MODERN FAMILY

The episode with iPad as a focal point of the story was aired just three days before the stores started selling Apple's new gadget. The plot was flawless: the Dunphy family tried to buy their dad an iPad for his birthday, which coincided with the device's launch day. Of course family members didn't pre-order it, so they tried desperately to fulfill their father's birthday wish.

Phil Dunphy is a bit of a geeky dad and calls himself an early adopter. The fact that iPad goes on sale on his birthday is an additional effect to his desire for it. He even said: "It's like God and Steve Jobs got together to say 'We love you, Phil!'"

The product was integrated in the plot; it was mentioned in different contexts, it was shown on the screen, it was used and it achieved the "I want to buy this product!" effect.

B.   COCA-COLA IN AMERICAN IDOL

Coca-Cola was one of the first sponsors of American Idol in its first season. In the beginning the sponsorship deal cost around $10 million, but in the Season 7 it rose to $35 million. The most important part of the product placement deal are cups bearing logo of Coca-Cola which are featured prominently on the judges table. Contestants and host are shown gathering between songs in the "Coca-Cola Red Room," the show's equivalent of the traditional green room.

MUSIC

A.   The famous original Nokia ringtone features in a number of television shows and movies including Kyaa Dil Ne Kahaa in Dil Ne Jise Apnaa Kahaa.

B.   Sometimes soundtracks are advertised as well. In one scene [1:28:00] of the film Kuch Kuch Hota Hai the melody of Celine Dion's 'My heart will go on' is heard in the background.

Depending on the category of product/ services to be marketed, marketers carefully select various forms of media that best convey the inherent product/brand values.

CLOTHING

A.   Sixers' or NBA shirts in Kal Ho Na Ho and New York Yankees' caps in Kuch Kuch Hota Hai represent sports or leisure clothes of young American teenagers or students. In the extraordinary case of Kuch Kuch Hota Hai a T-shirt of Polo Sport appears up to 43 times in a period of 12 minutes.

B.   Kuch Kuch Hota Hai presents most clothing product placements. Anjali (Kajol), for example, excessively advertises the label DKNY. All her clothes, caps, jackets and bags portray this label's logo. In one scene at the beginning of the film [19:59], she plays an active, young and boyishly dressed girl. Later on, when becoming an adult from, she changes her attire from trousers to saris and more decent female clothes. Thus, wearing the brand DKNY might mean for a girl, to be accepted and strong like boys. Even children in the movie are used as models by wearing pyjamas and T-shirts, thus promoting popular cartoons, such as Hello Kitty, 101 Dalmatians or Mickey Mouse in a holiday camp.

FOOD AND BEVERAGES

A.   In Kuch Kuch Hota Hai the main protagonists bump into each other in front of a Nescafé vending machine and immediately fall in love. Thus, Nescafé transmits the message of bringing people together or of meeting one's ideal partner when drinking coffee. Moreover, it suggests that asking somebody to coffee would create or maintain friendships or interpersonal relationships. In fact, inviting somebody is tied to paying a drink for someone and thus again is part of consumption behaviour.

B.   A similar example of a beverage bringing people together can be found in the film Kal Ho Naa Ho, when the loving couple meets each other for the first time by bumping into each other. She spills all the coffee of her Starbucks cup over him. This is the first time they see each other and fall in love.

C.   In Hum Tum, Rhea, the sad female protagonist grieves for her departed husband and always wears dark clothes. Suddenly Karan (Saif Ali Khan), who is full of life and energy visits Rhea in her shop and takes her for a walk in the park. At the beginning of the sequence, she seems annoyed, almost uninterested. However, she soon likes his funny jumping and encouraging singing. Exactly at the moment when in the background blurred Coca Cola sunshades appear, she begins smiling. The sunshades are then shown once again three seconds later in the background. After Karan has completed his part of the song, Rhea resumes and turns into a happy and joyful young woman playing with children and colourful balloons. Here the label Coca Cola appears in a song about enjoying life, forgetting sorrows and being optimistic because life is beautiful. In fact this is exactly what Coca Cola and its commercials usually suggest, forgetting problems and enjoying life.

AUTOMOBILES

A.   In Kyaa Dil Ne Kahaa, Rahul (Tusshar Kapoor) most of the time wears Harley Davidson's jackets and boots and drives the same-named motorbike. He acts out the free and independent biker, flirting with women, especially with Esha (Esha Deol) but rejecting to marry her. Armstrong even claims that the main motivation for buying a Harley Davidson is to act out one's inner feelings and wishful lifestyles.

ELECTRONIC DEVICES

A.   Nokia uses an interesting way of bringing people together by extending its advertisements from on-set to creative placements. In Kal Ho Naa Ho Aman (Shahrukh Khan) helps Rohit (Saif Ali Khan) to behave correctly and attract a girl friend. The former, possessing a Nokia phone gives instructions to the latter being equipped with a Bluetooth headset of the same mobile phone brand. As this headset is not noticed by anyone, they communicate with each other all day long. Thus, Nokia accompanies Rohit through a large part of the film, helping him to stay in contact with his friend in order to find a girl friend. In fact, Nokia and Aman are successful, bringing together Rohit and Naina.

LOCATIONS

A.   Exotic tourist locations such as London, Switzerland etc., have been overly promoted in bollywood movies like Dilwale Dulhaniya Le Jayenge and Kabhi Khushi Kabhi Gham.

FAILED PRODUCT PLACEMENTS

*   The first view of swift desire in a song of the movie Bunty aur Babli – Swift desire was first introduced to the Indian audience via a song in Bunty aur Babli wherein the car is shown as an active component of the song. Unfortunately for Suzuki this product placement went almost totally unnoticed and horribly bad. Very few people even realized that they had seen the car that had built a great amount of buzz before its launch. Even though the movie was a blockbuster this product placement was as big a failure as they get.

*   The Island was a movie having around thirty five paid for product placements. The sheer number of brands was overwhelming, and some imaginary such as that of a Pizza Hut shirt with a Nike logo on it, were just plain ridiculous. The movie failed miserably at the box office and as a result, the advertised brands barely got a look in.

*   In the movie Twister. The good guys all have old beat up clunkers. But the bad guys led all drive black Dodge mini-vans. The problem that arose with this bad boys ride concept was that the sales of Dodge minis actually dropped after this movie release.

CONCLUSION

Product placements are unlike other marketing tools. They represent a dual edged sword. When implemented correctly they could be highly beneficial for the brand and help it communicate messages that are generally not deliverable by other media. Some of the best practices derived out of this research are as follows:

- **FIND THE RIGHT MATCH** – The product/service advertised using this technique should be in sync with the content/theme of the media (film, TV etc.). For example a movie on racing is a good bet to advertise for a company like Mobil. This ensures that your product does not feel out of place of in the whole scenario. An out of place product placement is a recipe for disaster. To put it in a nutshell make sure placements appear natural onscreen.
- **THE TRAP OF NEGATIVE ADVERTISING** – Dodge tried to sell and popularize its minis using a 'being uncool is cool' factor. This however did not work for them. Very few products/services have the ability to sell using negative advertising as it is.
- **GENRE STRENGTH** – The aim of the product placements should be designed in a way so as to play to the strengths of the genre such as its ability to educate viewers and normalize brands. For example product placements could work better as part of a long-term strategy to shift perceptions or brand choices.
- **SUPPLEMENT** – Product placement on its own might not be a very penetrative tool. As evident by Suzuki swift example. In certain cases relying only on the medium (in this case film) for attaining the desired results might result in disappointment. Hence a better strategy would be plan as to how placements will be activated off-screen by other activities, and how they can be integrated into a brand's other promotions and messaging efforts.
- **DO NOT TRY TOO HARD** – Hard selling must always be avoided while undertaking a product placements. Repetitive usage of the product generally turns off the user.
- **AVOID OVER CLUTTER** – As applicable with other means of advertising over cluttering a show/program with product placements leads to a failure for almost all the associated brands. As evident by the example of the movie 'island', too many product placements make the medium too commercial and akin to an advertisement.
- **BE READY: THEY FAIL, YOU MIGHT FAIL** – Once a product is embedded into a medium, the shortcomings of the medium could rub off to the brand too. The failure of a movie/TV show or a negative perception about the same could be transferred to the brand being advertised.

REFERENCES

1. http://brandsandfilms.com/2011/01/top-40-product-placements-of-all-time-20-11/
2. http://brandsandfilms.com/2011/02/product-placement-highlights-wilson-in-cast-away/
3. http://en.wikipedia.org/wiki/Product_placement
4. http://en.wikipedia.org/wiki/Supa_Strikas
5. http://smallbusiness.chron.com/product-placement-strategies-1684.html
6. http://www.forbes.com/sites/velocity/2010/04/01/ipad-product-placement-star-of-abcs-modern-family-even-before-launch/

A REVIEW PAPER ON MULTICULTURALISM IN WORKPLACE

DR. POOJA DASGUPTA
ASST. PROFESSOR
INDORE INSTITUTE OF LAW
INDORE

KHUSHBU DUBEY
ASST. PROFESSOR
INDORE INSTITUTE OF LAW
INDORE

ABSTRACT

With the globalization of business, increased multiplicity in the workplace and multicultural inflection in society, cultural awareness has become one of the most important business gears in more or less every industry. Thoughtful of the cultures of those around you will improve communication, yield and harmony in the workplace. Formal cross-cultural knowledge training is very helpful for problem solving on multicultural business teams. And being in vicinity surrounded by people working in different multinational companies, we would like to discuss about the pros and cons of effect of multiculturalism in a workplace.

KEYWORDS

Multiculturalism, workplace environment.

INTRODUCTION

Workplace variety refers to differences between people in an association. That sounds simple, but diversity cover race, gender, ethnic group, age, personality, cognitive style, tenure, organizational function, education, background and more. Diversity not only involves how people distinguish themselves, but how they distinguish others. Those perceptions affect their communications. For a wide group of employees to function in effect as an organization, human resource professionals need to deal effectively with issues such as communication, flexibility and change. Diversity will increase considerably in the coming years. Successful organizations recognize the need for immediate exploit and are ready and willing to spend resources on managing diversity in the workplace now.

The workplaces will continue to reflect growing cultural variety and bring with it religious variety as well. Training workforce and especially supervisors to deal with lexis of this religious diversity in a constant and permissible fashion should improve the workplace as employees do not wish to leave their trust at home but will use it to bring their moral spirit to the job. Therefore, companies will benefit from both a policy of religious expression at work along with ample training for all workers, especially supervisors. There are several nuts and bolts this training should include. Much folklore exists concerning what is acceptable and these must be exposed. The goal should be to teach workforce how religious expressions can be rightly handled. The foundation for this is in our constitutional freedom of speech. Free speech during free time should be a given. However, during work time a variety of speech can disrupt the employer's hunt for efficiency. All must be treated equally including talk of sports, family, movies, religion, coming holidays, etc. The corporate goal can be reflected in a simple policy on speech in the workplace that includes religious speech. Since several issues may arise regarding accommodation requests for religious expression, the policy statement and training should deal with each of these. Common issues are situations arising from a worker's speech, personalizing workspace, personal time off requests for religious events, posting of religious materials, and personal appearance issues such as religious jewelry or attire. Supervisors should also be challenged to value fairness and objectivity even when they may have strong religious or non-religious convictions of their own. Finally in most companies, the training should include a discussion of any internal grievance process. Both workers and supervisors can be in error as to their religious rights in the workplace, so any appeal or internal appreciation process should be clearly outlined.

For governmental workers and supervisors some additional training will likely be essential. This training should focus on a neutral stance toward religion looks like. The myth of separation of church and state is so deeply entrenched into the thinking of many that a noteworthy portion of workers and supervisors intently believe religion has no place in government buildings. This flawed belief is increasingly being successfully challenged as courts are ruling that governmental employers are overstepping their authority to limit speech. Sorting out this myth which has become so tangled in the fabric of current governmental operations may pose the greatest training challenge of all.

Behavioral, attitudinal, cognitive and personality factors have been recognized as the main psychological factors that can impinge on intercultural effectiveness. Because intercultural effectiveness can be influenced by employee's socio biological background, employee's ethnicity, age, country of origin, educational/professional attainment and religion are noted as among the factors that can impinge on intercultural effectiveness as well. In addition to these factors, employees' intercultural effectiveness is argued to be influenced by prior experience and organizational factors such as structure, systems and policies.

Managing diversity in the workplace is a subject that has gained increased attention among managers during the last two decades. After all, the impact of affirmative action and equal employment opportunity programs on the nation's work force is undeniable. Women and minorities were the first to dramatically alter the face of the economic mainstream, persons with disabilities and foreign nationals followed not far behind.

Language barriers can be obvious but what about cultural differences? Intercultural skills are the skills that can help us communicate flexibly and sensitively with people from other cultures. People from other cultures may have different ways of communicating and different values. Use of eye contact, gestures and formal language and attitudes towards timekeeping, status and rules are just some examples where cultural differences may have an impact. In managing cross-culturally, we need to recognize that up to half of workplace behavior, including communication patterns and management styles, is culturally derived. A lack of cultural literacy can give rise to misunderstanding. Often when I'm brought in to "fix" foreign-born managers, the issue is twofold: a lack of cultural agility on their part and a lack of cultural awareness on the part of their organizations. The first step toward success is to understand our own cultural lens and then to learn other cultural worldviews.

REASON FOR SELECTION OF TOPIC

Organisations today operate within a de facto international economic system. The national societies and economies of today are no more isolated by geographical boundaries. A mention-worthy example would be the subprime crisis of USA in 2008 that shook the world. The effect of the catastrophic earthquake that devastated the small island nation of Haiti in January 2010 had wide-spread economic effects although the nation was small in size. And, today in 2012, we observe the maladies of yet another small country — Greece, grappling the world like never before.

This tendency of interconnection of the inhabitants of the world with respect to the cultural, economic, political, technological and environmental aspects of their lives is what we term today as **globalisation**. This trend has been brought about by three major factors viz. technology which has greatly eased international commerce, liberalization of trade laws (significant in India with regard to the recent past) and entrance of developing nations into the bigger arena by acceptance of foreign investments.

The manifestation of the same is seen in the ever increasing number of Multinational Corporations and Enterprises (MNCs & MNEs) today. This has resulted in shifting of people from their native countries to foreign countries where they have worked and lived. The number of such individuals, deemed **expatriates**, is on a steady rise, catalysed by the economic boom in various countries. Sudden exposure to an altogether new culture introduces utter confusion and disorientation into their minds. This is called **cultural shock**. This hugely influences their behaviour at workplace also in the initial phase. Time brings with it acclimatisation. But the condition may repeat again. It may also so happen that after few years, the individuals return to their homeland. Then the reverse process happens. They have to re-adjust with their native culture, known as **repatriation**. This again influences the individuals' organisational behaviour significantly.

In a highly diversified country like India, it is all the more significant as India presents a plethora of intra-national culture. It has several cultures within itself. Hence, for an Indian employee, even in a state-owned corporation faces such issues which mould his behaviour accordingly. For example, linguistic barrier often may lead to barriers of interpersonal interaction. Absenteeism increases when a person from another region takes leaves during his festival at native place, over and above the holidays available at his place of work, which he otherwise would not have taken. This affects important parameters like motivation, performance, organisational commitment, etc. So in today's context, multiculturalism has become a crucial focus area with its manifold effects on the employees at workplace. Hence, evaluation of the same has been selected as the topic of discussion.

LITERATURE REVIEW

The origin and definition of cultural diversity has been explained as follows. If the workforce profile in an organisation is composed of worker groups which show differences depending on demographic or other characteristics, diversity emerges. The criteria discriminating these groups include race, geographic origin, ethnicity, gender, age, functional or educational background, physical and cognitive capability, language, lifestyles, beliefs, cultural background, economic category, tenure with the organisation and sexual preference. (Dessler, 1998; Galagan, 1991:1/9; Bhadury et al., 2000)

Examples citing major cultural diversity also are not scarce. In USA, it is foreseen that the proportion of ethnic minorities will reach 50 per cent by 2050. It is cited that this country's workforce gradually becomes much more diversified particularly with respect to race, ethnic origin, age, gender, and physical and cognitive capability. (Boone and Kurtz, 1999; Wright and Noe, 1996; Fleury, 1999)

Cultural diversity in organisations goes into the inclusion of the secondary diversity size described earlier and has equally significant impacts on attitudes, manners and perceptions of the individuals. As distinctive qualities of group and individuals resulting from cultural diversity in organisations affect the workers' sense of identity and their way of their perceiving each other; also the differences in the management style, organisational attitude patterns, behavioural characteristics and communication styles can mostly be traced back to cultural effects. (Frey-Ridgway, 1997; Karoc-Kakabadse and Kouzmin, 2001; Mwaura et al., 1998)

On the other hand, Shenkar (2001:1/25), in his article, deals with the concept of cultural distance, and he clarifies presumably measuring the extent to which cultures are similar or different. This construct has been applied to most business administration disciplines, i.e. management, marketing, finance and accounting. Cultural distance has been used as a key variable in strategy, management, organisational behaviour and human resource management. (Seymen, 2006)

Tayeb (1997) defines national culture as a set of values, attitudes and behaviours includes everything related to work and organisation. To the author, these are brought into organisations as workers' cultural baggage, and culture as a social phenomenon directly affect the relations among people in organisations. Mellahi (2001) discloses in one of his research works about the post graduate candidates hailing from five different cultures and becoming managers, that the individuals understanding of the job, their expectations related to their demands as to how they should behave to others and how they should be treated in the working environment differs tied to the national culture. Hence the cultural background is seen to play a pivotal role throughout the employee hierarchy of an organisation.

VIEW DEPICTING POSITIVE EFFECTS OF MULTICULTURALISM

Authors like Cox and Blake argue that a culturally mixed workforce holds a potential competitive advantage for organisations. They opine that multiculturalism and a multicultural structure are the facts that are definitely to be backed up for the organisations of our day which target high performance (Dadfar and Gustavsson, 1992). Many surveys reveal that teams and a general workforce composed of individuals coming from different cultures can present more effective resolutions for the business problems. They show excellent performance in the long term and carry out their duties efficiently when compared to homogeneous employee groups. It can be said that this difference partially derives from the perspectives, views and experiences increasing creativity and novelty in multicultural teams. For instance, Iles and Hayers (1997) signify that many organisations believe they can increase their flexibility and responsiveness in globally competitive market environments through deployment of transnational project teams. They use such teams to address problems, integrate processes and learn new methods. It is claimed that these teams play a great role in realising novelties and changes and constituting strategic cooperation globally. (Seymen, 2006)

VIEW DEPICTING NEGATIVE EFFECTS OF MULTICULTURALISM

A study of multi-site software development organizations yielded the following negativities of multiculturalism. Considerable differences in stakeholders' language and national culture affected global collaboration. Equally important in this study was the impact of differences in organizational and functional culture. Not only did remote sites develop their own organizational culture, but also the distance widened the gap between the different functional departments of the organization (marketing, business management, and development). Such a factor reduced the trust level, induced unnecessary delays and significantly impacted on achievement of a common understanding and negotiation of requirements. (Herbsleb and Moita, 2001; Damian and Zowghi, 2003)

VIEW DEPICTING BOTH POSITIVE AND NEGATIVE EFFECTS OF MULTICULTURALISM

Bhadury et al. (2000) suggests diversity can have both positive and negative impacts on organisations, but the nature of the impact depends, to a large extent, on the type of diversity climate that exists rather than the fact of diversity itself. Similarly, Dadfar and Gustavsson (1992) opine that there seems to be a general agreement that if cultural diversity is managed well, it can be an asset to performance, and if it is overlooked or mismanaged, it may diminish the performance. Particularly, in the case of being unsuccessful about constituting an effective cultural communication, individuals may feel themselves excluded and arouse the feelings of suspicion, lack of confidence and even hostility. Communication impediments can pervade every facet of life for expatriates and their families, producing unhappiness in their current surroundings and hindering adjustment to the host country and its culture. As a result, expatriates can become inefficient in the workplace, resulting in diminished career progress, psychological stress, and ultimately failure. (Seymen, 2006; Montagliani and Giacalone, 1998:1/9)

IMPACT ON ONE AS MANAGER

The various positive and effects described above are very important from the viewpoint of effective management of an organisation. A few other factors, as viewed through the lens of OB also come into play from the management perspective:

(i)   Concept of convergence hypothesis: This is a highly inflexible approach of organisational management which arises due to dearth of cultural diversity in organisations. Long-drawn absence of a good cultural mix leads one to adopt a biased orientation towards the single dominant culture present in the organisation. A manager may go on to believe that that particular way of managing the organisation given that particular cultural backdrop is the only effective way to manage the organisation, which is a grave **perception error**, detrimental to the organisation.

(ii)   Impact on performance appraisal and recruitment: Another effect which can be cited due to lack of effective cultural mix is **stereotyping**. A manager coming from a culturally skewed background may have his attitude towards those groups of people with whose members he had had a bad experience may incorrectly evaluate employees during performance appraisal or interviewees during recruitment. Here again a perception error is experienced owing to wrong attribution. Also people under the **stereotype threat** feel uncomfortable about running the risk of fulfilling the negative stereotype associated with his group. This curtails performance severely.

CHALLENGES

Taking full advantage of the benefits of diversity in the workplace is not without its challenges. Some of those challenges are:

Communication - Perceptual, cultural and language barriers need to be overcome for diversity programs to succeed. Ineffective communication of key objectives results in confusion, lack of teamwork, and low morale.

Resistance to change - There are always employees who will refuse to accept the fact that the social and cultural makeup of their workplace is changing. The "we've always done it this way" mentality silences new ideas and inhibits progress.

Implementation of diversity in the workplace policies - This can be the overriding challenge to all diversity advocates. Armed with the results of employee assessments and research data, they must build and implement a customized strategy to maximize the effects of diversity in the workplace for their particular organization.

Successful Management of Diversity in the Workplace - Diversity training alone is not sufficient for your organization's diversity management plan. A strategy must be created and implemented to create a culture of diversity that permeates every department and function of the organization.

Follow these dos and don'ts to remove the ambiguity from your team and excel at managing diversity.

➢ Respect your employee, even if you don't understand the way he or she may do things. Take the time to understand the "why" behind your employee's actions or thought process. You may find yourself evolving from passive curiosity to active acceptance and appreciation.

➢ Commit to working harder on maintaining communication. Understand culture-based causes of conflict, such as ideas about authority, decision-making or indirect work or communication styles. For instance, employees from certain cultures tend to respect the hierarchy within an organization and may not challenge your opinions. In that case you can solicit opinions from the group before expressing your own.

➢ Focus on the goal. Apply your expectations evenly but be open to new ideas about how to achieve your objectives. Be open to differing opinions.

➢ Take the time to learn about the culture of your employees. The internet is rich with information on the multicultural workforce, or just asks your staff. Taking the time to learn about differences is the first step to understanding how to best manage a multicultural staff.

➢ Ask for help. Solicit feedback on your employees' challenges and frustrations. Be open to understanding that if there is any negative feedback, it is likely being shared through the lens of someone who has had different cultural experiences than yours. It's not always an indictment on your management style or personal beliefs

➢ Understand that difference is okay. We are not one big melting pot. We are individuals with varying viewpoints, practices and beliefs which can only benefit the workplace.

➢ Don't shield yourself from people from different cultures. By operating outside of your comfort zone, you can build your confidence, establish trust and expand your worldview.

➢ Don't give in to stereotypes. Few of us truly epitomize the loud-mouthed American, the lazy Mexican, the studious Asian or the slow Southerner. Separate truth from fiction. Stereotypes are divisive and will lead to lowered employee morale and high employee turnover; not to mention increased employee relations issues.

➢ Don't condemn different viewpoints as always wrong. Regardless of your employees' cultural backgrounds, your staff bring years of experiences and education into your business colored by a cultural perspective that can lead to positive business outcomes. By listening to your team members, you can collaborate on creative solutions that none of you would have imagined individually.

Overall, start by being conscious of your own cultural bias before you try to understand - and judge others. Being self aware means perceptive how your values may differ from those of your organization. Look forward to scenarios in which perspectives may run over. By taking steps to reduce divergence and bridge communication gaps, you can build a solid team that propels your firm into the next phase of success.

CONCLUSION

Multiculturalism, like any other aspect of life has both its positive and negative effects. But given the current global backdrop of organisational, it is inevitable and it is not detrimental in the long run as well. So the final judgement comes out as adoption of multiculturalism in an organisation having overcome its various initial disadvantages. This will eliminate the various psychological and perceptual differences and the associated discomforts, thereby promoting performance as a stronger candidate for evaluation and effective organisational management.

REFERENCES

1. Bhadury, J., Mighty, E.J. and Damar, H. (2000), Maximizing workforce diversity in project teams: a network flow approach, Omega, Vol. 28, pp. 143-53
2. Boone and Kurtz (1999), 9th Ed., The Dryden Press, Orlando, available at: booneandkurtz@contemporartybusiness.com
3. Dadfar, H. and Gustavsson, P. (1992), Competition by effective management of cultural diversity: The case of international construction projects, International Studies of Management and Organisation, Vol. 22 No. 4, pp. 81-92
4. Damian, D.E. and Zowghi D. (2003), Requirements Engineering challenges in multi-site software development organizations, Requirements Engineering Journal, 8, pp. 149-160
5. Dessler, G. (1998), Management, int. ed., Prentice-Hall, Inc., New Jersey, NJ
6. Fleury, M.T.L. (1999), The management of culture diversity: lessons from Brazilian companies, Industrial Management & Data Systems, Vol. 99 No. 3, pp. 109-14
7. Frey-Ridgway, S. (1997) The cultural dimension of international business, Collection Building, Vol. 16 No. 1, pp. 12-23
8. Galagan, P.A. (1991) Tapping the power of a diverse workforce, Training & Development, Vol. 45, No. 3
9. Herbsleb, J. and Moitra, D. (March/April, 16-20, 2001), Global software development, IEEE Software
10. Iles, P. and Hayers, P.K. (1997), Managing diversity in transnational project teams – a tentative model and case study, Journal of Managerial Psychology, Vol. 12 No. 2, pp. 95-117
11. Karoc-Kakabadse, N. and Kouzmin, A. (2001), Low- and high-context communication patterns: towards mapping cross-cultural encounters, Cross Cultural Management, Vol. 8 No. 2, pp. 3-24
12. Mellahi, K. (2001), Differences and similarities in future managerial values: a five cultures comparative study, Cross Cultural Management, Vol. 8 No. 1, pp. 45-58
13. Montagliani, A. and Giacalone, R.A. (1998), Impression management and cross-cultural adaption, The Journal of Social Psychology, Vol. 138 No. 5
14. Mwaura, G., Sutton, J. and Roberts, D. (1998), Corporate and national culture –an irreconcilable dilemma for the hospitality manager?, International Journal of Contemporary Hospitality Management, Vol. 10 No. 6, pp. 212-20
15. Seymen O.A. (2006), The cultural diversity phenomenon in organisations and different approaches for effective cultural diversity management: a literary review, Cross Cultural Management: An International Journal, Vol. 13, Iss: 4, pp. 296 – 315
16. Shenkar, O. (2001), Cultural distance revisited: towards a more rigorous conceptualization and measurement of cultural differences, Journal of International Business Studies, Vol. 32, No. 3
17. Tayeb, M. (1997), Islamic revival in Asia and human resource management, Employee Relations, Vol. 19 No. 4, pp. 352-64
18. Wright, P.M. and Noe, R.A. (1996), Management of Organizations, Irwin McGraw-Hill
19. Greenberg, J. (2011), Behaviour in Organizations, pp. 13-16, 83-90

INTERNATIONAL JOURNAL OF RESEARCH IN COMPUTER APPLICATION & MANAGEMENT   68

A Monthly Double-Blind Peer Reviewed (Refereed/Juried) Open Access International e-Journal - Included in the International Serial Directories

http://ijrcm.org.in/

A STUDY ON IMPACT OF SOCIAL NETWORKING SITES ON THE ACADEMIC PERFORMANCE OF UNDERGRADUATE STUDENTS WITH S.R.F TO BANGALORE CITY

JONITA PREETHI SEQUEIRA
ASST. PROFESSOR
NEW HORIZON COLLEGE
KASTURINAGAR

ABSTRACT

Social Networking Sites (SNS) has become one of the most important communication means in recent times. This helps individual to interact with the users, which can increase the social awareness and gather information on different streams. However, this study attempts to obtain students perceptions on how their use of social networking sites influence their academic performance. The aim of this research is to study the impact of SNS on the Academic performance of undergraduate students in special reference to Metropolitan city like Banaglore. A research questionnaire was designed to collect the data from target population of undergraduate students of Bangalore city with random sampling survey and with the sample size of 126 undergraduate students. From the collected data a descriptive and analytical study is conducted to determine the impact of SNS on Academic performance in terms of awareness level, time spent, and frequency of visiting SNSs, purpose of using SNSs and fulfilment of academic purposes with the use SNSs. From this research study it was found that, there is High prevalence of Social network users. Most of the students are engage in the SNSs for Non academic activities such as chatting with friends and for entertainment like music, videos rather than Academic purposes. 44% of the respondents believe that use of SNSs effect their study timings. However most of the respondents feel that SNSs has positive impact on their Academic Performance, due to the fact that SNS could be used as a source to improve the knowledge on academics, as an Effective tool for E-learning, as a source for their Project Reports, Assignments and Skill development.

KEYWORDS

Social Networking Sites (SNS), Academic Performance, Undergraduate students, E-learning.

INTRODUCTION

ocial network sites are web-based services that allow individuals to create a public profile and interact with other users on the website. Web-based social networking services make it possible to connect people who share interests and activities across political, economic, and geographic borders. However, Social networking exist so as to provide communication among people regardless of the distance, making it open to people easily share information, files, pictures, videos, create blogs, send messages and conduct real time conversation with the means of Social Networking Sites such as Google, Facebook, Twitter, Yahoo, Myspace, Youtube, Orkut, Skype. The main SNS used are Facebook (98.8%), Skype (61.3%), What's App (59%), and Hotmail (56.6%). The most purposes of using the SNs were connecting with family and friends (86.7%), following the news (76.6%), connecting with people from the past (69.9%), and chatting (53.9%). 57.8% of users have attempts to minimize or cutoff the using of SNS. 51.2% of users became upset when they don't find any means to login to SNs during their day. 81.3% of users have desire to know what happened online when they are offline. 96.1% of users using the SNs for academic purposes, and 11.3% of users sometimes are absent from academic activities because of using the SNS(Daffalla A'lamEluda 2014).

The internet has provided the facility to connect with the people from around the Globe. People consume a lot of time on SNS for uploading or downloading, extracting information, communication. Hence, the impact of SNS on Education is an important issue that has caught both educators and practitioners' attention in recent years. The increased use of SNS has become an international phenomenon in the past several years. Teenagers and young adults have especially embraced these sites as a way to connect with their peers, share information, reinvent their personalities and showcase their social lives (Boyd 2007).

Though there are negative perceptions about the possible effects of SNS on Students' Academic Performance, some studies showed that students found it quite appropriate for a teacher to use Facebook, and for teachers and students to socialise by this means (Baran, 2010) students also believed that such tools could allow them to share knowledge in formal educational context. Churchill's study (2009) showed that the use of weblogs or blogs (social publishing) in education facilitated a useful learning atmosphere.

The overuse of SNS has some negative impact that may counter balance the potential benefits and poses grave consequences to the academic performance of its victims.

This research seeks to investigate the impact of social network usage among undergraduate students in special reference to Bangaluru city.

REVIEW OF RELATED LITERATURE

Many researchers have conducted research to ascertain the influence and impact of SNS on users with the special reference of undergraduate students of different Universities.

Adam Mahamat Helou and Nor Zairah Ab Rahim: 2014 "The influence of Social networking sites on students Academic performance in Mayasia, A study was undertaken with the sample size of 30 respondents. And the study found that the majority respondents agreed that Social networking Sites have a positive impact o their academic performance, due to the fact that SNS can be used for various Academic purposes such as communicating with the faculty and university Authorities, communicating with the lecturers, discussing academic topics with the classmates.

Saba Mehmood and Tarang Taswir : 2013 Authors conducted the research to investigate pedagogical impacts of SNS on undergraduate students at Nizwa, Oman the objective of the study is to determine how the SNS can be used as a platform for E-learning. The beneficial results of this study, shows SNS has a significance influence on the Academic Performance of students. The results of empirical evidence explore classroom and SNS as paradigms that build young knowledgeable societies. And SNS as an social tool in knowledge sharing and general awareness of student communities. The study conducted by Waleed Mugahed and Mohd Shahizan, drawn the results as SNSs has the potentials of influencing decision making in a very short time regardless of the distance. Hence, it helps in collaborative learning positively and significantly with interactive with peers, interactive with teachers and engagement which impact the students academic performance.

Unvsersity of Tanzania, conducted the research on "extent of Social Networking Sites usage by students" with the target population of 7337 students and of 356 sample size. The outcome of the study revealed that, SNS is not an hindrance for the studies. The interesting conclusion given by Dr. Nelson Jagero and Micheal Kariuki, is that, the students were managing their time efficiently and hence, the use of SNS didnot harm their Academic achievement. However this fact gave rise to a proposition that excessive usage of SNS's might be having adverse impact on Academic Performance of the student's users.

According to Dr.M.Kanagarathinam (2014), Students used social networking site for various purposes such as writing of class assignments and other related social activities. At first it will be easy to predict that too much use of social networking sites might have adverse impact on academic performance. Findings suggested that despite spending time on the use of internet or on social networking sites, students were still efficient enough in their studies. They did not face any difficulty in meeting their academic requirements.

Aamo Iorlian and Egena Ode: (2014) The study conducted on the topic "the impact of Social Network Usage on University students Academic Performance at Benue State University Markudi, Nigeria with the sample size of 1596 students. The study focused on three major areas: the time spent on Socail media, the frequency of visiting social media and the relationship between the volume of social friends and and students Academic performance. Researchers found that

the time spent on social media, the frequency of visit and total number if virtual friends has a statistically significant relationship with a students Academic performance. Hence study recommended that access to SNS usage should be restricted and controlled and idle time should rather be channelled in to studies.

Social networking sites are mainly used for Non Academic purposes by the students (Ishaq Ahmad and Tehmina Fiaz Quasi :2011) .However the same study Titled "a lookout for Academic impacts of SNS gave a interesting conclusion that, students are able to manage the time for Academic activities effectively and hence, SNS did not harm their Academic Performance.

SNS has adverse impact on the Academic Performance of the students. With the view that social networking sites, allows participant to create a profile, search and receive friends requests uploading and downloading of images, tags, comments would lead to waste of time which could be used for the studies (Ezekiel S Asemah Ruth A: 2013).

The prevalence of negative effect of using the SNs on academic performance is very high especially among females. 68% of users have benefit from using of the SNs for connecting with others. 23.4% of users lower their social activities in real life because of using the SNs. The prevalence of lowering the practicing sport exercises because of using the SNs is 20.2% (Daffalla A'lamEluda 2014).

Students whose age range from 15-25 mostly use SNS for entertainment and which is more influenced by their friends on Social Networking Sites.60% of male students commonly used social networking websites for knowledge (Shahzad Khan). In another study conducted by Shana (2012), it was revealed that students use Social Networking Sites making friends and chatting. The result showed that only 26% of the students indicated that they use SNS for academic purposes.

A greater number of younger students reported negative perception of the effect of Social Networking Sites on their Academic performance (Jason Tham & Dr. Niaz Ahmed 2011)

It is assumed that running a social networking site on the background on a student's PC while studying or doing homework could lower a student's grade. According to Enriquez (2010), students who multi-task between social networking sites and homework are likely to have 20% lower grades than a student who does not have a social networking site in visual range.

The emergence of Social Networking Sites has become a major trend over the years with growing popularity amongst the younger generation. As online social networking becomes more popular, literature, however, suggests that there is an ongoing debate on the role of online SNs in the social life and academic performance of users. While many researches claim they can be tempting and addictive with the use of features such as dating, photo and video-sharing, instant messaging, etc., others claim they can be advantageous as they lead to better interaction and cooperation among users. While this debate goes on, there is still lack of strong empirical evidence to show how the use of these tools affect social life and academic performance especially for undergraduate students, Daffalla A'lamEluda.(2014). Hence, this research seeks to investigate the impact of social network usage among undergraduate students on their academic performance in special reference to Bangaluru city.

OBJECTIVES

1. To study the concepts of Social Networking Sites and its effect on the Academic Performance of undergraduate students of Bangalore city.
2. To find the awareness level of SNS among undergraduate students.
3. To study the involvement level and frequency of visiting SNS by undergraduate students in Bangalore City in terms of time spent.
4. To study the usage of SNS to fulfil Academic Purposes and Academic achievements and for E-learning.

RESEARCH METHODOLOGY

The Author conducted descriptive and Analytical research. Data was collected with the help of a questionnaire from research respondents. The target population of this study was undergraduate students of Bangalore city collages. The purposive sampling was used to select the undergraduate students while the simple random sampling was used to select 126 sample size from undergraduate students of Bangalore city for the study. Participation was voluntary for all the students from the departments of Commerce, Management and BCA.

LIMITATIONS OF THE STUDY

1. The study is limited to Bangalore City only.
2. The study focused only on impact of SNS on Academic performance in terms of of awareness level, time spent, and frequency of visiting SNSs, purpose of using SNSs and fulfilment of Academic purposes with the use SNSs.

DATA ANALYSIS AND INTERPRETATION

Gender distribution of respondents: Out of the total sample size of 126, 45 were the male respondents and 81 were female respondents. All the respondents were from undergraduate students of Bangalore City.

TABLE 1: GENDER DISTRIBUTION OF RESPONDENTS

Gender	Frequency	percentage
Male	45	36%
Female	81	64%
Total	126	100 %

TABLE 2: TIME SPENT ON SNS

Time spent on SNS p/d	Frequency	Percentage
30 min	30	24 %
1 hour	23	18 %
2 hours	29	23 %
More than 2 hours	44	35 %
	126	100 %

In examining the amount of time spent by those using Social Networking Sites, 24 % of the respondents spent only 30 minutes or less than that per day to access SNS; 18% of the respondents involve in SNS atleast One Hour per day; 23% of the respondents use SNS for Two hours per day 35% of the respondents indicated they spent more than Two Hours per day. Hence, most of the undergraduate students prefer to use SNS for different purpose.
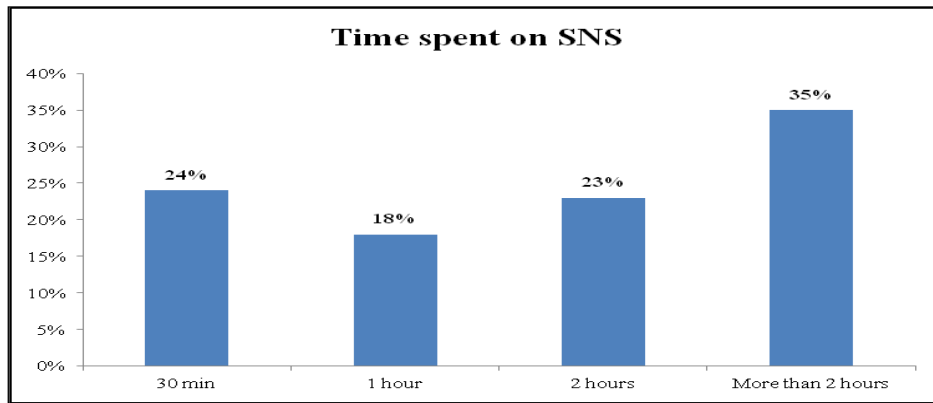
FIG. 1

Time spent on SNS

TABLE 3: EFFECT ON STUDY TIMINGS

Response	Frequency	Percentage
Yes	56	44 %
No	70	56 %
	126	100 %

Above Table No 3 shows the effect of Social Networking Sites on their Study timings. 44% of the respondents say that, their study timings are getting affected by Social Networking Sites, since 35% (table No.2) of the students are engaging themselves for more than 2 hours per day to access Social Networking Sites. Hence, they agree that time spent on SNS effects their study timings. However 56% of the respondents strongly agree that, use of SNS does not effect on their study timings. Findings shows that despite of spending time on internet or on SNS, students are efficient enough to manage the time for their studies.
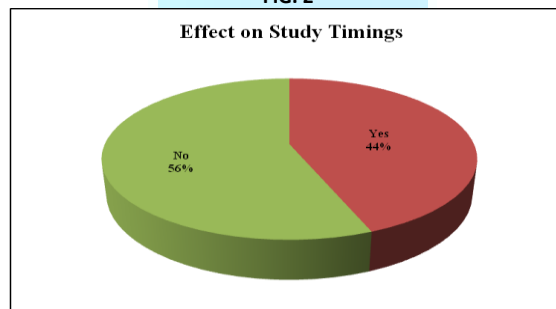
FIG. 2

Effect on Study Timings

TABLE 4: MOST VISITED SNS AND NUMBER OF SNS USED BY THE RESPONDENTS

Most visited SNS	Frequency	Percentage	No of SNS	Frequency	Percentage
Youtube	75	17 %	1	12	10 %
Twitter	21	5 %	2	24	19 %
Facebook	96	22 %	3	23	18 %
Yahoo	36	8 %	4	16	13 %
Google	96	22 %	5	27	21 %
Watsapp	108	24 %	More than 5	24	19 %
Any other	8	2 %			
Total	440	100 %	Total	126	100 %

To find the awareness level on SNS among undergraduate students of Bangalore City, certain parameters are used and the above table No:3 shows the most visited Social Networking Sites and the number of Social Networking Sites used by the respondents. By extracting the data from the respondents it was found that, out of 126 sample size 12 (10%) respondents are using atleast One Social Networking Site; 24 of the respondents are using 2 SNS; 23 of the respondents are using 3 SNS; 16 of the respondents are using 4 SNS; 27 (21%) of the respondents are using 5 SNS and 24 of the Respondents are using more than 5 SNS. Hence it proves that the maximum undergradute students of Bangalore city are well aware about different SNS and the most visited SNS are Facebook (22%), Google (22%), Whatsapp (24%). Twitter and Yahoo is used at low level. Which reflects that majority of the undergraduate students are involved in using Social Networking Sites.
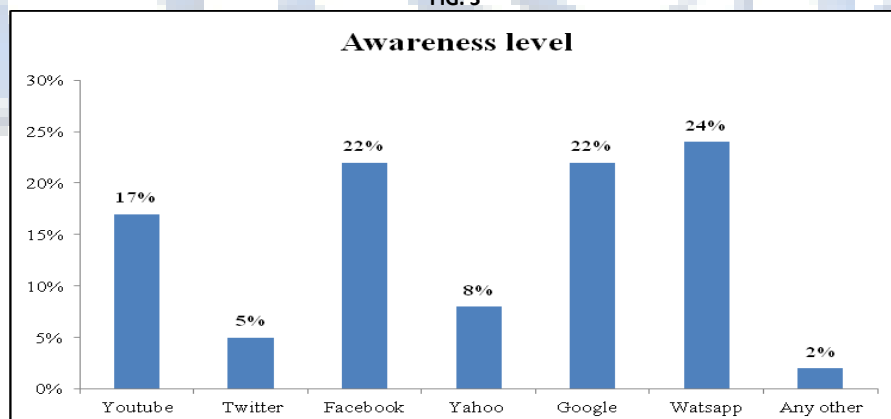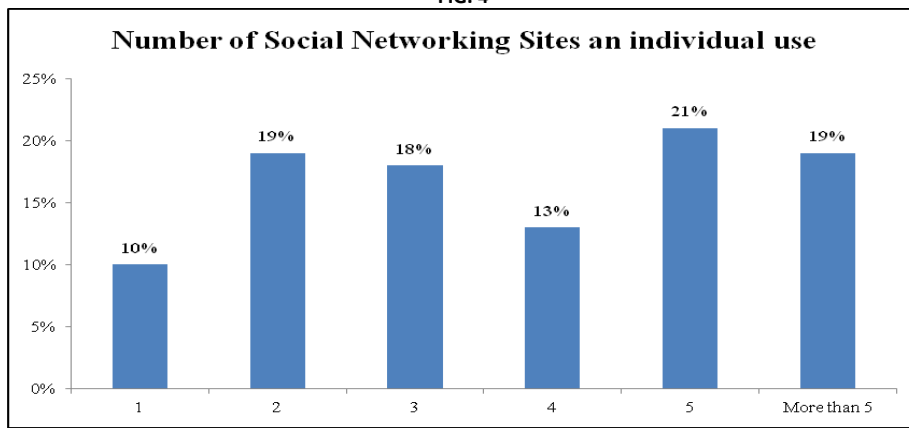
FIG. 3

Awareness level

FIG. 4

TABLE 6: PURPOSE OF USING SOCIAL NETWORKING SITES

Purpose of using Social Networking Sites	Frequency	Percentage
Downloading Study material	4	13 %
Communication with teachers and friends for Academic purposes	39	10 %
Uploading any Articles and Writings	24	6 %
Posting Photos	69	18 %
Music /Videos/ entertainment	84	22 %
Creating Polls/ Quiz/ survey	0	0 %
Chatting with friends	87	23 %
Any other	30	8 %
Total	381	100 %

Table No.5 represents the purpose of using Social Networking Sites by the undergraduate students. Respondents revealed that; Music, videos, Entertainment (22%) and Chatting with their Virtual Friends(23%) is the Major priority in using SNS. The second priority is Posting photos (18%) on SNS; 13% of the respondents are interested in downloading the study material from SNS; 10% of the students communicate with their Teachers and friends through the SNS for Academic Purposes; 6% of the students upload Articles and writings on the Social Networking Sites; none of the students are interested in creating Polls, online Quiz and survey. So, it depict that, majority of the students use SNS with the purpose of entertainment, music and chatting with friends. Hence, these findings explicitly reveal that SNS are basically used for Non Academic motives.
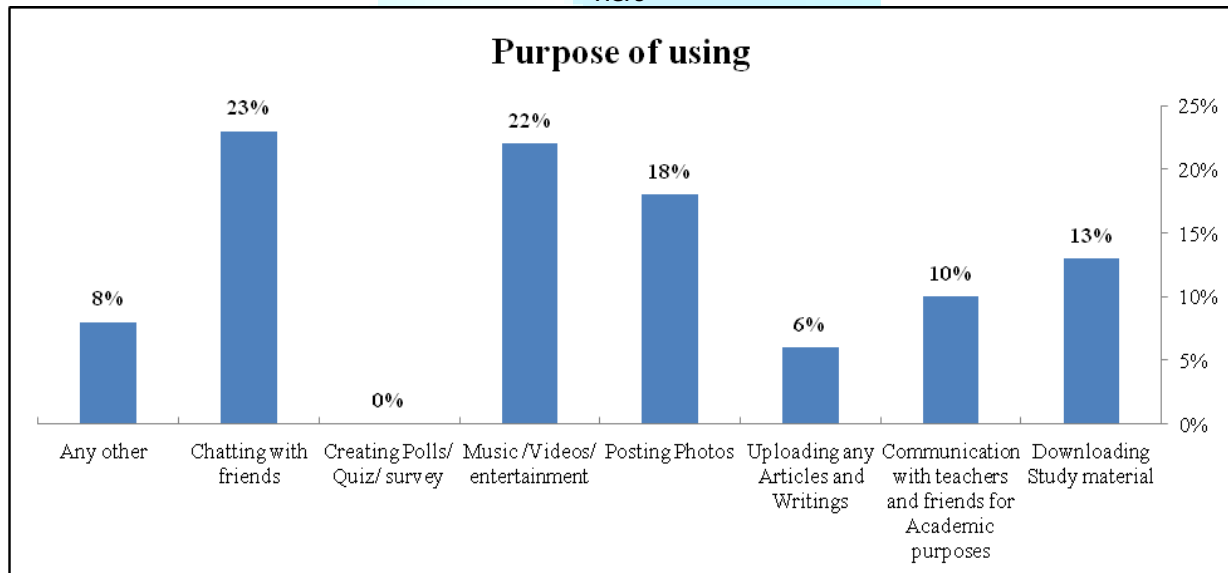
FIG. 5

TABLE 6: IMPACT OF SOCIAL NETWORKING SITES ON THE ACADEMIC PERFORMANCE

Response	Improve the knowledge about academics	%	SNS as an tool for E-learning	%	SNS helps for projects, Assignments and Skill development	%	Helps to fulfil Academic purposes	%
Yes	104	83 %	97	77 %	117	93 %	81	64 %
No	22	17 %	29	23 %	9	7 %	45	36 %
Total	126	100 %	126	100 %	126	100 %	126	100 %

Table 6 shows the Impact of Social networking sites on the Academic Performance. Various parameters are used to extract the data to find the impact of SNS in fulfilling the Academic purposes of the students. 83% of the students strongly believe that, SNS improve the knowledge on Academics where as only 17% of the students disagree with this; 77% students say that SNS could be an effective tool for E-learning; 93% of the students use SNS for their Projects, Assignments and Skill Development Activities and finally 64 % of the students believe that SNS helps to fulfil Academic purposes. So, it shows that even though SNS are used for entertainment and chatting with the friends, It is the opinion of the students that, SNS has favourable effect to achieve their Academic Performance and also it could be an effective tool for E-learning.

FIG. 6

Impact of Social networking sites on the Academic Performance
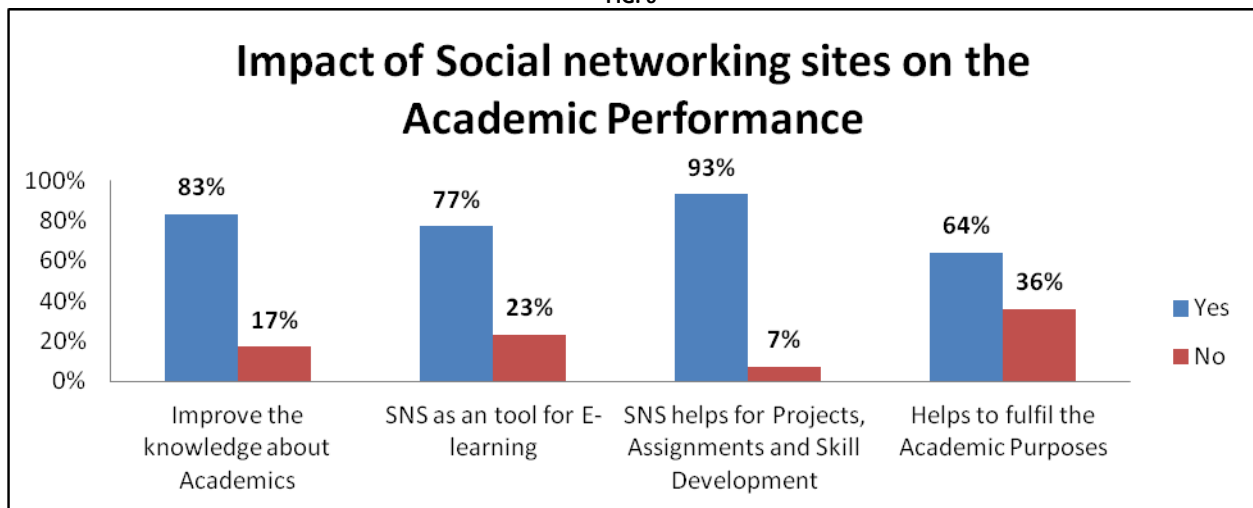
CONCLUSION AND RECOMMENDATIONS

This study examined the awareness level of Social Networking Sites, time spent on SNS, usage of SNS, effect of SNS on Study timings, SNS as effective tools for E-learning and impact on Academic Performance. The findings show that, there is High prevalence of Social network users. Most of the students are engage in the SNSs for Non academic activities such as chatting with friends and for entertainment like music, videos rather than Academic purposes. 44% of the respondents believe that use of SNSs effect their study timings which otherwise could be used for their studies. Hence, students should learn to manage the time efficiently for the studies.   However most of the respondents feel that SNSs has positive impact on their Academic Performance, due to the fact that SNS could be used as a source to improve the knowledge on academics, as an Effective tool for E-learning, as a source for their Project Reports, Assignments and Skill development. Even though students are aware about the positive aspects of SNSs which would a great support to fulfil the Academic requirements, study found that majority of the students use SNSs for Non-Academic purposes which would lead to an adverse effect SNSs on the Academic performance.

Therefore, based on the positive impacts of Social Networking Sites on the Academic Performance, the findings and analysis suggests that, students should make use of SNSs to enhance their Academic achievements for which they should restrict themselves from Non- Academic purposes which may cause adverse impact on the Academic Performance.

However, this research focuses on few aspects of SNSs and its impact on Academic Performance. An increasing growth rate of SNSs and its impact on Academic performance, Virtual communities, social behaviour, language and relationships calls for academicians, researchers, parents and Teachers to monitor the students on the usage of SNSs towards the fulfilment of Academic and social growth.

REFERENCES

1.   Saba Mehmood and Tarang Taswir. (January 2013). "The effect of Social Networking Sites on the Academic Performance of Students in college of Applied Sciences, Nizwa, Oman. *International Journal of Arts and Commerce Vol. 2 No.1.*
2.   Shahzad Khan , "Impact of Social Networking Sites on Students", *Abasyn Journal of Social Sciences Vol. 5 No. 2*
3.   Boyd, D and Ellison.N. (2007). Social Network Sites. *Journal of Computer – Mediated Communication Vol.2 No.13*
4.   Jason Tham and Dr. Niaz Ahmed. (2011). "The usage and implication of Social Networking Sites: A survey of College students. *Journal of Interpersonal, Intercultural and Mass communication Vol.2 issue.1 (2011).*
5.   Baran, B. (2010). "Facebook as a formal instructional environment". *British Journal of Educational Technology, 41(6).*
6.   Churchill, D (2009). Educational applications of web 2.0: using blogs to support teaching and learning. *British Journal of Educational Technology, 40(1).*
7.   Dr.Nelson Jagero & Micheal Kariuki (2013). "Extent of Social Networking Sites usage of students" in Private Universities, Dar Es Salaam, Tanzania. *International Journal of Academic Research in Economics and Management Sciences. Vol. 2 No.3.*
8.   Adam Mahamat Helou & Nor Zairah Ab Rahim: (2014). "The influence of social networking sites on stdents academic performance" in Malysia. *International Journal of Electornic Commerce Studies. Vol. 5, No.2, 247-254.*
9.   Daffalla A'lamEluda.(2014). The impact of Facebook and other Social Networks usage on Academic Performance and social life among Medical students at Khartoum University. *International Journal of Scientific and Technology Research. Vol 3. No 5. ISSN 2277-8616.*
10. Dr.M.Kanagarathinam (2014). "Impact of social networking sites on academic performance of Adolescents" in Coimbatore city. *Vol. 4, Issue 12. ISSN 2249-555x*
11. Aamo Iorlian and Egena Ode: (2014). The Impact of Social Network usage on University Students Academic Performance: A case study of Benue State University Markurdi, Nigeria. *International Journal of Computer Science and Engineering (IJCSE).*
12. Ishaq Ahmad and Tehmina Fiaz Quasi: (2011) A look out for Academic Impacts of Social Networking Sites(SNSs): A student based perceptive. *African Journal of Business Management.vol 5(12) pp.5022-5031.*
13. Ezekiel S Asemah , Ruth .A. Okpanachi & Leo O .N. Edegoh (2013). Influence of Social Media on the Academic Performance of the Undergraduate Students of Kogi State University, Anyigba, Nigeria. *Research on humanities and Social Sciences. Vol.3, No.12.ISSN 2222-1719.*
14. Shana, L.B. (2012). The influence of social networking sites on students academic performance in Malaysia.
15. Enriquez (2010). "facebook and other online social networking sites can lower grades.
16. Waleed Mugahed and Mohd Shahizan. "The impact of Social media use on Academic Performance among university students": A pilot Study. *Journal of Information Systems Research and Innovation.(ISSN 2289-1358).*
17. E. Nepolean (2010). The effect of Social Networking Sites on the Academic Performance of Students in college in Girne American university, North Cyprus (ozan Ormeci Articles)

EXPORT GROWTH AND PROSPECT OF FLORICULTURE IN INDIA: GLOBAL SCENARIO

R.SENTHILKUMAR
ASST. PROFESSOR
PG. & RESEARCH DEPARTMENT OF COMMERCE AND MANAGEMENT STUDIES
SUDHARSAN COLLEGE OF ARTS & SCIENCE
PERUMANADU POST

ABSTRACT

Floriculture is an age-old farming activity in India. It always has an immense potential for generating gainful self-employment especially among small and marginal farmers. In the recent years it has emerged as a profitable agri-business in India and elsewhere throughout the world. It has also improved the standards of living. Growing consciousness among the citizens across the globe to live in environment friendly atmosphere has led to an increase in the demand of floriculture products in the developed as well as in the developing countries worldwide. Naturally, the production and trade in floriculture has increased consistently over the last 10 years. In this article, we first make a review of the global scenario of floriculture and compare the export growth of Indian floriculture with other countries across the globe considering data for the period 2006-2015. Finally we try to identify some emerging markets of floriculture and make a review of India's export performance in these markets during the period of five years from 2011 to 2015. The data used for the purpose of making comparisons and study of export performance has been collected from the website of the United Nations Commodity Trade Statistics Database.

KEYWORDS

Floriculture Product, Export, Import, CAGR, Global Scenario.

INTRODUCTION

Floricultural products consist of a wide variety of different types of plants & plant materials. They are broadly classified into four categories, namely, (i) bulbs, tubers, corns including, chicory plant (non-food) (HS Code: 0601), (ii) Other live plants, roots, cuttings, mushroom spawn (HS Code: 0602), (iii) Cut flowers, dried flowers for bouquets, etc, (HS Code: 0603) & (iv) foliage etc., except flowers for Ornamental Purposes (HS Code: 0604).

During the ten year period of 2006-2015, production and export of floricultural products from India has increased manifold. In 2006, India's export of this commodity was around 18 million US $ which has increased to almost four times in 2015. In a country like India floriculture as an Industry has tremendous potential for generation of gainful employment in rural as well as urban areas. Since the global demand of floricultural products is increasing day by day, India can effectively capitalize on this opportunity to solve the problem of unemployment & poverty, to some extent, through achieving a consistent growth in production and export of this commodity which will earn valuable foreign exchange. In comparison to the developed countries and also to some developing countries floriculture in India is still in a nascent stage.

OBJECTIVES OF THE STUDY

The main theme of the paper that know the growth and prospect of export of floriculture in India after the globalization. Globally, the export of floricultural products has increased phenomenally from 8 billion US $ in 2006 to 13 billion US $ in 2015. The number of countries reported to have exported floricultural products in 2006 was a mere 50 which has increased to 118 in the year 2015. In fact, this number gradually increased from 50 in 2006 to its peak at 137 in 2012 & 2013. However, the contribution of export of floriculture products to the global export has hovered in the same level during 2006-2015. In fact, it was the highest (0.19%) in 2006 and thereafter, it has mostly remained in the range of 0.14% to 0.16%.

The Netherlands has traditionally dominated the world export market of floriculture products with its value of export growing from 4.6 billion US $ in 2006 to 6.7 billion US $ in 2015. It alone contributes more than 50% of the total export of floricultural products worldwide. But its contribution to the global export has come down marginally from 57% in 2006 to 52% in the year 2015. This may be due to the fact that several other countries like Ecuador, Costa-Rica, India, China, Uganda, Austria & Kenya are keenly/ competing in the market of floriculture export after the opening up of the worldwide market in the WTO. Regime.

Columbia, the next highest floriculture product exporting country though has remained in the second position throughout the period 2006-2015, in terms of value of export of floricultural products it is far away from the Netherlands. Italy is the third largest exporter of floriculture products worldwide. During the year 2015, it has exported floriculture products to the tune of $ 696.90 million. Apart from these three countries, Belgium, Denmark, Germany, Ecuador, USA & Costa-Rica has made significant contribution in the global export of floricultural products during the period under reference.

INDIA'S CONTRIBUTIONN TO GLOBAL EXPORT

India is in the 18th position, just behind china in the export of floricultural products of the world. But about 0.07% of the country's total export volume during the period 2006-2015. The compound annual growth rate (CAGR) of India's floricultural product export during 2006-2015 is 14% which is far ahead than that of the CAGR in global export of floriculture products (5%). The CAGR of export of floricultural products for some selected countries is presented in the following Table 1:

TABLE 1: CAGR OF EXPORT OF FLORICULTURAL PRODUCTS FOR SOME SELECTED COUNTRIES

Sl. No.	Country	Period	CAGR (in %)	Rank in CAGR (in %)
1	Belgium	2009-2015	7.23	VII
2	China	2006-2015	9.91	V
3	Costa-Rica	2007-2015	4.23	X
4	Colombia	2006-2015	5.85	VIII
5	Denmark	2009-2015	1.09	XII
6	Ecuador	2008-2015	9.55	VI
7	India	2006-2015	14.36	III
8	Italy	2006-2015	4.32	IX
9	Kenya	2007-2015	16.00	II
10	Netherlands	2006-2015	3.82	XI
11	South Africa	2010-2015	10.54	IV
12	Uganda	2006-2015	28.13	I
13	**World**	**2006-2015**	**5.00**	-

E-Source: Secondary Data Collected from United Nations Commodity Trade Statistics Database, Statistics Division, http://comtrade.un.org/

The growth in India's floriculture export in 2006-2015 has been quite noticeable in comparison to several other developed nations like the Netherlands, Denmark, Italy, Belgium etc., During the period under reference, Uganda registered the highest CAGR in floriculture product export and India was the third country to register a CAGR more than 10.0. Such a consistent and robust increase in the export growth is quite encouraging.

In the year 2015, around 46% of the total value of floriculture product export from India has been cut flowers, dried flowers for bouquets etc., (ITCHS Code: 0603) and another 43% was in the category of foliage, branches & other parts of plants without flowers or flower buds etc., (0604). In fact, export of cut flowers,

dried flowers for bouquets etc., was the highest (83%) in the year 2007 and then it gradually come down to 46% of the total value of export of floriculture produce in the year 2015. On the other hand, export of foliage etc., has consistently increased from a mere 4% in 2006 to around 43% of the total floriculture product export in the year 2015. However, export of live plants, roots, cuttings, mushrooms, spawn etc., (ITCHS Code: 0602) during 2006-2015 has remained more or less in the same level and the contribution of bulbs, tubers, corns etc., (ITCHS Code: 0601) has been 1 to 2% of the total volume of export during this period.

(i) MAJOR EXPORT DESTINATIONS OF INDIA'S FLORICULTURE PRODUCTS

From this sub-section onwards we will restrict our discussion to the period 2011-2015, i.e the second half of the reference period 2006-2015. During the five year period 2011-2015, USA has been the major importer of Indian floriculture products. In 2015, it has imported around one fourth of India's total floriculture export. Next to USA is Japan. In 2011 Japan Imported floricultural product worth of 2.7 million US $ which has increased almost 5 times to 12.8 million US $ in the year 2015. The third major export destination for India's floriculture product is the UK and export to this country in 2015 has risen to 7.0 million US $ from million US $ from 2.3 million US $ in the year 2006. Apart from these three destinations, the Netherlands, Germany, Italy, UAE and France also import a significant amount of our floriculture produce.

It is also heartening to note that Indian exporters have also been able to increase their share of floricultural product exports to some emerging markets like Russia, China, Thailand, South Africa and Austria. In case of China and Russia the growth has been quite substantial. Floriculture products of worth three thousand million US $ was exported to China in 2011 which has grown to more than one million US $ in 2015 while for Russia it has increased to 0.3 million US $ in 2015 from almost nil in 2011. On the other hand, export of this commodity to countries like France, Singapore, Belgium, and Spain has either remained in the same level or registered a negative growth in 2011-2015.

(ii) GLOBAL IMPORTERS OF FLORICULTURAL PRODUCTS AND IDENTIFICATION OF POTENTIAL MARKETS FOR INDIA

Germany is the highest importer of floriculture products. The share of Germany in global Import has increased from 1.7 billion US $ in 2011 to 2.5 billion 2015. It is followed by the USA with an import value of 1.6 billion US $ in 2015. Its share in global import of flower & flower products has come down to 12% in 2005 from 15% in 2011. UK is the third largest importer of floriculture products from across the globe and its import has more or less remained the same during the period 2011-2015.

In the recent years import of floricultural products from countries all over the world has been quite impressive for the Russian Federation, Poland, Norway, Czech Republic, Hungary, China, Ukraine, Romania, Thailand and South Africa. The CAGR of import of flower during 2011-2015 has been phenomenal for the countries mentioned below:

TABLE 2: CAGR OF FLORICULTURE PRODUCT IMPORT DURING 2011-2015 FOR SELECTED COUNTRIES

Sl.No.	Countries	CAGR	Rank in CAGR
1	China	25.41	V
2	Czech Rep	16.51	VIII
3	Hungary	23.80	VI
4	Norway	11.82	X
5	Poland	18.60	VII
6	Romania	37.20	II
7	Russian Federation	26.89	IV
8	South Africa	13.21	IX
9	Thailand	39.81	I
10	Ukraine	34.90	III
11	**World**	**8.78**	-

E-Source: Secondary Data Collected from United Nations Commodity Trade Statistics Database, Statistics Division, http://comtrade.un.org/

From the above table it is observed that while the global CAGR for import of flower from the countries all over the world has been 8.78%, it has been higher for countries like Thailand, Romania, Ukraine, Russian Federation and China. In fact, the CAGR for import of flowers from across the world for the countries mentioned above has exceeded that of the developed countries like USA, UK, Germany, the Netherlands, Italy and Japan by a significant margin. The following figure 7 shows the trend in import of floriculture products for some selected emerging flower importing countries.

TABLE 3: DOUBLE RELATIVE MEASURE OF TRADE INTENSITY INDEX FOR SOME SELECTED COUNTRIES

Sl.No.	Country	2011	2012	2013	2014	2015
1	Austria	0.06	0.10	0.26	0.82	0.52
2	Canada	0.25	0.28	0.43	0.49	0.19
3	China	0.56	0.94	0.69	4.69	2.90
4	Czech Rep.	0.03	0.31	0.30	0.25	0.15
5	Denmark	0.16	0.15	0.19	0.22	0.15
6	France	0.44	0.41	0.34	0.25	0.21
7	Germany	0.50	0.46	0.50	0.57	0.42
8	Hungary	0.59	0.64	1.03	0.16	0.27
9	Italy	1.06	0.69	1.18	0.87	0.63
10	Israel	2.72	4.47	7.73	3.27	2.78
11	Japan	2.31	3.22	2.88	2.08	5.30
12	Malaysia	7.55	7.43	9.47	7.80	10.23
13	Mauritius	7.68	10.24	6.63	14.41	9.20
14	Netherlands	1.93	1.51	1.18	1.47	1.02
15	New Zealand	11.45	11.44	15.46	12.93	11.08
16	Philippines	6.80	0.89	4.13	7.34	1.94
17	Poland	0.69	1.68	3.08	1.47	0.96
18	Romania	0.00	0.05	0.06	0.87	0.35
19	Russian Federation	0.00	0.05	0.39	0.41	0.23
20	Saudi Arabia	5.34	5.28	3.36	4.91	4.99
21	Singapore	3.65	3.34	2.76	2.70	1.94
22	Spain	1.78	0.66	0.69	0.76	0.79
23	Sri Lanka	79.87	107.70	93.04	74.78	51.87
24	South Africa	6.68	3.75	3.04	15.44	13.55
25	Switzerland	0.56	0.26	0.19	0.19	0.15
26	Thailand	0.31	1.20	0.88	9.69	4.36
27	USA	1.28	1.97	2.32	1.83	2.03
28	United Kingdom	0.75	0.61	0.90	0.98	0.8

E-Source: Secondary Data Collected from United Nations Commodity Trade Statistics Database, Statistics Division, http://comtrade.un.org/

From table 3, it is easy to note that during the period 2011-2015 the countries like the UK, Germany, France, Switzerland, Australia, Austria, Canada, Denmark, Czech Republic & Hungary were less important as markets for India's floriculture products than they were for the world, while countries such as USA, the Netherlands, Italy, Japan, Poland, South Africa, Singapore, Sri Lanka, China etc., appeared to be more important markets to India for export of floriculture products than the rest of the world. A comparison of Table 2 & 3 also reveals that although the growth in impart of floriculture products have been phenomenal for countries like the Russian Federation, Romania, Czech Republic & Hungary. Indian exporters were unable to make their presence felt in these markets even though in the other emerging economics of China, Thailand and South Africa, Indian exporters have a significant presence.

We present below in table 4, the trend of import in floriculture vis-à-vis per capita gross domestic product (GDP) (in US $) for some selected countries during 2011-2015. It may be noted from this table that for almost all the countries mentioned here, the consumption of floricultural products increases as the per capita GDP moves up though the rate of increase in consumption varies widely across the countries. This increase may be due to the fact that with an increase in the GDP the standard of living improves which might have a positive effect towards the consumption of flower products in the developed as well developing nations. What is encouraging to note from table 4 that even in developing countries such as China, Thailand, Malaysia, Mauritius, Philippines, Sri Lanka and South Africa also consumption of flower and products has been growing up with the increase of per capita GDP and these countries are emerging as potential future markets for floricultural products. In table 4, the import figures (in million US $) for a particular country has been shown in the first row while the second row represents the per capita GDP figures (in US $).

TABLE 4: TREND IN IMPORT OF FLORICULTURE PRODUCTS (IN MILLION US $) VIS-À-VIS PER CAPITA GDP (IN US $) DURING 2011-2015

Sl.No.	Country	Year				
		2011	2012	2013	2014	2015
	(1)	(2)	(3)	(4)	(5)	(6)
1	Austria	230.61	254.43	313.94	303.85	329.47
		29927	30376	30994	32276	33662
2	Canada	225.25	228.44	248.91	276.60	298.45
		28223	29255	30014	31263	32886
3	China	22.14	32.94	45.27	51.38	68.67
		4335	4756	5265	5896	6572
4	Czech Rep.	50.85	64.22	83.45	93.44	109.18
		16429	17211	18064	19448	21317
5	Denmark	181.96	194.59	239.75	257.36	264.91
		29507	30106	30558	31914	33722
6	France	790.47	909.10	1119.17	1254.30	1274.42
		26772	27608	28087	29300	30120
7	Germany	1670.33	1840.45	2008.80	2230.59	2494.77
		26406	26858	27196	28303	29309
8	Hungary	26.65	33.93	50.15	67.50	77.49
		13891	14711	15450	16813	18086
9	Israel	6.74	7.65	8.41	10.00	11.03
		23329	22880	23157	24382	25670
10	Italy	378.15	418.17	454.74	614.28	631.96
		26017	26577	27150	28180	29019
11	Japan	375.76	376.14	408.73	460.94	463.78
		26746	27051	27851	29251	30821
12	Malaysia	3.37	6.59	4.42	5.59	4.30
		8903	9183	9545	10276	10843
13	Mauritius	0.23	0.30	0.47	0.48	0.48
		10234	10667	11052	11794	12456
14	Netherlands	801.05	905.06	1053.08	1135.02	1176.04
		29832	30520	30672	31790	32927
15	New Zealand	5.05	5.39	5.72	6.67	7.53
		20472	21381	22133	23932	22511
16	Philippines	0.86	0.87	0.87	0.91	0.91
		4020	4202	4368	4664	4920
17	Poland	75.69	88.45	101.63	140.94	177.59
		10850	11216	11959	13316	13980
18	Romania	6.11	11.25	11.99	18.22	29.70
		6460	7027	7648	8700	9208
19	Russian Federation	74.92	93.74	112.01	185.53	246.41
		7562	8130	9036	9899	10897
20	Saudi Arabia	9.58	8.55	9.92	13.35	14.80
		12460	12318	13210	13790	14729
21	Singapore	42.83	41.71	41.11	40.18	45.02
		22937	24843	25788	28860	29921
22	Spain	145.52	171.88	222.80	234.48	264.03
		22757	23418	24105	24992	26125
23	Sri Lanka	0.64	0.41	0.48	0.39	0.41
		3591	3735	3939	4390	4569
24	South Africa	4.00	4.49	5.84	6.81	7.44
		9878	10222	10634	11394	12347
25	Switzerland	327.49	365.93	426.29	450.59	450.37
		31835	32821	31747	33039	34355
26	Thailand	1.93	2.88	3.44	3.60	10.31
		6515	6909	7483	8090	8551
27	USA	1342.65	1320.97	1454.32	1607.21	1630.96
		34802	35986	37501	39677	41854
28	United Kingdom	962.66	1268.68	1435.08	1577.38	1603.80
		27515	28257	29265	30821	32005

INTERNATIONAL JOURNAL OF RESEARCH IN COMPUTER APPLICATION & MANAGEMENT   76

A Monthly Double-Blind Peer Reviewed (Refereed/Juried) Open Access International e-Journal - Included in the International Serial Directories

http://ijrcm.org.in/

We now present below the CAGR of floricultural product import vis-à-vis CAGR of India's export of floricultural products to some selected countries during 2011-2015. It is observed from table – 5 that even though the growth in import of floricultural products for countries like Belgium, Spain, France, Hungary, Italy, Switzerland and Oman has been quite substantial during 2011-2015, India's contribution to the import of these countries was unsatisfactory. In fact, India's share to the import of Switzerland, Singapore and Oman has decreased during the period of reference.

TABLE 5: CAGR OF IMPORT VIS-À-VIS THAT OF INDIA'S EXPORT DURING 2011-2015

Sl.No.	Country	CAGR of Import of floricultural products during 2011-'15(in %)	CAGR of Export of floricultural products during 2011-'15(in %)
1	Belgium	9.72	8.61
2	China, Hong Kong SAR	2.35	1.10
3	France	10.02	4.53
4	Hungary	23.80	16.84
5	Italy	10.82	10.28
6	Oman	10.40	-22.07
7	Singapore	1.00	-1.96
8	Spain	12.65	5.40
9	Switzerland	6.58	-9.42

E-Source: Secondary Data Collected from United Nations Commodity Trade Statistics Database, Statistics Division, http://comtrade.un.org/

FINDINGS, SUGGESTIONS AND CONCLUSION

India's export performance of floricultural products has been quite noticeable since 2006.

In fact the growth rate of India's flower export during the period 2006-2015 was one of the highest observed world-wide. In spite of such a phenomenal growth in export, it has not been possible for India to record significance presence in the import basket of countries like Germany, the highest importer of floricultural products from across the world and the UK, the third largest importer of flower & related products. In general, it is observed that export of India's floricultural products to Europe during 2011-2015 has not been encouraging although Europe is a major consumer market for floriculture products. This is evident from the fact that during 2011-2015 India's export of cut flowers, dried flowers for bouquets etc., which are in high demand in Europe, has consistently decreased from 71% of total volume of floriculture product export in 2011 to about 46% in 2015. One possible reason for such sluggish performance may be that the Indian exporters are unable to meet the stringent quality norms that most of the European countries demand. Another reason may be the inability of the Indian exporters to produce quality value-added products which are in high demand in most of the European countries.

The world market for floricultural product has been changing continuously. Markets like Germany, the Netherlands, France, New Zealand, Singapore & USA are already saturated while UK, Italy, Poland, China, South Africa, Russian Federation and Thailand are coming up as new markets. Initiatives are to be taken up by the Government as well as the exporters to trap the potential of these emerging markets.

In India, labour is cheap and available in abundance in rural as well as urban areas. The cost of vial inputs for floriculture like water, electricity, fertilizer, pesticides etc., are reasonable. India has a wide variety of tropical and temperature plants in comparison to much other floriculture product exporting countries. But, in spite of these advantages India's performance in the global floriculture market is not up to the mark comparison to several other countries. The major reasons behind such lackluster performance are:

(i)Absence of proper and adequate infrastructure,
(ii) Lack of proper technical knowledge of know-how.
(iii) Inadequate and improper handling of control mechanism,
(iv) Lack of sale and export promotion activities, market surveys etc.,

Indian floriculture has been mostly small scale and unorganized in nature. In different parts of the country, mainly, small and marginal farmers are engaged in cultivation and production of floricultural products. These small and marginal farmers have little knowledge about the technical aspects and cost-effective methods of floriculture farming. Recently some serious private concerns have started production and export of floriculture products in large scale and in an organized way. But, more of such initiatives both from the Government as well from private entrepreneurs are required. In order to survive in the highly competitive overseas market and to increase market share their production floriculture product, value-added products as also export of such things needs careful and close Integration at all levels-beginning with farmers and ending with Government policy makers. For boosting its floriculture export and to capture more share in overseas market a host of measures are to be undertaken by both the Government as well as the private agencies involved in production and export of floricultural products. Some of the issues that need immediate attention are:

(i)Setting up of an export promotion council for export of floricultural products,
(ii) Increase in production value added products like dry flowers, seeds, potted plants, micro propagated plants etc.,
(iii) Organization of appropriate training for personnel involved in production and export of floricultural products,
(iv) To create awareness among the producers about all effective quality control measures,
(v) Establishment of appropriate marketing and distribution channels,
(vi) Setting up more export processing zones for floriculture products etc.,

REFERENCES

1. International Trade Statistics yearbook, 2005,
2. Rudd, L.M. Van Uffelen & Nico S.P. de Groot. Floriculture worldwide; production, trade and consumption patterns show market opportunities and challenges. Wageningen University and Research Centre.
3. United Nations Commodity Trade Statistics Database, Statistics Division, http://comtrade.un.org/

RECOGNITION: AN EMPLOYEE RETENTION TOOL

RASHMI BADJATYA
ASST. PROFESSOR
PIONEER INSTITUTE OF PROFESSIONAL STUDIES
INDORE

ABSTRACT

Given that employee retention is very important for the functioning and competitiveness of a company, this study focuses on Recognition factors that influence employee retention, because it is seen as a retention supporting activity. This research is completely focused on finding whether Recognition practices have an impact on employee for not leaving the organization. If so, which practices have the most impact on retention? Sample data was collected from 300 employees of various organizations in Indore city of Madhya Pradesh. The data was analyzed using different statistical tools of SPSS. A high degree of positive correlation was found between Retention and Recognition Practices. It can be interpreted that organizations that are practicing on giving recognition for work done by employees enjoy high rate of retention and vice versa. It was also found that 'Public Praise' was the most important recognition activity that was indicated by most of the respondents.

KEYWORDS

Employee Retention, Recognition, Rewards.

1.   INTRODUCTION

Employees are now considered as one of the greatest asset of the organization. And as a rule an asset should add value to the balance sheet of the organization and should appreciate with time. Employees help the business to work towards company goals and reach new market heights. Organization's talent is its prime source of competitive advantage in the business world. Besides bringing in profits to the organization, employees provide a face to the organization through which the outer world gets an impression about the organization. An employee is the only factor who has the ability to think and react and, moreover, control all the other factors of production, and therefore his presence is of utmost importance. With the fact that an employee can think and react, comes the complications of dealing with him and managing him, since he is the factor whose behavior is unpredictable and hence can be expected to react in any manner in any given situation in spite of all the steps taken to impress and satisfy him. The process of making an employee a competitive advantage and finally retaining them starts simply with the thought of hiring people. Organizations devote a lot of efforts and money in recruiting the right kind of employees to fit in their needs, but seldom do anything to make them a competitive advantage by retaining them.

1.1.   EMPLOYEE RETENTION

Employee Retention in simple words means the percentage of employees remaining in the organization. It is important to mention that retention means the employees stay in the organization because they want to, not because they have to; it also means the ability of an organization to retain its employees. In modern HR senses, Employee retention refers to the practices that are adopted by the companies to make the employees stay for a duration which is long enough for him to contribute effectively and efficiently. High rates of employee turnover have prompted organizations to take steps for retaining employees. For an organization to do well and earn profits it is essential that the high potential employees stick to it for a longer duration and contribute effectively. Intelligent employers always realize the importance of retaining the best talent, although in Indian scenario retaining talent has never been so important; however, things are changing from past few years. (Mahalaxmi & Rao, 2012) In prominent Indian metros there is no dearth of opportunities for the best in the business. Retention of key employees and controlling attrition has never been so important to companies. Failing to retain a key employee is a costly proposition for any organization. Various analysis suggest that losing a middle manager in most organizations, translates to a loss to business & in new hiring and training process which estimates up to five times to the lost salary. This might be worse for outsourcing companies where fresh talent is intensive. Retaining employees involves understanding the intrinsic motivators of them which many organizations are unable to identify.

1.2.   RECOGNITION

It is a well known fact that people work for money. Then why it happens that in spite of paying a handsome salary, employees leave their job? Is it just that they have been offered another job with higher salary or there are some different reasons? If money is the only factor, for which employees work, then there has to be some limit to it, because even if you pay the highest salary of the industry norms to an employee, someone else will pay a higher salary to lure the employees. Recognition is a means of providing immediate, non-cash rewards to employees for contributions to the Organization. We've all heard the statistics on how staff members like to be recognized and rewarded for doing a good job. That a pat on the back or a 'thank you' can mean more to a person than any amount of money. Employees not only want good pay and benefits, they also want to be valued and appreciated for their work, treated fairly, do work that is important, have advancement opportunities, and opportunities to be involved in the organization. Recognition is a leadership tool that sends a message to employees about what is important to the leaders and the behaviors that are valued. (Pearl, Arul, 2011)

1.3.   THE PRESENT RESEARCH

The present work focuses on the phenomenon of recognition and its possible impact on employee retention. For the purpose of research the items - Employee of the Month award, Employee Suggestion Program, Annual Performance Appraisal, Public Praise at a Staff Meeting, Publishing Good performance acts in in-house journals and in Public Press, Facilitating High performance employees on special occasions like annual day, Retention Bonus, Recognition on Birthdays were studied. Also the retention level in the same organization was also studies to find that whether there is any correlation between these.

2.   REVIEW OF LITERATURE

There had been numerous researches on employee retention, all stressing on various factors of retention such as compensation, rewards, work environment, growth etc. Adding to this Carsen (2005), says, retention also involves weeding out the underperformers to free up space and resources for achievers. If rewards are not in direct proportion to achievement, employees will find new jobs at organizations where they will be rewarded accordingly. (Gupta, 2005). Capelli (2000) indicated that several factors are considered important in a well functioning of employee retention. The determinants that are considered to have a direct impact are work environment, career opportunities, Recognition and work life balance. The results of the research done by Bob Nelson (2001) indicated strong correlation between recognition and performance. In a study by Gallup (2007) with an average increase of 10% recognition practices, organizations witnessed a 6.5% higher productivity and 2% higher customer engagement. (Cited in Globoforce, 2008). Stressing the organizational benefits of non-financial recognition Silverman (2004), says, perhaps the most important non-financial recognition schemes is that they afford an organization an opportunity to highlight desired actions and behaviors. In doing so, it creates a role model for other employees. Adding to the benefit, a report by Income Data Services(incomesdata.co.uk, 2002), says the recognition given under this scheme is less expensive, and have results which even the costliest of gifts cannot give, as the monetary value of the award is less important than the act of recognition itself. Another benefit of non-financial recognition schemes, Silverman says is the immediacy of their application. Khatri (2012), suggested providing Instant recognition "Do not save recognition for a year-end banquet, but show honest appreciation with a card, nomination for an award, movie tickets, dinner or even a simple 'thank you' to make people feel valued. Avoid drive-by or insincere praise." Non-financial recognition schemes can help reinforce affective relationships. And they are more difficult for other organizations to match compared extrinsic forms of reward, says Silverman (2004.) He also points out that Recognition provides other benefits such as encouraging strategic behaviors, cost

efficiency, immediacy of impact, Employer branding, and high credibility. . Recognition is a leadership tool that sends a message to employees about what is important to the leaders and the behaviors that are valued. (Employee Recognition Program Handbook, 2000). When rewards for performance are not based upon money, the culture of a company tends to value recognition instead of the drive for money. Nasbi, (2012), has stressed on the verbal Recognition to contribution and giving meaningful rewards as a key to bringing in Employee loyalty.

3. RATIONALE OF THE STUDY

In spite of the Herculean efforts made to understand the needs of employees, organizations are still unable to identify the reasons of high employee turnover. It is a huge loss for an organization when an employee and who has been trained and has been performing, leaves the organization. It has been observed by many organizations and various researches have proved that, employees do not work only for money. There is an aspect in each job which is beyond the reach of money. This research basically focuses on those recognition practices which motivates an employee to stay or stick to an organization. In other words this research will help organizations retain its employees for a longer duration to be more effective.

4. OBJECTIVE OF THE STUDY

For making this research more precise, the following objectives were formulated:
1. To Find the Impact of Recognition Practices on Employee Retention.
2. To enlist the Recognition Practices in Industries that are more effective in retaining employees

5. RESEARCH METHODOLOGY

This descriptive research was conducted through a questionnaire, measuring the retention level of employees in the organization, and in the same organization the availability and importance of recognition practices were quantified. A Non-Probability convenience sampling was used and sample of 300 employees were collected. The data obtained through questionnaire was analyzed by using appropriate statistical tools. The reliability analysis of the scale was done through SPSS 15.0 using Cronbach's Alpha. T-Test has been used to confirm the result of hypothesis. Karl Pearson's Co-relation Coefficient was derived between the Retention level (Dependent Variable) and availability of recognition practices (Independent Variable) to find out the relationship between retention and Recognition Practices.

6. RESULTS AND DISCUSSION

Cronbach's alpha was calculated to measure the internal consistency and reliability of the instrument. The Cronbach's alpha came as 0.762, thus the instrument was considered reliable for the study. The reliability coefficient indicates that the scale for measuring trust and commitment is reliable. So now, various statistical tools can be applied and tested. The hypothesis '*There is no significant impact of Recognition on Retention of Employees*' was tested after finding the correlation between Retention and Recognition.

TABLE NO. 1 THE CALCULATION OF CO-RELATION COEFFICIENT BETWEEN RECOGNITION AND RETENTION LEVEL AND RESULTS OF HYPOTHESIS TESTING

Pearson's Correlation Coefficient (r)	0.71
N	300
Df(n-2)	298
t-value	16.69
p-value	0.00001

The above table shows the value of r = 0.71, which shows high positive co-relation between Retention and Recognition practices, and is confirmed by p value- 0.00001 which is less than the significant value 0.05. This interprets that with the presence of Recognition practices in an organization, retention level also increases and with its reduction the retention level also decreases. The recognition practices includes activities such as Employee suggestion program, Employee of the month award, Public Praise at a Staff Meeting, Publishing Good performance acts in in-house journals and in Public Press, Facilitating High performance employees on special occasions like annual day, Retention Bonus and Recognition on Birthdays. The following graph shows the importance of these recognition practices. (Employees were asked to mark the importance of these practices on a likert scale)

GRAPH 1: GRAPHICAL REPRESENTATION OF SCORE OF RECOGNITION PRACTICES
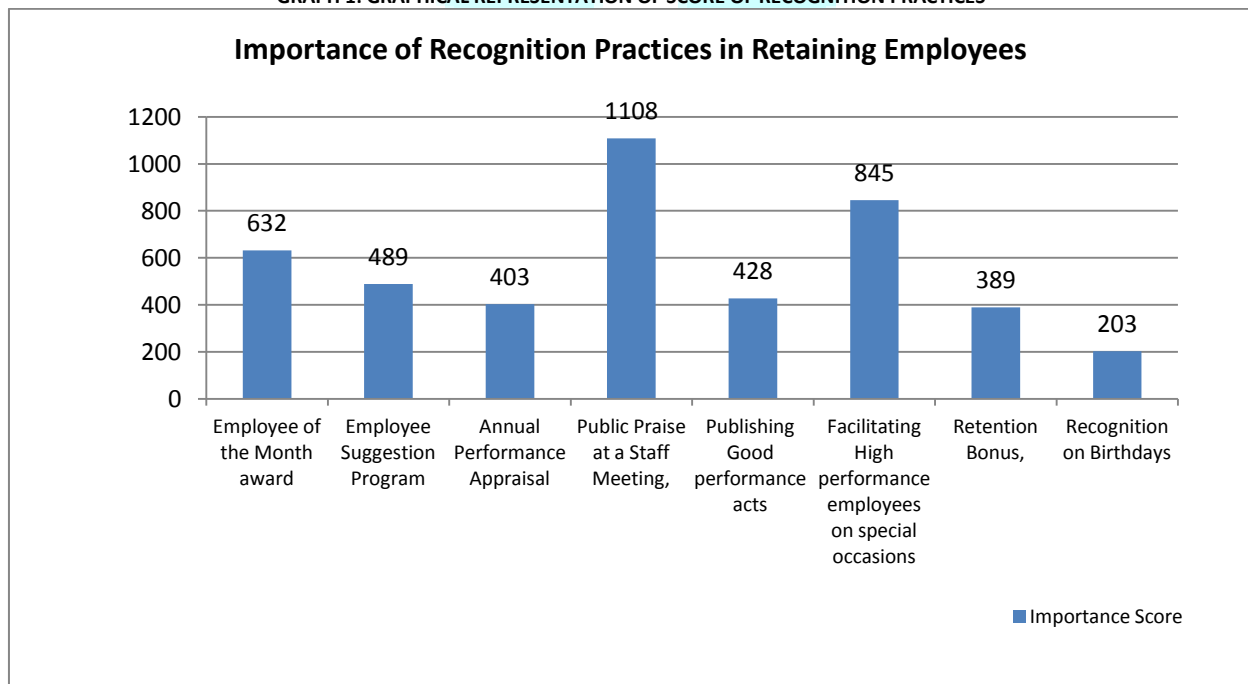
It can be clearly observed that the maximum score is received by the factor 'Public Praise at a staff meeting', followed by 'Facilitating High performance employees on special occasions like annual day' and 'Employee of the month award'.

7. FINDINGS

The 'Self Esteem' needs as mentioned in Maslow's Need Hierarchy can be very well referred here. The only thing that could make an employee stay with the organization is the feeling that he is being taken care of and his needs of self esteem and self actualization are fulfilled. Being appreciated for the work that they do, is what employees want, in fact everybody wants. This will not only build up their morale, but will also motivate them to work for new challenges and innovate ways and means of working and achieving their targets.

8. SUGGESTIONS

- Recognizing all contributions, whether big or small must be appreciated. Good work also should be recognized verbally or through gifts, letters of appreciation, tickets to social or sports activities etc.
- Encourage employees by providing them with autonomy and more responsibility in their work. Allow them to use variety of skills and knowledge.
- Letting them participate in decision making will boost their morale many times. Promotions at the right time will set an example for others to work efficiently while giving results in accordance to the company's objectives.
- Assigning challenging duties, organizing social activities in the work place, improving working conditions, etc.
- Boost Employees' Self-Esteem. It is a well versed truth that all the professional employees give high importance to self-esteem in their employment and professional life. They would not continue and leave the employment where their self-esteem is at risk. Hence, the managements and the HR managers in particular should create an environment that ensures self-esteem of the employees. The contributions made by the professional employees need to be appreciated and rewarded.
- Create a sense of ownership in employees, through various measures such as Employee Stock Ownership programs etc. When the employees feel that they are owners or partners in the organization - may be to a little extent – they think twice before leaving the organization. This can be done only for a particular level or for middle and higher level employees in the hierarchy.
- Furthermore, the organizations should not overdo the recognition practices so that it loses its importance and employees stop giving importance to them. Also managers must not attempt initiating newer recognition policies without the top management supporting them.

9. CONCLUSION

There are extensive employment opportunities for talented professionals. Higher the skills of the employee, the greater is his demand. Then, employee retention is and has always been a topic of concern for most of the organizations as well as managers. Money as a universal appeal eases the application of retention strategies. But money has a constraint, it can let people in, but it cannot keep them there. Recognition practices on the contrary involve understanding of one's socio-psychological needs and behaviours and thus cater as a retention source. This work was intended with a aim to highlight the importance of recognition As the final or conclusive remarks of the research work, it can be said that the employees do not have any attachment with the firm, they only work there till the time their needs are satisfied (both monetarily and non-monetarily). The moment they start feeling that their needs are not being met, they will switch their company and job. Non-Monetary rewards in general and Recognition practices in particular, if implemented judicially can satisfy the employee's needs and retention to a larger extent.

REFERENCES

1. Capelli P.(2000) 'A Market – Driven Approach to Retaining Talent' Harvard Business Review 78 (1), 103 – 112.
2. Carsen, J. A. (2005). HR How To: Employee Retention. Chicago, IL: CCH Incorporated.
3. Gupta, M. (2005). HR Challenges in the Indian software Industry. Retrieved February 12, 2012, from http://www.ircc.iitb.ac.in/: http://www.ircc.iitb.ac.in
4. Khatri, N. (2012). Ways To Hire And Retain Generation Y Employees. International Journal Of Research In Commerce & Management Volume No. 3 (2012), Issue No. 4, pp. Volume No. 3 (2012), Issue No. 4.
5. Kyndt, E., Dochy, F., & Michielsen, M. (2009). Employee Retention: Organisational and Personal Perspectives. Vocations and Learning , 1-2.
6. Mahalakshmi, R , Rao, Bala Nageswara (2012), a study on effective employee retention strategies, International Journal of Logistics & Supply Chain Management Perspectives, Vol1, No.1, October -December' 2012
7. Maslow A (1954), Motivation and Personality, Harper & Row: New York
8. Nasbi, A. N. (2012). Employee Loyalty Above Customer Loyalty. International Journal Of Research In Commerce & Management, Volume No. 3 (2012), Issue No. 7Nelson, Bob, 2001, Factors that Encourage or Inhibit the Use of Non-Monetary Recognition by U.S. Managers, Ph.D. Thesis, retrieved on 31st Jan 2006, www.nelson-motivation .com
9. Nelson, Bob, 2001, Factors that Encourage or Inhibit the Use of Non-Monetary Recognition by U.S. Managers, Ph.D. Thesis, retrieved on 31st Jan 2006, www.nelson-motivation .com
10. Pearl, Arul, 2011, Review Of Literature - Non Monetary Rewards - Employee Involvement, citehr.com, September 11, 2011 retrieved May 4, 2014, from http://www.citehr.com/151047-rewiew-literature-non-monetary-rewards-employee-involvement.html
11. Silverman, M. (2004). Non Financial Recognition-Most effective of rewards. Brighton: Institute of Employment Studies.
12. Yavuz, N. (2004, July). The Use Of Non-Monetary Incentives As A Motivational Tool: A Survey Study In A Public Organization In Turkey. Turkey: The graduate School of Social Sciences of Middle east Technical University

WEBSITES

13. Employee Recognition Program Handbook. (2000, September). Retrieved May 1, 2012, from https://www.dhrm.virginia.gov/: https://www.dhrm.virginia.gov/docs/default-source/hr/manuals/emprechnbk.pdf?sfvrsn=2
14. Globoforce.com: Issue2 June 2008 white paper, Who says cash is King? The importance of non cash recognition in building motivation across a global organization
15. Incomes Data Services (2002), 'Employee Recognition Schemes', IDS Studies Plus, Autumn issue retrieved February 12, 2013 from http://www.incomesdata.co.uk/books/employment-law-handbooks/

INTERNATIONAL JOURNAL OF RESEARCH IN COMPUTER APPLICATION & MANAGEMENT 80

A Monthly Double-Blind Peer Reviewed (Refereed/Juried) Open Access International e-Journal - Included in the International Serial Directories

http://ijrcm.org.in/

IMPLEMENTATION OF INTERNET OF THINGS IN RURAL SENSITIVE AREA OF CHHATTISGARH

DR. ASHIM RANJAN SARKAR
ASST. PROFESSOR
DEPARTMENT OF COMPUTER SCIENCE & INFORMATION TECHNOLOGY
CHRIST COLLEGE
JAGDALPUR

ABSTRACT
Internet of things (IoT) referred to as objects connected with the Internet. Each object can be uniquely identified by the Internet. It is estimated that (as per the analysis of CISCO), there are more than 4000 crores devices being wirelessly connected to the Internet of Things by 2020. The purpose of our research is to understand the feasibility of implementing Internet of Things in identification of Transport System, Military, Para Military Force, Weapons and persons. There is a need for the security agencies to find out locations, working conditions of vehicles, soldiers and weapons etc. in an efficient manner, here, Internet of Things infrastructure can help. The research helped us to gain immense knowledge in the field of IoT and helped us with the protocols for communication between the devices.

KEYWORDS
Internet of things, Transportation.

INTRODUCTION
The Internet of Things (IoT) is a large network of connected "things". The relationship is between people-people, people-things, and things-things. IoT deals with having physical objects we see around us in a network in one form or the other. As the progress of technology, more objects are being installed with sensors and having the ability to communicate with each other. The way in which information is getting transferred is changing as the physical world outside is becoming more of an information system. It mainly deals with RFID, infrared sensors, global positioning systems and scanners. These have helped the objects to not only sense information but also interact with the physical world.

The Internet of Things (IoT) is ordinary objects have inter-connected with inside microchips. These microchips help to keep track of other objects and sense many devices surrounding and report it to other machines and to the humans. It is called M2M, means Machine to Machine, Machine to Man, Man to Machine or Machine to Mobile. The IoT intelligently connects humans, devices and systems. Analysts describe two distinct modes of communication in the IoT: thing to person and thing-to-thing communication (Raunio, 2005). Thing-to-person and person-to-thing communications encompass a number of technologies and applications which are use to remote access to objects by humans, and object that continuously report their status. Thing-to thing communications encompasses technologies and applications wherein everyday objects and infrastructure interact with the human. Objects can monitor other objects, take corrective actions and notify or prompt humans as required.

LITERATURE REVIEW
Zhang et. al. [1] propose the solution for dynamic access allocation. In this approach the device owner provides clients with one time token that can be used to access device in the network. This paper describes different approaches to perform token reuse detection. Some of these approaches involve replication of reused tokens and some suggest distributed token storage.

The proposal described in [2] applies usage control model for the IoT. This approach maps the UCON abstractions to IoT entities and is based on fuzzy theory. Unfortunately there are only few experiment present that does not provide enough data of evaluation of the approach on IoT nodes.

The work presented in [3] demonstrates delegated capability based approach and based on UDP and CoAP protocols. Access tokens are provided by issuer to a client with ECC digital signature in JavaScript Object Notation (JSON) format. A token contains information about resource to access, action that can be executed and additional conditions that is supposed to be checked by device. Server verifies digital signature and performs operation if permissions are granted by token.

In the Cooltown project [4] Kindberg et al. proposed to use the Internet and the Web as the information network of choice for smart things. Exploring this idea of merging RFID enhanced objects and the Web, Welbourne et al. [5] create an RFID-based microcosm for the Internet of Things.

THE IoT APPLICATION DOMAINS
1. MEDICAL TECHNOLOGY / HEALTH
In Sensitive area of Chhattisgarh villagers cannot keep their medical records for a long time, implantable wireless sensors can be adopted to keep health records of patients with chronic illnesses[6]. IoT applications have an massive impact on independent living and support for aging population by detecting daily living and support using the combination of sensors, Wi-Fi, etc.

2. BETTER MANAGEMENT OF THE WEAPONS
In military or paramilitary force smart lockers can be used. Smart lockers can track the present items in real-time[7]. Weapons can be monitored through Radio Frequency Identification (RFID) tags to alert the Store Keeper/authorized person to any changes.

3. FORCE MANAGEMENT
By using RF tag force can be counted and can be located in new positions[8].

4. AGRICULTURE
By using wearable sensors farmers can track in real-time their animals, crops and carts through RFID. By using sensor the moisture percentage of the soil can measured. Development of an intelligent scheduling platform for agricultural machinery working with integrated ICT such as the internet, mobile phone, fixed phone, satellite navigation systems, cloud computing to implement the guidance, promote the restricted flow of machinery and improve utilization of IoT is the key factor[9]. The platform commands and dispatches farm machines, cultivation and harvest according to factors such as crop maturity time, weather, farm machine distribution, etc. It can realise functions including inquiry of farm machine positions, tract review, information reception and release, remote failure diagnosis, and measuring farmland area and estimation of crop yields (Zhiguo, 2011).

5. EDUCATION
IoT can enable interaction with physical spaces for learning purposes or communication. Student attendance and curricular development can be traced. On demand Study matrial, lecture notes and video lectures can send to the students[10]. All activities of the student can be traced.

6. THE FOOD-IOT
Today's food supply chain (FSC) is extremely distributed and complex. It has large geographical and temporal scale, complex operation processes, and large number of stakeholders[11]. The complexity has caused many issues in the quality management, operational efficiency, and public food safety. IoT technologies offer promising potentials to address the traceability, visibility and controllability challenges[12][13]. It can cover the FSC in the so-called farm-to-plate manner, from precise agriculture, to food production, processing, storage, distribution, and consuming. Safer, more efficient, and sustainable FSCs are expectable in the future[14][15][21].

It comprises three parts: the field devices such as WSN nodes, RFID readers/tags, user interface terminals, etc., the backbone system such as databases, servers, and many kinds of terminals connected by distributed computer networks, etc., and the communication infrastructures such as WLAN, cellular, satellite, power line, Ethernet, etc. As the IoT system offers ubiquitous networking capacity, all these elements can be distributed throughout the entire FSC. And it also offers powerful but economy sensing functionalities, all the environmental and event information during the lifecycle of food product can be gathered on a 24/7 basis[16][18]. The vast amount of raw data can be refined into high level and directly usable information for the decision making of all stakeholders.
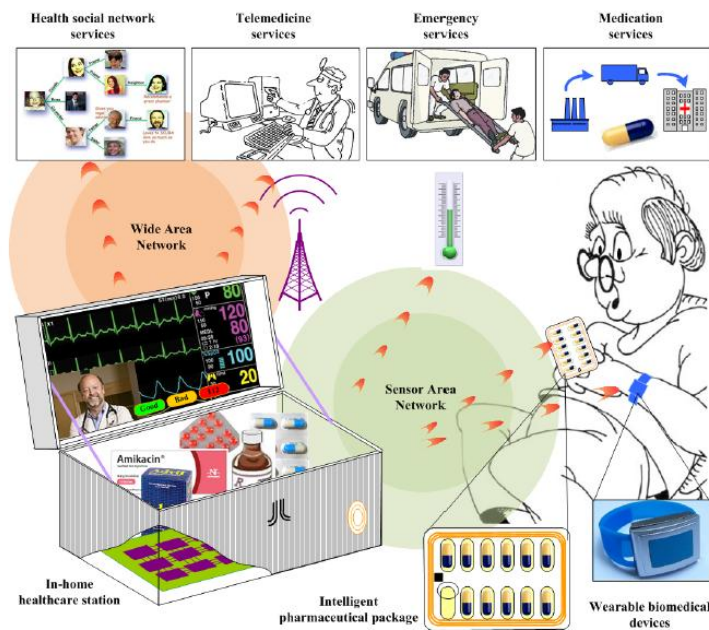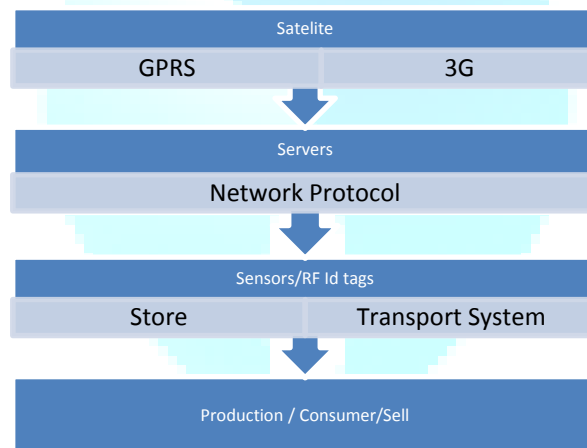
FIG. 1

FIG. 2

TECHNOLOGIES OF THE INTERNET OF THINGS CAN BE USED IN REMOTE AREA

A number of technologies can be identified by analyzing a wide range of literature including:

1. RFID

Radio-frequency identification (RFID) uses radio waves to identify items. In contrast to bar codes, RFID tags can be read away from the line of sight. They track items in real-time to yield important information about their location and status. Early applications of RFID include automatic highway toll collection, keeping track of entire inventory, supply-chain management for large retailers, prevention of counterfeiting in pharmaceuticals, and for patient monitoring in e-health[17][20]. RFID tags are being implanted under the skin for medical purposes, e-government applications such as in drivers' licenses and passports and RFID-enabled phones are some of the applications.

2. SENSOR NETWORKS

To detect changes in the physical status of things is also essential for recording changes in the environment. In this regard, sensors play a pivotal role in bridging the gap between physical and virtual worlds, and enabling things to respond to changes in their physical environment, generating information and raising awareness about the context. Sensor networks need not be connected to the Internet and reside in remote sites, vehicles and buildings having no Internet connection.

3. MICROCONTROLLERS

Microcontrollers are computer chips that are designed to be embedded into objects. Embedded intelligence in things distributes processing power in the network, and empowers things and devices in the network to take independent decisions[18].

4. PROTOCOLS

Machine-to-machine interfaces and protocols of electronic communication set the rules of engagement for two or more nodes of a network. Internet Protocol (IP) has become the standard for all data communication and it is therefore easy to move things over the Internet. The Internet protocol for lower-power radio IPv6 plays a big role in the IoT. The advantage of IPv6 is that it meets the challenges of different existing systems having to work together. Because this

interoperability is possible, the system of objects connected via the Internet can develop the same way that the current Internet developed. The version of IP currently in use, IPv4, supports only[15].

5. BIOMETRICS
Biometrics enables technology to recognize people and other living things, rather than non-living objects.

6. MACHINE VISION
Machine vision can be a channel for delivering the same type of information that RFIDs enable. Machine vision is an approach that can monitor objects having no on-board sensors, controllers or wireless interfaces.

7. ACTUATORS
Actuators detect an incoming signal and respond by changing something in the environment. Actuators such as motors, pneumatics and hydraulics can move objects and pump fluids. A relay, for example, is an actuator that toggles a mechanical switch, and can thus cause a good number of responses to occur such as enabling illumination, heating system, audible alarm and so on.

8. LOCATION TECHNOLOGIES
Location technology helps people and machines find things and determine their physical location. Sensors play a role, but that approach does not satisfy practical needs for geo-location resulting in the rise of wireless approaches including GPS and cellular towers[14]. In the automatic identification of tagged products quickly look up information or initiate a specific action, using bar codes for linking real-world objects to virtual information has a number of drawbacks when compared to an RFID-enabled feature with corresponding mobile RFID readers, such as Near Field Communication(NFC)-enabled mobile phones. Near Field Communication is a short-range wireless connectivity standard that enables communication between devices when they are brought within a few centimeters of each other through magnetic induction.

9. BAR CODES
A bar code is an optical representation of machine-readable data and can be seen on the majority of products that are on sale in the retail industry to speed up the checkout process. These linear symbologies or so-called one-dimensional (1D) barcodes represent data in vertical parallel lines with varying space and line width. A lesser well-known two-dimensional (2D) barcode or matrix code is also an optical representation resembling something like a crossword puzzle of even more machine-readable data and can normally be seen on larger packaging containers to assist with warehouse logistics and quality control. A Data Matrix code is made up of a two-dimensional matrix code consisting of black and white square modules arranged in either a square or rectangular pattern. The information to be encoded can be text or raw data. The code can be read quickly by a scanner which allows the media to be tracked. Semacode is machine-readable ISO/IEC 16022 data matrix symbols which encode URLs. It is primarily aimed at being used with cellular phones which have built-in cameras. A URL can be converted into a type of barcode resembling a crossword puzzle, which is called a "tag". Tags can be quickly captured with a mobile phone's camera and decoded with a reader application to obtain a web site address. This address can then be accessed via the phone's browser.

10. AMBIENT TECHNOLOGIES
Ambient technologies refer to electronic environments that are sensitive and responsive to the presence of people. In an ambient intelligence world, devices work in concert to support people in carrying out their everyday life activities in easy, natural way using information and intelligence that is hidden in the network connecting these devices. The ambient intelligence paradigm builds upon pervasive computing, ubiquitous computing, profiling practices and human-centric computer interaction design.

METHODOLOGY
We run a survey in 2012 to identify the different IoT application scenarios in different domains. This survey was based on 180 responses from 14 villages. A farmer survey was done to get useful input regarding the farmer services. A survey was also carried out to examine the possible application layer protocols for sensor networks.

This research paper suggests a need for a public survey to understand the villager's side for a particular IoT implementation. Also there is a need for a qualitative survey to understand the feasibility of implementing IoT in a certain area.

CHALLENGES AND DRAWBACKS OF INTERNET OF THINGS
One of the main challenges for the Internet of Things is in transformation of the connected objects into the real time sensing actors which also involves the societal and ethical considerations. IOT technologies enable or control the capabilities of the people and how this influences people's capabilities to satisfy accountability demands. The multiple dimensions of accountability such as visibility, responsibility, control transparency and predictability should be taken into consideration to be controlled with the capacities of IOT technologies. Internet of things is spreading widely in the present world which accounts for at least two objects connected per person. It is expected that by 2015 an average person would be accompanied by eight objects. The key challenge that sparks for this innovation is protection of privacy. Three very important barriers that exist for IoT development are having a single standard, the development and transition to the newer IPv6 and developing energy sources for the huge number of sensors (Evans, 2011). Another challenge in building IOT is lack of common software fabric and how to combine all the software systems in building the common software platform (Internet and privacy concerns, 2012). The first direct challenge for this is that the generation of huge scale of data may have digital twin in cloud that could be generating regular updates as a result of which the messaging volume could easily reach between 100 to 10000 per person.

TECHNICAL ARCHITECTURE
Existing research on the topic of "Implementation of Internet of Things in Rural Sensitive Area of Chhattisgarh and Even in India" shows lack of research on its implementation.
The technology followed by our research team would establish a connection between the sensors, embedded device, satellite, mobile phone app and a cloud server cum database.

CONCLUSION
The research was aimed to find out the feasibility of using of Internet of things in the Vehicle, Animal and fields. The design proposed by us has capitalized on the advantages provided by IoT by giving real time data to the consumers. Through the Impact analysis and Competitive analysis, it was found that IoT application if implemented would clearly outweigh in almost all the parameters. These parameters include time management, time saving, efficiency management, crowd management and in the number of options being offered to users. It would cater to all the sections of the society satisfying their varying needs. Also, a robust analysis of the algorithm used for IoT confirmed that the IoT application with the use of direct communication between the devices would give the most accurate in all circumstances. The qualitative research with experts all over the world revealed that there is a challenge in terms of selecting a common protocol that facilitates a secure, efficient and real-time communication between system and the application.

FUTURE SCOPE
Making the model sturdier by taking the signal waiting time into consideration. This would require all the signals to be included as virtual objects. Usage of other sensors costing less than that of the RFID's can be used in detecting the devices.

REFERENCES

1. R. Zhang, Y. Zhang, and K. Ren, "Distributed Privacy-Preserving Access Control in Sensor Networks," IEEE Transactions on Parallel and Distributed Systems, vol. 23, no. 8, pp. 1427–1438, 2012
2. G. Zhang, W. Gong. The research of access control Based on UCON in the Internet of Things. Journal of Software, 6(4), April 2011.
3. J. L. Hernandez-Ramos, A. J. Jara, L. Marin, A. F. Skarmeta. Distributed Capability-based Access Control for the Internet of Things. Journal of Internet Services and Information Security (JISIS), volume: 3, pp 1-16.
4. Tim Kindberg, John Barton, Je Morgan, Gene Becker, Debbie Caswell, Philippe Debaty, Gita Gopal, Marcos Frid, Venky Krishnan, Howard Morris, and Others People, places, things: Web presence for the real world. Mobile Networks and Applications, 7(5):365{376, 2002.
5. Felix Von Reischach, Florian Michahelles, Dominique Guinard, Robert Adelmann, Elgar Fleisch, and A. Schmidt. An evaluation of product identification techniques for mobile phones. In Proc. of the Conference in Human-Computer Interaction (INTERACT 2009), pages 804{816, Uppsala, August 2009. Springer.
6. Akyildiz, I., Su, W., Sankarasubramaniam, Y., & Cayirci, E. (2002). Wireless sensor networks: a survey. Computer Networks , 393–422.
7. Boos, D., Gunter, H., & Kinder, K. (2012). Controllable Accountabilities: The Internet of Things and its challenges for organisations. Online first .
8. Brain, M. (2009, May 27). How do Google traffic maps work? Retrieved May 17, 2013, from How Stuff works: http://blogs.howstuffworks.com /2009/05/27/how-dogoogle-traffic-maps-work/
9. Carrez, F. (2012). Internet of Things Initiative. ITIS, (pp. 7- 9). Dolenjske Toplice.
10. Ching, L. T., & Garg, H. (2002). Designing SMS applications for public transport service system in Singapore. Conference Publications (pp. 706 - 710 vol.2). Browse Conference Publications > Communication Systems, 2002.
11. Coroama, V. (2006). The Smart Tachograph – Individual Accounting of Traffic Costs and its implications. Proceedings of Pervasive , 135-152.
12. Davidson, W. E. (2001). Patent No. US 6,191,708 B1. United States of America.
13. Dempsey, P. P. (2012). News analysis: Safety benefits drive US policy support for connected vehicles. Engineering & Technology , 22-23.
14. Deng, T., & Nelson, J. D. (2011). Recent Developments in Bus Rapid Transit. Transport Reviews , 69 - 96.
15. Evans, D. (2011). How the Next Evolution of the Internet Is Changing Everything. Cisco Internet Business Solutions Group White papers , 3-5.
16. Ezell, S. (2010). Explaining International IT Application Le adership. Intelligent Transportation, 8-20.
17. Gentile, G., Nguyen, S., & Pallottino, S. (2005). Route Choice on Transit Networks with Online Information at Stops. Transportation Science , 289-297.
18. Gobble, M. M. (2013). Big Data: The Next Big Thing in Innovation. Research Technology Management , 64-66.
19. Gontmaker, S. (2011, June). Know when your bus is late with live transit updates in Google Maps. Retrieved 05 20, 2013, from Google Official Blog: http://googleblog.blogspot.sg/2011/06/know-when-yourbus-is-late-with-live.html
20. Hardgrave, B. C., Waller, M., & Miller, R. (2006). RFID's Impact on Out of Stocks: A Sales. Research Report from the Univ. of Arkansas .
21. Hu, H. H., Yang, D. D., Fu, L. L., Xiang, H. H., Fu, C. C., Sang, J. J., et al. (2011). Semantic Web-based policy interaction detection method with rules in smart home for detecting interactions among user policies. IET Communications , 2451-2460.

WOMEN EMPOWERMENT IN MADURAI CITY

DR. S.C.B. SAMUEL ANBU SELVAN
ASST. PROFESSOR
DEPARTMENT OF COMMERCE
THE AMERICAN COLLEGE
MADURAI

V.SUGANYA
LECTURER
DEPARTMENT OF COMMERCE
THE AMERICAN COLLEGE
MADURAI

ABSTRACT

Women in India had status quo with men in ancient times. With traditions and ordinances catching place in the society women were subjugated to oppression which were borne silently by her. Social revolution began with reformers from different aegis of the society made a loud call to Indian women to come out of her shell. Many laws were enacted in favour of women to take her in the path of empowerment. Yet in the male chauvinistic society empowerment has not reached its fullness as was desired. To analyse and find the real position of women in Madurai city,India an attempt has been made by the authors and a sample of 50 women respondents were taken and their socio economic status were questioned. The results of the study are obtained by applying statistical tests.

KEYWORDS
women empowerment, social revoluatin.

INTRODUCTION
The most wonderful creation of God is humankind, made in His own image and likeness. 'Women' as she is, is known in India, for her selfless service. The Holy Scriptures talk about her as one who is full of love and compassion and holds, her love for children as eternal and edifying. During the historic times, she was subjected to inequality and suppression and was reduced to a machine, which is thrown away or discarded after use. Many pioneers emerged to refit her status in the society. Of late, she has come out of her shell, though not completely. This paper attempts to throw light on her real status in the pluralistic society Madurai India.

REVIEW OF LITERATURE
Various books, journals and websites were assessed to identify the research gap in relation to empowerment of women .Social issues in relation to women were examined by social activists who pronounce the evils existing in their society which includes child marriage, sati and poly gamy. Various regional poets have brought out their quest for empowering women and have raised their hands against the atrocity committed to women. Of late commerce studies also talk about empowering women by way of providing empowerment through financial inclusion and entrepreneurial development.

STATEMENT OF THE PROBLEM
Women in India in this technological savvy period play multiple roles at home and at work place. This is common in cities and metros where a good number of women experience economic and social independence. Not many cases have this liberty in down south of Tamil Nadu. Madurai known for its inheritance of traditions of Dravidians and Aryans has within and between different sections of the society a big poisonous vein of illiteracy among women folks .There is an urgent need to focus into the status of women in Madurai city and so the following issues have become relevant to the study.
a)   Identifying the socio economic status of women in Madurai city
b)   Assessing the impact of education on the status of the family and thereby its role in empowering women
c)   Offering suitable solutions to the policy makers.

OBJECTIVES
The objectives of the study are
a)   To Identify the socio economic status of women in Madurai city
b)   To assess the impact of education on the status of the family and thereby its role in empowering women
c)   To Offer suitable solutions to the policy makers.

SCOPE OF THE STUDY
The study entails women empowerment in Madurai city. The results of the study will be applicable to tier II cities in Southern India that inherit similar traditions.

SIGNIFICANCE OF THE STUDY
Women empowerment enables improvement in the standard of living of the community as it makes women sharp emotionally and rationally. In this backdrop the study gains importance.

LIMITATIONS OF THE STUDY
The study is restricted to the Corporation governed part of Madurai. Data collected is purely based on the response provided by women workers who were questioned casually during work time. Data were recorded in sheets after obtaining oral answers from the respondents.

ANALYTICAL FRAMEWORK
A sample size of 50 women was taken at random in Madurai city covering posh and slum areas. Simple percentage is used to analyse the data collected. The socio economic status of women is analysed here.

SOCIO ECONOMIC STATUS OF WOMEN

OCCUPATION

Women in Madurai are doing all types of job from being that of a cleaner to a CEO. Occupation of women plays a vital role in empowerment because it portrays her financial independence in the society.

TABLE 1: OCCUPATION

Occupation	Total	Percentage
Salaried Employees in private sector	25	50
Public sector employees	5	10
Professional	10	20
Business	10	20
Total	**50**	**100**

Source: Primary data.

Table 1 reveals that 50 percent of the total respondents are salaried employees in private sectors doing odd jobs to make their living.

MARITAL STATUS

Married women assume greater responsibility in their homes in being that of a home maker. This is either a part time or a full time job (that is) she works only as a homemaker or takes up multiple roles, both within and outside family. This plays a key role in determining women empowerment and hence the classification.

TABLE 2: MARITAL STATUS

Status	Total	Percentage
Married	37	77.5
Unmarried	13	12.5
	50	100

Source: Primary data

Among 50 respondents 37 of them are marred and support family through their status.

EDUCATION

The backbone of a society is educated women. Educated women enlighten her children and take decision wisely and seriously. This also paves a way for empowerment by enabling her to have her eyes of the mind open to reality.

TABLE 3: EDUCATION

Education	Total	Percentage
Upto HSC	20	40
Graduate	10	20
Post Graduate	5	10
Professional	5	10
Others	10	20
Total	**50**	**100**

Source : Primary data

Table 3 reveals that 40 percent of respondents are qualified only up to HSC and take up blue collared jobs, thus revealing suppression.

MONTHLY INCOME

The income earned enables one to support a decent living. Greater the income greater is the increase in standard of living and contribution made by women towards this helps in empowering them. Table 4 throws light on this phenomenon.

TABLE 4: MONTHLY INCOME

Income per month	Family income	Contribution by women	Contribution by men
Less than Rs. 10,000	Yes	75%	25%
10,000-20,000	Yes	63%	37%
20,000-30,000	Yes	45%	55%
Above 30,000	Yes	39%	61%

Source: Primary data

Table 4 highlights that in case of low income group contribution by women is the highest and among high income group contribution by male is the highest. It can therefore be understood that women folks suffer with poor income and are breadwinners in downtrodden families.

FAMILY TYPE AND SIZE

Madurai known for its inheritance of traditions houses both joint and nuclear families. The waves of modernization have influenced the city with number of families growing smaller in size and nature. Joint families are linked with women doing perennial occupation of house maker alone whereas nuclear families reduce the burden of work in terms of number of members to be served. Table 5 reveals this classification.

TABLE 5: FAMILY TYPE AND SIZE

Family type	Number of respondents	Per centage
Joint	10	20
Nuclear	40	80
Family size		
Less than or equal to 4	35	70
Greater than 4	15	30

Source: Primary data

Table 5 portrays that nuclear families are more in Madurai city and the number of members in 70 per cent of the total families is less than or equal to four.

Applying correlation tests on the variables namely education and income, education and occupation undertaken there is a high degree of positive correlation between the variables and the regression coefficient shows dependence of income and occupation on the educational attribute. This has led to the following findings.

SUMMARY OF FINDINGS, CONCLUSIONS AND SUGGESTIONS

The study has revealed that 50 percent of women are salaried employees and 77.5 percent women are married and 80 percent are educated only upto HSC. 75 per cent earn less than Rss.10,000 per month. 80 per cent live in nuclear families and 70 per cent have less than or equal to 4 members in their families. Conclusions arrived at are married women in Madurai city, are educated up to HSC and are employed in doing blue collared jobs. They contribute to the best

INTERNATIONAL JOURNAL OF RESEARCH IN COMPUTER APPLICATION & MANAGEMENT   86

A Monthly Double-Blind Peer Reviewed (Refereed/Juried) Open Access International e-Journal - Included in the International Serial Directories

http://ijrcm.org.in/

part of the family income and live in nuclear small sized families. The poor state of women in the city is due to lack of collegiate education which prevent them from taking up refined employments. Since education is limited among women, it is concluded that women are not really empowered in Madurai city.

It is suggested that free and compulsory education can be, given to women at graduate level and job oriented studies can be taught as free adult education programme, which will enable them to be empowered.

SCOPE OF FURTHER STUDY
a)   Women empowerment through financial inclusion.
b)   Women empowerment among corporate women employees.
c)   Role of Women in family decision making.

CONCLUSION
When a women is educated the nation is built is a consensus existing among the pioneers and social reformers. Women when educated empower themselves and the society.

REFERENCES
1.   Empowering Women , Competition Success Review Year Book , 2004, pp11-13
2.   Entrepreneurial Skill Development , Kanka.S. S.Chand Publications,New Delhi, 2011.
3.   Women in India, Manorama Year Book 1998, pp183-197

INDIAN CIVIL AVIATION INDUSTRY: OPPORTUNITIES AND CHALLENGES

JAYA G. PRABHU PARRIKAR
ASST. PROFESSOR
D M\'S COLLEGE OF ARTS, SCIENCE & COMMERCE
ASSAGAO

ABSTRACT

India is one among the emerging economies of the world. To sustain its growth potential, it has to built and strengthen its key infrastructure areas particularly transportation. Air transport is a key infrastructure and a major contributor to economy with significant catalytic benefits across wide spectrum of economy. A strong, stable and efficient civil aviation industry would kick start India's growth, facilitate business, trade, and travel and tourism as well as employment generation. Burgeoning India's middle class population, entry of LCCs, relaxation of FDI policy and "make in India" drive of Government are some of the splendid opportunities for aviation industry to rise in near future. However, the industry is also mired by challenges such as viability issues, high cost environment, and competitiveness. Smart management and cutting non value cost will allow aviation to become a top sector and a worth contributor to India's growth story in coming years.

KEYWORDS
civil aviation industry, FDI.

INTRODUCTION
India is in an economic sweet spot and is the fastest growing among large economies. This growth will touch all sectors including aviation. The remainder of this paper looks at the opportunities and challenges of Aviation sector.

India is the ninth largest aviation market in the world and projected to be the third largest aviation market by 2020. To sustain its growth potential, it has to strengthen its infrastructure, particularly transportation infrastructure. Air transport has contributed to the rapid growth of international trade and business by offering safest, fastest and reliable mode of transport. Civil aviation is a key infrastructure sector that facilitates growth of business, trade and tourism, employment generation with significant multiplier effect across various sectors of economy. Indian civil aviation industry has undergone drastic changes over the years and has ushered into a new phase. The entry of Low cost carriers, modernization of airports, FDI in aviation sector and growing emphasis on remote regional connectivity. This paper attempts to study the growing opportunities and challenges faced by the industry.

GLOBAL SCENARIO
A look into the Global civil Aviation industry and its impact on employment and GDP represents the following scenario.

In 2012, U.S. civil aviation-related economic activity generated $1.5 trillion and supported 11.8 million jobs with $459.4 billion in earnings. Civil aviation accounted for 5.4% of U.S. gross domestic product (GDP) [1]. In UK, the contribution of civil aviation to GDP is to the tune of £ 53.3 billion i.e 3.8% of GDP [2]. Dubai civil aviation sector provides around 19% of total employment and generates 28% to Dubai GDP [3]. China, the aviation sector contributes ¥329 billion (0.8%) to Chinese GDP and supports 4.8 million jobs in China [4]. In India, The aviation sector contributes INR 330 billion (0.5%) to Indian GDP and supports 1.7 million jobs in India [5]. This offers a huge untapped market potential for civil aviation industry to explore in the near future.

PRESENT STATUS OF INDIAN AVIATION INDUSTRY
The Indian civil aviation industry has witnessed ups and downs. The industry has been through transition from monopoly market to increasingly competitive market. The state owned national carrier Air India which enjoyed monopoly rights gradually lost its market share to new private players. The entry of low cost carriers in 2003 changed the competitive dynamics of aviation in India.

Air India has historically been the symbol of Indian Aviation. After ruling for nearly half a century it suffered an erosion of market share, image and prestige. Today, Air India is saddled with accumulated losses of Rs. 200 billion, debts of Rs.400 billion and surviving on government bailout packages of Rs.300 billion. The net losses for Air India for the financial year 20013-14 were Rs. 53.88 billion.

High cost environment, depreciating rupee, higher taxation impacted the viability of private airlines. It also witnessed mergers of Kingfisher Airlines with Air Deccan and Jet Airways with Air Sahara.

High operating costs, rising ATF prices, substantial debt levels and losses impacted financial health of all airlines industry. This culminated into the collapse of Kingfisher Airlines and dampened the confidence of investors in India's aviation industry. However, there is always a silver lining in dark clouds. Though the aviation industry is in the midst of turbulent times the future appears promising. The relaxation of FDI norms has attracted Ethiad Airways to purchase stake in Jet Airways and entry of new players particularly Air Asia and Vistara makes the industry lucrative.

FACTORS THAT SUPPORT THE GROWTH OF AVIATION IN INDIA
1.   EXPANDING MIDDLE INCOME GROUP
Rising income levels, favorable demographic environment, change in consumer mindset and lifestyles are the significant factors for the growth of aviation sector in India.

2.   ENTRY OF LOW COST CARRIERS
The entry of Low Cost Carriers changed the competitive dynamics of civil aviation. It targeted the railway first class AC commuters to switch on to LCCs. The low cost fares encouraged more leisure and business travel. It also led to more growth in passenger and cargo traffic. Low fares and no frills pushed the competitiveness of the industry.

3.   GROWING TOURISM
Tourism accounts for 6.8% of GDP and is third largest foreign exchange earner. Strengthening civil aviation would drive India's growth story. It is a key infrastructure industry that supports development of travel and tourism.

4.   SIGNIFICANT AIRPORT INFRASTRUCTURE INVESTMENT
Airport infrastructure is vital for the growth of aviation industry. The growth in passenger and cargo traffic requires substantial investment on airport infrastructure, expansion, improvement and modernization of existing airports as well as infrastructure development at Greenfields airports in tier II /III cities. The emphasis on remote regional connectivity also opens plethora of investment opportunities.

5.   MAKE IN INDIA
The "Make in India" campaign by Government can make India an attractive Maintenance, Repair and Overhaul (MRO) hub in the world. At present, airlines operating in India get 90% of their MRO done abroad, mainly due to cost advantage resulting from the comparatively higher taxation and inadequate MRO facilities in India.

Making India a MRO hub would achieve significant employment generation, save and earn foreign exchange by attracting national and international carriers in India and reduce dependency on other nations. It can be an excellent opportunity for India as it has huge pool of technically qualified people.

6.   FDI IN CIVIL AVIATION

FDI policy of the Government is a major boost for civil aviation industry. The increase in FDI cap is not just a source of equity investment but it also brings with it considerable benefits viz: technology transfer, management knowhow and access to international markets.

CHALLENGES FOR THE AVIATION INDUSTRY

1.   VIABILITY OF AIRLINE INDUSTRY

The airlines are reporting losses despite of year on year growth of passengers. The three major factors that are responsible for affecting airlines profitability are fuel costs, employee costs and MRO. Rising operating costs and servicing of huge debts are shrinking the profits margins of airlines.

The collapse of Kingfisher Airlines also brought the aviation industry into doldrums.

TABLE 1.1: EMPLOYEE COST (Rupees in Crore)

Airlines	2010	2011	2012	2013	2014
SpiceJet	168.39	231.45	402.87	526.80	575.70
JetAirways	1226.65	1342.19	1599.49	1544.24	1899.59

TABLE 1.2: POWER AND FUEL (Rupees in Crore)

Airlines	2010	2011	2012	2013	2014
SpiceJet	814.22	1226.23	39.53	2806.71	3255.79
JetAirways	3151.65	4366.70	6648.41	6992.00	7175.42

TABLE 1.3: PROFITS AFTER TAX (Rupees in Crore)

Airlines	2010	2011	2012	2013	2014
SpiceJet	67.03	101.16	-605.77	-191.08	-1003.24
JetAirways	-467.64	9.69	-1236.1	-485.50	-3667.87

2.   HIGH COSTS OF AVIATION TURBINE FUELS (ATF)

ATF is the major cost component for airlines. It accounts for 40-50% of the total operating costs of airlines. The ATF rates are higher in India as compared to international market.

The ATF cost comprises of import duty, excise duty, VAT, freight and transportation charges besides profit margins of Oil Marketing companies. This adversely affects the financial health of domestic airlines company. Moreover, the weak rupee dollar exchange rate, capacity constraints and unavailability of securing landing slots leads to burning extra fuel which aggravates the economic crisis.

3.   USE OF INTERNET TECHNOLOGY

Internet revolution can be a major threat for airlines industry. Generally, majority flyers are business executives and professional who fly across places and airlines companies derive major chunk of their revenue from business class travel who's pricing is significantly higher than economy class. In a tight economy, companies have resorted to cost cutting drives, reduced travel expenditure and have enhanced video- conferencing facilities at work place. This has significantly brought down business travel costs.

4.   WEAK INVESTORS CONFIDENCE

Shrinking profit margin, high debt levels, rising attrition rates and collapse of airlines has dampened the investors' confidence in aviation and aviation related stocks. All aviation stocks have taken heavy beating since 2008.

5.   HIGHLY COMPETITIVE MARKET

To sustain and survive in the tough market competition airlines have resorted to low fares, consolidated their positions through mergers and acquisition.

CONCLUSION

Although major airlines are on the brink of collapse, operating costs are at an all time high, shrinking or negative profit margins, weak investors' confidence surrounds the aviation industry with dark clouds. However, there is always a silver lining in the dark clouds.

As long as India's growth story is strong, the aviation industry is here to stay. The high working class population, rising income levels makes aviation a promising sector. Currently, only 1% of one billion plus population is making use of air travel. The trips per capita in India still remain very low (0.04) even by the standards' of other emerging markets. This offers a huge untapped market potential for airlines industry.

The 'make in India' campaign, relaxation of FDI policy, urge to set a MRO hub in India, mergers and acquisition of airlines makes the aviation industry future look lucrative. Smart management and cutting non value cost will allow aviation to become a top sector and a worth contributor to India's growth story in coming years

REFERENCES

1.   http://aviationspaceindia.com/content/aviation-mro-india-opportunities-and-challenges
2.   http://civilaviation.gov.in/cs/groups/public/documents/document/moca_001680.pdf
3.   http://www.iata.org/policy/Documents/Benefits-of-Aviation-China-2011[1].pdf
4.   http://www.iata.org/policy/Documents/Benefits-of-Aviation-India-2011.pdf
5.   http://www.makeinindia.com/sector/aviation/
6.   http://www.moneycontrol.com
7.   http://www.rediff.com/business/report/how-rising-competition-adds-to-air-indias-woes/20141104.htm
8.   https://www.faa.gov/air_traffic/.../2015-economic-impact-report.pdf
9.   www.dubaiairports.ae/.../oxford-economics_explaining-dubai's-aviation

INTERNATIONAL JOURNAL OF RESEARCH IN COMPUTER APPLICATION & MANAGEMENT   89

A Monthly Double-Blind Peer Reviewed (Refereed/Juried) Open Access International e-Journal - Included in the International Serial Directories

http://ijrcm.org.in/

ROLE OF PUNE MUNICIPAL CORPORATION IN SUSTAINABLE DEVELOPMENT OF SLUMS

SHEETAL RANDHIR
ASST. PROFESSOR
TIKARAM JAGGANNATH COLLEGE
KHADKI

ABSTRACT

Pune is the eighth largest city and eighth largest metropolis in India, and the second largest in the state of Maharashtra after Mumbai.. As per 2001 census population of Pune is 25,38,473,. Out of that 40% population are slum dwellers. The city of Pune is managed by the Pune Municipal Corporation (PMC) which is governed by The Bombay provisional municipal corporation Act 1949. As per the secondary information collected from PMCs CITY DEVELOPMENT PALN 2006-2012 , there are 564 slums in Pune city. With growing economic activity in Pune, the slum population has been increasing at a tremendous rate. Due to constant growth in Pune's slum population and pressure on the existing basic services to slums which is provided by Pune municipal corporation the present study is undertaken.

KEYWORDS

Pune municipal corporation, slums.

1.   INTRODUCTION

Pune is the eighth largest city and eighth largest metropolis in India, and the second largest in the state of Maharashtra after Mumbai. As per 2001 census population of Pune is 25,38,473,. Out of that 40% population are slum dwellers. The city of Pune is managed by the Pune Municipal Corporation (PMC) which is governed by The Bombay provisional municipal corporation Act 1949. The Corporation consists of 149 directly elected councilors who are led by the Mayor of Pune, a titular position mainly acting as an ambassador and representative of the city. Actual executive power is vested in the Municipal Commissioner, an officer of the Indian Administrative Service who is appointed by the Government of Maharashtra. There are 14 administrative wards and 4 divisional offices/zones . The administrative wing of PMC is divided into 14 wards, each headed by a ward officer.

FIG. 1
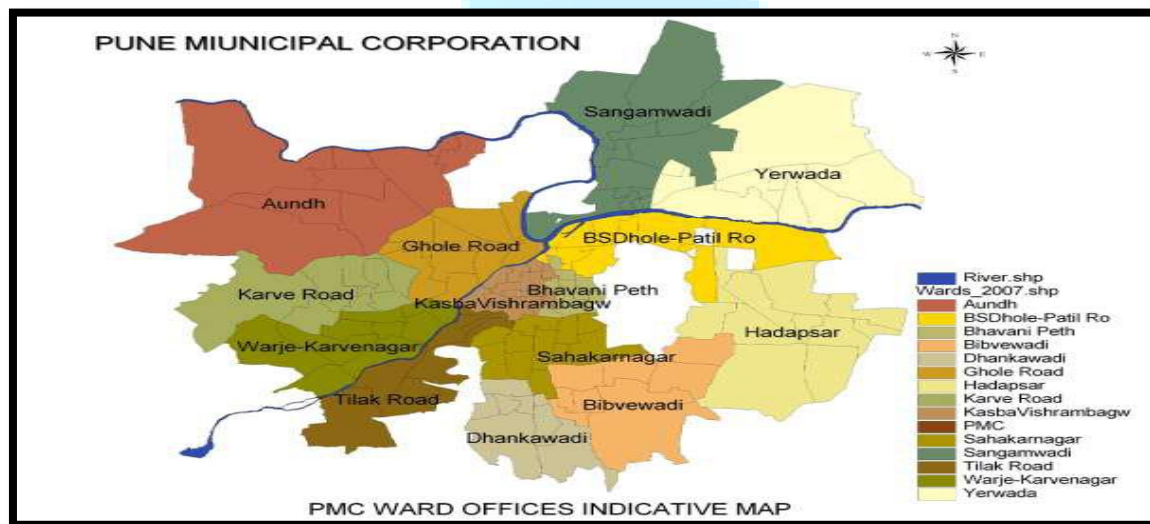
Source: Pune Municipal Corporation Scity Development Plan 2006-2012

Apart from the PMC, four other administrative bodies are active within the Pune Metropolitan Area:
- ❖   Pimpri-Chinchwad Municipal Corporation (PCMC responsible for Pimpri-Chinchwad and its surroundings)
- ❖   Khadki Cantonment Board (KCB), responsible for Khadki –Pune 3
- ❖   Pune Cantonment Board (PCB), responsible for Pune Cantonment Pune -1
- ❖   Dehu Road Cantonment Board, responsible for the Dehu Road area

As per the secondary information collected from PMCs CITY DEVELOPMENT PALN 2006-2012 , there are 564 slums in Pune city, of which 353 are declared and 211 undeclared slums.[but As per information from Shelter Associates, an NGO working on Pune Slums the total number of slums is 447 (253 declared, 113 undeclared, 9 partly declared, 8 in process of rehabilitation and 64 not recorded)]

With growing economic activity in Pune, the slum population has been increasing at a tremendous rate. According to the Census of India and ESR 2004-05 the growth of the slum population was higher than that of the total population. It is observed that during 1971, the annual growth in slum population was about 10 per cent against the total growth in population at 3.5 per cent. This trend continued further but at a lower pace and picked up again in 2001. In terms of proportion of the population living in slums, it has also increased from 15 per cent in 1961 to 40 percent in 2001. This growth in the composition of slum population could be attributed to non-availability of housing stock at affordable costs, leading to the emergence of a large number of slums.

2.   RESEARCH OBJECTIVES

The major objectives of the study are:
1.   To study the role Pune municipal corporation in development of slums.
2.   To Study the notification process and The basic Services To Slum
3.   To suggest the measures for sustainable development.

3.   STATEMENT OF THE PROBLEM

Pune municipal corporation plays vital role in sustainable development of slums in pune city through Notifying slums.

INTERNATIONAL JOURNAL OF RESEARCH IN COMPUTER APPLICATION & MANAGEMENT   90

A Monthly Double-Blind Peer Reviewed (Refereed/Juried) Open Access International e-Journal - Included in the International Serial Directories

http://ijrcm.org.in/

4. DEFINITIONS

1.   ANNUAL SLUM SERVICE CHARGES

Annual slum service charges are the charges for slum services which are provided by Pune Municipal Corporation.

2.   TAX

Tax is a charge or burden laid upon persons or property for the support of a government.

3.   MUNICIPAL TAXES

The municipal tax is imposed on holders of buildings and land by virtue of the law .The charges is prepared once a year and refers to the period between April 1 to March 31of the same year.

4.   SLUMS

According to the Maharashtra Slum Areas, (Improvement, Clearance and Redevelopment) Act of 1971, a slum is loosely defined as' a congested, unhygienic area or buildings that are public hazards."

5.   NOTIFIED SLUM DWELLERS/ DECLARED SLUM DWELLERS

Under a resolution passed by the government of Maharashtra slum dwellers that have lived in the city prior to 1995 are recognized as legitimate dwellers who are entitled to resettlement if evicted and so merits basic services
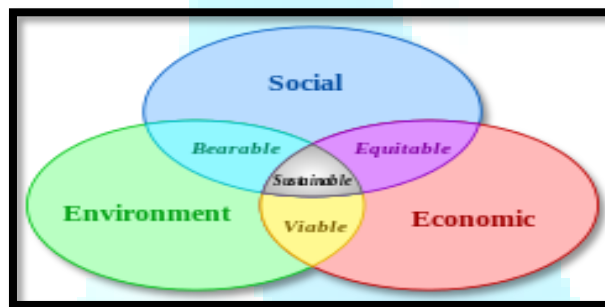
6.   MUNICIPAL CORPORATION

An incorporated political subdivision of a state that is composed of the citizens of a designated geographic area and which performs certain state functions on a local level and possesses such powers as are conferred upon it by the state. A municipal corporation is a city, town, village, or borough that has governmental powers.

7.   SUSTAINABLE DEVELOPMENT

According to the World Commission on Environment and Development's (the Brundtland Commission, *1987*) "Development that meets the needs of the present without compromising the ability of future generations to meet their own needs."

Sustainable Development suggest that meeting the needs of the future depends on how well we balance social, economic, and environmental objectives--or needs--when making decisions today.
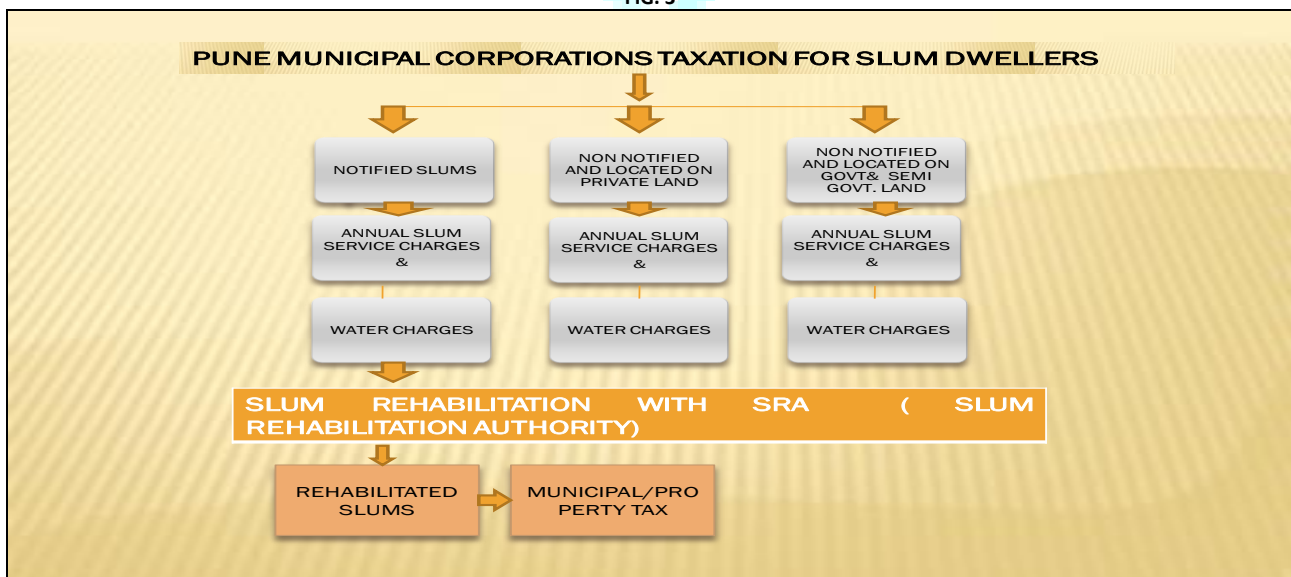
FIG. 2

5.   THE SERVICES PROVIDED BY PUNE MUNICIPAL CORPORATION TO SLUMS

The administrative wing of PMC is divided into 14 wards, each headed by a ward officer.The total strength of officers and employees at PMC is about 16,731, as against the approved employment level of about 17,986. Following are the prime functional departments of PMC:

- ❖   General Administration Public Health
- ❖   Municipal Secretary Water Supply
- ❖   Tax Collection, Octroi Sewerage
- ❖   Public Security- Fire& Street Lighting Accounts and Audit
- ❖   Education Slum Clearance/Improvement
- ❖   City Development, Primary Health
- ❖   Public Works Transport Department / Workshop

6.   THE PATTERN OF COLLECTION OF MUNICIPAL CHARGES FROM SLUM DWELLERS OF PMC

FIG. 3

INTERNATIONAL JOURNAL OF RESEARCH IN COMPUTER APPLICATION & MANAGEMENT   91

A Monthly Double-Blind Peer Reviewed (Refereed/Juried) Open Access International e-Journal - Included in the International Serial Directories

http://ijrcm.org.in/

WHY NOTIFICATION

Under a resolution passed by the government of Maharashtra slum dwellers that have lived in the city prior to 1995 are recognized as legitimate dwellers who are entitled to resettlement if evicted and so merits basic services & have to pay municipal charges like Annual slum service charges & water taxes to PMC slum development department (*Zopadpatti Punarvasan Vibhag*). *{Criteria for notification has changed, that is Maharashtra slum dwellers that have lived in the city prior to 2001 are recognized as legitimate dwellers}*

SLUM LOCATIONS IN THE 14 ADMINISTRATIVE WARD OFFICES OF THE PUNE MUNICIPAL CORPORATION

TABLE 1

Sr no.	DMINISTRATIVE WARD	NO. OF SLUMS	NO. OF SLUM STRUCTURE	NO. OF NOTIFIED SLUMS	NO. OF NOTIFIED SLUMS STRUCTURE	NO. OF SLUMS INVOLVED IN REHABILITATION WITH SRA	NO. OF SLUMS INVOLVED IN REHABILITATION WITH SRA STRUCTURE
1.	Aundh	34	8,682	20	6,548	2	579
2.	Kothrud	23	12,887	12	7933	10	6,010
3.	Ghole Road	50	15,038	31	13294	17	6919
4.	Warje-Karvenagar	27	10,675	11	3,177	4	1,016
5.	Dhole-Patil Road	62	16,177	25	6789	10	2120
6.	Hadapasar	56	16,256	19	7616	13	4423
7.	Ahamadnagar Road	13	5,871	7	4,623	5	1,138
8.	Sangamwadi	53	21,231	19	11582	4	1739
9.	Bhavani Peth	62	12,933	38	9157	14	4687
10.	Kasba-Visrambaugwada	12	2,161	3	733	2	760
11.	Sahakarnagar	27	13,828	21	13,368	7	7,203
12.	Tilak Road	42	16,958	20	13464	13	10357
13.	Bibvewadi	11	3,820	8	1,781	2	468
14.	Dhankavdi	5	1,066	4	981	0	0
Total		477	1,57,583	238		103	

Source: Taken From SLUM ATLAS Prepared By Ngo MASHAL Along With The Pune Municipal Corporation's Urban Community Development Department And Another NGO CHF International

7. RESEARCH METHODOLOGY

❖ **SOURCES OF DATA**

The study is exploratory in nature and is based on both primary and secondary data. Secondary data was collected from various journals, articles, working papers, NGO reports etc. Primary data was enumerated from a field survey in the study region**. (Pune municipal corporation)**

❖ **AREA OF SAMPLING**

The study was conducted in the Pune municipal corporation through a field survey

❖ **SAMPLE SIZE**

50 samples from 2 WARD(**Dhole-Patil Road** , **Bhavani Peth**) from the area of study have been considered to conduct the present study.

❖ **METHOD FOR DATA COLLECTION**

A structured interview schedule was prepared and used for collecting data from the notified slum dwellers. Corporators, tax officer, Gavani department , Both open ended and close ended questions were included in the schedule.

8. THUS THE FINDINGS OF THE STUDY CAN BE SUMMARIZED AS FOLLOWS

1. Pune municipal corporation is playing a vital role in making available   basic services to slums although *There is* constant growth in Pune's slum population and pressure on the existing basic services to slums which is provided by Pune municipal corporation.
2. There is no documentation of slum dwellers record in pune municipal corporation
3. There is lack of mechanism for collection of annual slum service charges & water taxes (municipal charges).
4. There is need of awareness of slum dwellers on why to pay municipal charges .
5. Maximum number of respondents accepted that, the objectives of PMCs behind notifying slums are not accomplished due to changing policies of government.
6. There is constant growth in Pune's slum population and pressure on the existing basic services to slums which is provided by Pune municipal corporation.

9. SUGGESTIONS

1. There should be public participation(slum participation) in development process.
2. There should be financial assistance from slums to Pune Municipal Corporation.
3. For sustainable development of slums ,There should be proper mechanism for collection of annual slum service charges & water taxes (municipal charges),where every slum has unique identity code like property tax payer .
4. Corporators /Pune municipal corporations   should take initiative to make awareness of " Why to Pay annual slum service charges & water taxes (municipal charges".)
5. There should be *Pune Municipal Corporation & Slum Association* .Vasahat Adhikari / Divisional Officer should have contact with all slums under the area.

10. CONCLUSION

Thus it can be concluded from the above study that Pune municipal corporation is playing a vital role in making available   basic services to slums although *There is* constant growth in Pune's slum population and pressure on the existing basic services to slums which is provided by Pune municipal corporation. There is need of proper mechanism to implement notifying slum strategies and awareness of this subject among slum dwellers

Countries need to recognize that the urban poor are active agents and not just beneficiaries of development.

Local governments should develop strategies to prevent the formation of new slums. These should include access to affordable land, reasonably priced materials, employment opportunities, and basic infrastructure and social services.

REFERENCES

1. Babara S. Mensch, Monica J Grant, Mary P Sebastian (April 2004)-The Effect of livelihood Intervention in Urban slums in India: Do Vocational Counseling and Training Alter the Attitude and Behavior of Adolescent Girls?- Paper Presented at The population Association of America Annual meeting In Boston.

INTERNATIONAL JOURNAL OF RESEARCH IN COMPUTER APPLICATION & MANAGEMENT

A Monthly Double-Blind Peer Reviewed (Refereed/Juried) Open Access International e-Journal - Included in the International Serial Directories

http://ijrcm.org.in/

92

2. City Development Plan2006-2012-Pune Municipal Corporation- This Plan focuses on *The Vibrant Culture of Pune,* PUNE MUNICIPAL CORPORATION (PMC), REVIEW OF MUNICIPAL FINANCES.. PMC TAXES , SERVICESS ECT.

3. Dr. Durga Das Basu -1995- Introduction to the constitution of India – seventeenth Edition- Prentice-hall of India private ltd. –New Delhi : This book focuses on nature of the constitution, government of the union , government of the state , new system of local government ect.

4. Hon. Pravinsinh Pardeshi (IAS.)Commissioner of PMC, Pune municipal corporation : (2007-08):Mudran Maharshi Mamasaheb Date Mudranalya:Pune : This book focuses on different tax charges for different heads

5. MS Alamgir,Ma Jabbar,Ms Islam (2009) – Assessing the livelihood of Dhaka city- Journal of the Bangladesh Agriculture University .

6. Ratnadeep Bane & Ami Rawal-(2002)-Slums: A Case study of Anand City-M. S. University Baroda Gujarat.- focuses on slums growing population and burdens on existing facilities provided by municipal corporations .

7. Selja(Union Housing and Urban Poverty Alleviation Minister) : (July 1 , 2009)- Property rights for slum dwellers proposed- Press trust of India – New Delhi)

8. (Vijay Viswanathan & Shabana Tharkar :(2009) - Can the divide be bridged: Overview of life in urban slums in India - university of Chennai.

SALES PROMOTION STRATEGY: A STIMULATING FACTOR FOR THE CONSUMERS TOWARDS THE ORGANIZED RETAIL SECTOR IN BILASPUR

PRATIBHA RAI
RESEARCH SCHOLAR
GURU GHASIDAS VISHWAVIDYALAYA
BILASPUR

DR. (MRS.) B.B. PANDEY
ASST. PROFESSOR (Sr. Scale)
GURU GHASIDAS VISHWAVIDYALAYA
BILASPUR

ABSTRACT

The Retail Sector is growing and modernizing speedily in line with India's economic growth. It is the high time for Indian retail with continued economic expansion and retail growth. Indian retail sector has gone through major transformation from last few years with visible shifts towards organized retail .Indian retail industry is one of the top five retail markets in the world by economic value. The country stands 3rd among 30 countries in terms of global retail development. The current market size of Indian retail industry is about US$ 520 billion with annual growth rate of 14- 15 percent. Sales promotion is one of the techniques covered under the scope of promotion mix. Retailers introduce many sales promotions in the market either consumer oriented or trade oriented which is attracts and stimulates to purchase the products. The sales promotion scheme frequently changes because the cut throat competition among the companies. The present research paper is highlighting the different types of promotional schemes offered by organised retailers and their impact on consumer buying behavior in order to attract and influence the new and existing consumers in organized retail sector. Sales promotion, consumer behaviour, brand and consumer satisfaction are the different parameters used in this research paper. The objective of this paper is to study the role and impact of sales promotion on shopping behaviour of consumes. Research design is descriptive in nature.

KEYWORDS

Sales Promotion, Brand, Consumer Behavior and Consumer Satisfaction.

INTRODUCTION

Retail sector is the biggest industry of world wide. India has a fastest growing retail market in the world. Today the retail sector is one of the most important contributors in Indian economy. Indian retail sector leads for 20 to 22 % of GDP of Indian economy. Retail stores are an important part of a nation's economic and social structure as they play a very important role in creating employment opportunities for the growing labour force. The Indian retail market is estimated to be US$ 520 billion and one of the top five retail markets in the world by economic value.

ORGANIZED RETAIL

Organized Retail sector refers to the sectors undertaken by licensed retailers, that is, those who are registered for sales tax, income tax and many more. These include the corporate retail formats of the exclusive brand outlets, hypermarkets, supermarkets, departmental stores, specialty stores, convenience stores and discount stores. Growth in organized retail formats in India has been boosted by the liberalization policies pursued by the government.

TABLE 1: SHARE OF ORGANIZED RETAIL IN TOTAL RETAIL SECTOR IN INDIA

Year	% age Share	Source
2005	3.5	AT Kearney
2008	5	MC- Kinsey & Company
2010	8	AT Kearney
2013	10	AT Kearney

RETAIL IN CHHATTISGARH

Chhattisgarh is one amongst the newly created state, and is under transformation from the under developed state to a developed one. A major section of the society is excluded from organized retail sector and is mainly dependent on unorganized retailing for their shopping facilities and as a result, this lead to the need of systematized retailing in the state for transition of consumer preferences from unorganized retail sector to the organized retail sector in the state. And also the level of access of consumers dealing with organized retail sector in Chhattisgarh is low in comparison to national average. Lower extent of reach of organized retail outlets in Chhattisgarh is a matter of distress. The retail sector in Chhattisgarh is mainly concentrated into four major cities Raipur, Bilaspur, Bhilai, and Durg. And based on this we have selected Bilaspur city as the area of this present study. As in Bilaspur there is an existence of 2 big shopping malls, Big bazaar, and also such other organized retail sector participants. So it is a relatively concentrated consumer zone for our study hence we have selected the said city as an area of our study for the purpose of this research.

SALES PROMOTION

Sales promotion is a technique of promotion which supplements and co-ordinates advertising and personal selling efforts of a firm. It is any short-term incentive used by a firm to boost the sales of its product. It has become a valuable tool for both manufacturers and retailers for influencing the purchase decision of the consumers. Sales promotion is an important part of the marketing mix.
According to Philip Kotler (2006) Sales Promotion is an activity that 'consists of a diverse collection of incentive tools mostly short term designed to stimulate quicker and greater purchase of particular products or services by consumer or the trade'. Thus we can say that sales promotion is a kind of promotion method which offers reward to customers by way of a discount, a coupon, an additional product and various other schemes.

OBJECTIVES OF THE STUDY

1. To identify various types of sales promotion schemes offered by organized retailer of Bilaspur.
2. Degree of responsiveness of consumers towards sales promotion strategies adopted by retailers.
3. To analyses the impact of Sales Promotion Schemes offered by organized retailers on consumers of Bilaspur city.

LITERATURE REVIEW

Bareja Gourav and Sain mangal (2014) in their research conducted on "impact of pricing strategy as promotion strategy in organized retail sector" revealed that India is developing itself as a market full of opportunities for the marketers/Entrepreneurs and also it is going to result in certain benefits to the consumers. More over what the companies have to focus is on the priorities of the consumers which can be in the form of the benefits associated with the products.

McNeill Lisa S., Fam Kim Shyan & Chung Kim (2014) In their paper "Applying transaction utility theory to sales promotion – the impact of culture on consumer satisfaction" revealed that Transaction utility theory tells us that consumers make overall cognitive judgments about a price-based promotion after the experience, driving their intention to repeat the process in the future. In their study they examined the impact of culture on satisfaction and pleasure with, and resultant preference for, price-based sales promotion in two culturally dissimilar consumer markets, New Zealand and China and find that, while transaction utility theory is supported in the collectivist market of China, it is not in the individualist market of New Zealand, suggesting a need for further investigation cross-culturally.

Muthukrishanaveni D. and Murugananadam D. (2013) in their article "Effect of Sales Promotions on Consumer Purchase Behaviour with Reference to Personal Care Products" concluded that Sales promotion is considered to be a successful and effective weapon in the hands of companies in the personal hygiene product category to influence consumers to purchase. However, sales promotion schemes may win a "share of mind" but do not guarantee a place in the "share of heart" for the firm. Introducing schemes is not the only sufficient mechanism for firms. It needs to be ensured that during the schemes the products are also made available in the stores. The non availability of the items in the stores after the company has declared the promotional offer/scheme creates a negative impact in the minds of consumers.

Dr. Priyanka Mokshmar(2013), on her study on "Factors affecting the retail outlet preference: the effect of sales promotion schemes among customers of FMCG products" explained that the major factors related to promotion and other value addition aspects that make customer choose and visit a particular retail store for the purchase of FMCG products.

Shallu and Gupta Sangeeta (2013) In their research conducted on "Impact of Promotional Activities on Consumer Buying Behavior: A Study of Cosmetic Industry" revealed that promotional activities actually work; that is, have any positive effects on consumers' purchasing behavior or brand choice in cosmetic industry. This study attempts to provide an in-depth analysis into the way different promotional factors influence consumers' decision-making processes.

Soni Neha and Varghese Manoj (2013) in their research conducted on Impact of Sales Promotion Tools on Consumer's Purchase Decision towards White Good (Refrigerator) at Durg and Bhilai Region of CG, India concluded that sales promotion tools plays significant role in consumer purchase decision. The respondents are most influenced by offer further followed by premium and contest while price pack and rebate have been found to be insignificant.

Pandey Sanjay and Mishra Apoorwa (2012) in their study conducted on impact of sales promotion schemes on retailer of Chhattisgarh recommended following Sales promotion strategies for the retailer of Chhattisgarh and the strategies are as follows: Freebies, Discount, Store Markdown, and Coupon

Vyas Preeti H (2007) in her study conducted on "sales promotion practices in apparel retail sector and challenges ahead" concluded that the companies will bring many promotional practices which they have been following in developed markets which will increase the use of sales promotion activities even further. Indian brands will have to withstand turbulent conditions and learn to survive.

Banerjee Arindam and Divakar Suresh (2001) in their article "Price Thresholds in a Promotion Intensive Retail Environment: Implications on Consumer Purchase Behaviour and Managerial Insights" concluded that It is important for retail managers to be sensitive to the issue that consumers can no longer be assumed to make purchase decisions in a myopic framework.

RESEARCH METHODOLOGY

Research Design: A Research design refers as the framework or plan for a study that guides as well as helps in data collection and analysis of the data. The present study is descriptive in nature. Being the study descriptive in nature; it will go through sampling, data collection, and its analysis.

Data Sources: The study has done on the basis of primary and secondary data.

Secondary Data: Secondary data is collected from books, newspapers, articles, websites various reports magazines etc.

Primary Data: The primary source of data is respondents (customers) and collected by using a predefined questionnaire.

Research Approach – Survey Method

Research Instrument – Questionnaire
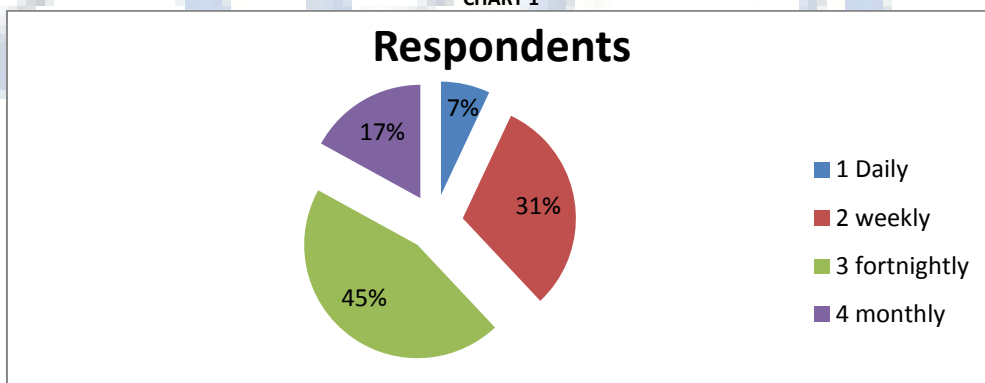
Contact Method – Personal contact

Sample Size – 100

DATA ANALYSIS AND INTERPRETATION

1.　　HOW OFTEN YOU VISIT SHOPPING MALLS?

TABLE NO. 2

S. no.	Frequency	No. of Respondents	%
1	Daily	7	7
2	Weekly	31	31
3	fortnightly	45	45
4	Monthly	17	17

CHART 1

Respondents

- 1 Daily — 7%
- 2 weekly — 31%
- 3 fortnightly — 45%
- 4 monthly — 17%

Interpretation & Finding: It has been observed from the above data that the no of consumers visiting organized retail outlets daily are very less, i.e. > 10%. And the no of consumers visiting weekly is much higher about 31 %. However the majority of consumers about 45% visit the organized retail outlets fortnightly. And the monthly visitors are 17%.

2.   **WHAT IS THE PURPOSE OF VISITING SHOPPING MALLS?**

TABLE NO. 3

S. no.	Purpose	No. of Respondents	%
1	Shopping	32	32
2	Entertainment	30	30
3	Window shopping	38	38

CHART 2

Respondents

- 1 Shopping
- 2 Entertainment
- 3 Window shopping

38% 32% 30%
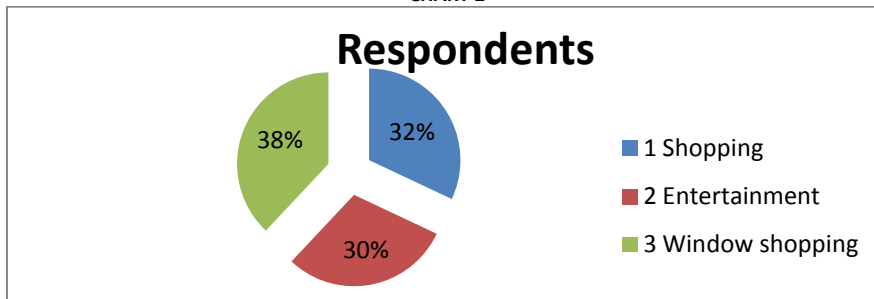
Interpretation & Finding: The purpose of this question is to identify the purpose of the visitors in the shopping malls. Here we observed that the main purpose of the visitors is window shopping which is leading the chart with 38% followed by shopping which constitutes 32% of the visitors and lastly the purpose is entertainment which includes the remaining 30%.

3.   **WHAT IS THE REASON FOR PREFERRING ORGANIZED RETAIL STORE?**

TABLE NO. 4

S. No	Reasons	No. of Respondents	%
1	Quality	40	40
2	Store layout	27	27
3	Brand and price	20	20
4	One stop shopping	13	13

CHART 3

Respondents

- 1 Quality
- 2 Store layout
- 3 Brand and price
- 4 One stop shopping

13% 40% 20% 27%
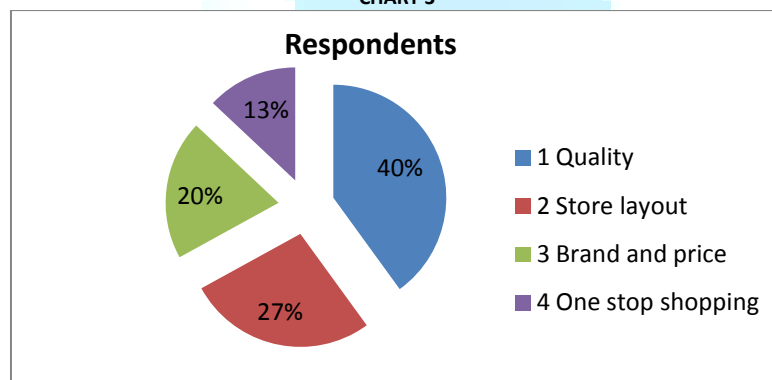
Interpretation & Finding: The purpose of this question is to know the reason for preferring organized retail outlets by the visitors. And from the data collected it has been concluded that the main factor for preference is the quality (40%) followed by the store layout (27%) and after it the reason is brand loyalty and pricing (20%). And the least preferring factor is one stop shopping (13%).

4.   **WHICH PROMOTIONAL SCHEMES INFLUENCE YOU THE MOST?**

TABLE NO. 5

S.No	Schemes	No of Respondents	%
1	Price discount	46	46
2	Bonus packs	14	14
3	Exchange offer	9	9
4	Coupons	4	4
5	Buy one get one free	27	27

CHART 4

Respondents

- 1 Price discount
- 2 Bonus packs
- 3 Exchange offer
- 4 Coupons
- 5 Buy one get one free

27% 46% 4% 9% 14%
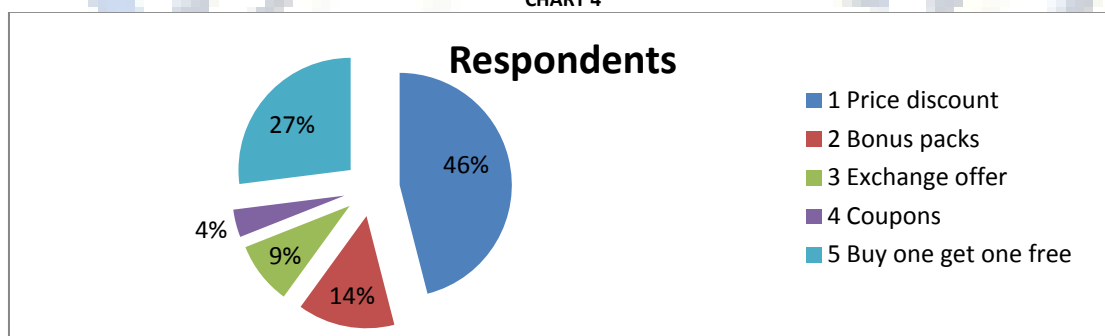
Interpretation & Finding: The objective of this question is to identify the promotional scheme which influences consumers the most. Here we concluded from the data collected that major influencing factor which influences the most is price discount offered by the organized retail outlets with 46%, followed by buy one get one offered with 27 %, subsequent to this its bonus packs (14%), then it's the exchange offer with 9%, and lastly it is coupons with least of 4%.

5.   DOES SALES PROMOTION ACTUALLY STIMULATE TO VISIT TO THE ORGANIZED RETAIL STORE?

TABLE NO. 6

| S.No.	Level	No of Respondents	%
1	Yes	55	55
2	No	16	16
3	To some extent	29	39
4	Can't say	0	-

CHART 5
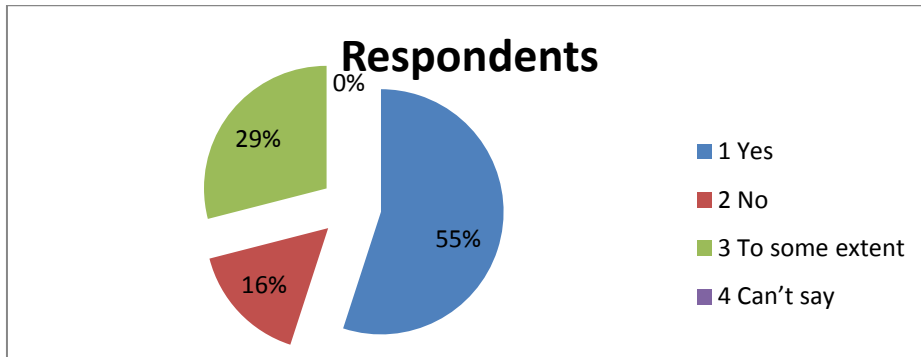
Interpretation & findings: The objective of the above question is to know whether the sales promotion strategy adopted by the organized retail sector does actually stimulates the consumers for visiting the shopping mall and here it was observed by the data collected that this strategy actually stimulates the consumers with leading the chart with more than 50 %, followed by 29 % of the respondents who were stimulated but to some extent only and remaining was not at all stimulated and affected by these strategies.

6.   WHAT IS THE MAIN REASON OF PURCHASING THE PRODUCTS FROM ORGANIZED RETAIL SECTOR?

TABLE NO. 7

| S.No.	Reasons	No of Respondents	%
1	Sales Promotion	32	32
2	Product Satisfaction	34	34
3	Good packaging	19	19
4	Recommendation to purchase	15	15

CHART 6
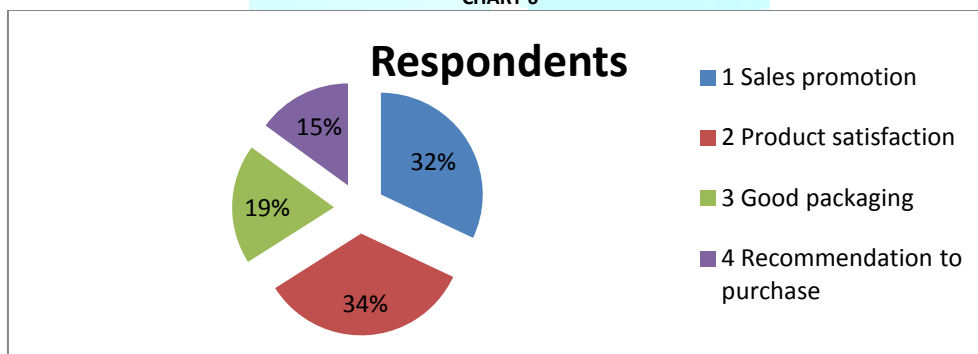
Interpretation & Finding: The motive behind the question was to evaluate the main reason behind the purchasing of products from the organized retail sector. And from the data collected it has been observed that here it's the product satisfaction which leads the chart with 34% closely followed by the sales promotional activities with 32% then it's the good packaging which attracts about the 20% consumers to purchase from shopping malls and lastly it's the recommendation to purchase or insistence by the other existing consumers.

7.   WHAT WILL YOU SAY ABOUT THE QUALITY OF SERVICES PROVIDED BY ORGANIZED RETAIL STORE?

TABLE NO. 8

S. No	Level	No of Respondents	%
1	Excellent	23	23
2	Good	38	38
3	Average	31	31
4	Poor	8	8

CHART 7
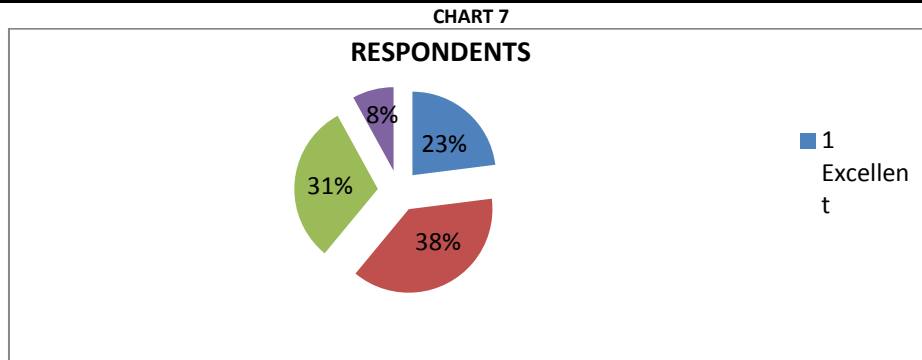
Interpretation & Finding: 38% peoples say that organized retail provide good service to them, 31% peoples feel average, 23% peoples are excellent and 8% peoples feels poor to them. The objective of this question was to know about the quality of services offered by the organized retail stores here it is observed from the data that about 40% of the consumer ranked it good as compared to 31% which ranked it as average followed by the 23% which rated it excellent and lastly the remaining 8 % ranked it poor.

LIMITATIONS
- The sample size is 100 which is small and that might affect the overall reliability.
- The study is limited to only Bilaspur and cannot be generalized.
- The time available is short and that also limits the study.
- The study is based on the opinion of respondents (questionnaire) and there can be Bias. The questionnaire might have excluded some important factors.

SUGGESTION
- In a city like Bilaspur, Retail managers should adopt the right marketing strategies and consumer attraction techniques.
- They should have proper planning on pricing the product.
- They should focus on service and quality of the product.
- They should change their promotional schemes time to time.
- Regular surveys should be conducted regarding effectiveness of the promotions as it is mandatory for the marketer to remain updated with the customers demand. To remain ahead in competition it's important to be updated with customers ever changing needs.

CONCLUSION
On the basis of above findings it can be concluded that sales promotion plays a significant role in consumer buying behavior and it actually stimulates the shopping behavior of consumers toward the organized retail outlets. The respondents of Bilaspur are most influenced by price discount followed by buy one get one free and other similar offered schemes. And it is also observed from the views of the respondents that product satisfaction arise from the products comes first and then comes the sales promotion for motivating the consumers for purchasing products from organized retail store (shopping malls, etc.). And being a basic human tendency the Consumers are also very price sensitive so the promotional strategies must be formulated by keeping in mind the pricing and discounting factors and its influence on the mind of the consumers. Hope this study will helps retailer while planning and implementing any strategy related to sales promotion in the selected area.

REFERENCES
1. Banerjee Arindam and Divakar Suresh (2001). Price Thresholds in a Promotion Intensive Retail Environment: Implications on Consumer Purchase Behaviour and Managerial Insights. *Vikalpa, 26*(2), 15-31.
2. Bareja Gourav and Sain Mangal (2014). Impact pricing strategy's as promotional tool in organized retail sector. *International journal of informative & futuristic research, 1*(6), 47-56.
3. McNeill Lisa S. Fam Kim Shyan and Chung Kim (2014). Applying transaction utility theory to sales promotion – the impact of culture on consumer satisfaction. *The International Review of Retail, Distribution and Consumer Research, 24*(2), 166–185.
4. Mokshmar Priyanka (2013). Factors affecting the retail outlet preference: the effect of sales promotion schemes among the consumers of FMCG Products. *Shodh Ganga, 3*(1), 49-54
5. Muthukrishnaveni D and Muruganandam D (2013). Effect of Sales Promotions on consumer purchase behaviour with reference to personal care products. *International Journal of Scientific Research, 2*(10), 1-1
6. Pandey Sanjay and Mishra Apoorwa (2012). Impact of sales promotion schemes on Retailer of Chhattisgarh. *International Journal of Research in Finance & Marketing, 2* (10), 30-49.
7. Shallu and Gupta Sangeeta (2013). Impact of Promotional Activities on Consumer Buying Behaviour: A Study of Cosmetic Industry. *International Journal of Commerce, Business and Management (IJCBM). 2*(6), 379-385.
8. Soni Neha and Varghese Manoj (2013). Impact of Sales Promotion Tools on Consumer's Purchase Decision towards White Good (Refrigerator) at Durg and Bhilai Region of CG, India. *Research Journal of Management Science, 2*(7), 10-14.
9. Vyas Preeta H. (2007). Sales Promotion Practices in Apparel Retail Sector and Challenges Ahead. *IIM Ahmadabad Research and Publication* Vol. W.P. No.2007-11-02, 1-13.

BOOKS
10. Kothari, C. R. (2004). *Research Methodology: methods and technique* (2nd ed.). New Delhi: New Age International (P) ltd.
11. Kotler, P., & Keller, K. L. (2009). *Marketing Management (*14th ed.*).* Upper Saddle River, N.J: Pearson Prentice Hall.
12. Malhotra, N. K. (2010). *Marketing Research: An applied orientation* (2nd ed.). Frenchs Forest, N.S.W.: Pearson Education.
13. Suja R. Nair, (2006). Consumer behaviour, Himalaya Publishing house, New Delhi.

EFFECT OF STEREOTYPE ON EMPLOYMENT OPPORTUNITIES FOR PEOPLE LIVING WITH DISABILITIES IN SELECTED UNIVERSITIES IN KENYA

JOHN WEKESA WANJALA
ASST. LECTURER
MURANG'A UNIVERSITY COLLEGE
KENYA

DR. SUSAN WERE
LECTURER
JOMO KENYATTA UNIVERSITY OF AGRICULTURE AND TECHNOLOGY
KENYA

DR. WILLY MUTURI
SR. LECTURER
JOMO KENYATTA UNIVERSITY OF AGRICULTURE AND TECHNOLOGY
KENYA

ABSTRACT

All over the world, reports from different organizations say that people living with disabilities (PLWDs) are underemployed. In Kenya besides many organizations lobbying for the increased employment of PLWDs, amplified by the constitution that at least 5% elective positions must be spared for (PLWDs) there is lower rate of employment. For example the entire cabinet and parastatal secretaries of about twenty six people only one is disabled. The empirical review has pointed out that education has affected negatively on people with disability employment; the employer stereotype also has made it difficult for PLWDs to attain jobs. The literature revealed that the organizational culture is of dare consequences as it may work against the advantage of the disabled, also inaccessibility inhibit Disabled employees from accessing organizational facilities. The employer perception in the literature shows that employers view people living with disabilities as costly. The objective of the study investigated the challenges facing employment opportunities for PLWDs while the specific objectives investigated; the effect of education on employment opportunities for People Living With Disability, to find out the effect of organizational culture on employment opportunities for People Living With Disability, to investigate the effect of employer stereotype on employment opportunities for People Living With Disability, and to investigate the effect of employer perception on employment opportunities for People Living With Disability. The target population was all People Living with Disability employees in selected Universities in Kenya and associations of People Living with Disabilities in Kenya. The sample size was all employees living with Disabilities and all members of the association of People Living with Disabilities in Murang'a County. The findings were presented in tabular form. Both Descriptive statistics i.e. mean standard deviation, skewness, kurtosis and inferential statistics i.e. Correlation, Regression, ANOVA models were used to analyze the findings. The findings showed that People Living with Disabilities do not secure employment opportunities due to: lack of required Skills; lack of available accessible organizational facilities; stringent organizational culture; negative employee stereotype; and negative employer perception towards employees. The study recommended that for people living with disabilities to increase their employment opportunities, their educational level, working experience have to be enhanced. The organizational facilities have to be made available and accessible to PLWDs. The organizational culture has to be changed to embrace acceptable performance not high performance, be less bureaucratic, and equal measures in performance have to be changed to favor customized to individual nature of being.

KEYWORDS
Stereotype, employment opportunities, people living with disabilities.

BACKGROUND OF THE STUDY
One billion people, or 15 percent of the world's population, experience some form of disability. One fifth of the estimated global total, or between 110 million and 190 million people, encounter significant disabilities. Persons with disabilities on average as a group are more likely to experience less employment, and higher poverty rates, World Bank (2014). Many countries in the world have passed laws directed towards equal employment opportunities for the people living with disabilities in the labor market; however, employment disparities are persistent, even in industrialized countries.

Disability and Employment statistics for people with disabilities in high income countries are not only unreliable due to insufficient data, incompatible disability definitions and statistical biases; they are also plagued by huge differences in employment definitions Sarpong (1974). Employment statistics for people with disabilities are virtually non-existent in developing countries. Nevertheless, the existing evidence suggests that lack of employment opportunities for people with disabilities in high income countries are extremely high, and that unemployment rates for people with disabilities in developing countries are at least as high or higher Wright (1960) . In the United States, only 14.3 million of an estimated 48.9 million people with disabilities were reported to be employed in 1991-92 in Austria, where people with disabilities must register, only 69% of those who registered were reported to be employed in 1994.

GLOBAL PERSPECTIVE
In general, disabled are less valued in the world of work as shown by lack of equity in participation, pay, the kind of jobs they have, and the positions they hold. Studies conducted across the globe using both micro Blau & Kahn, (2003) and macro data Azmat *at el* (2006) United Nations Economic Commission for Europe UNECE (2008) have converging findings regarding people living with disabilities employment disparities. For instance, Blau and Kahn (2003) investigated the people living with disability employment gap in 22 countries across the globe. The data were extracted from the International Social Survey Program between 2000 and 2010 and include countries such as the United States, Britain, Canada, Japan, Germany, The Netherlands, and Russia. The discrimination gap averaged between 44 and 84%. The study outcome revealed the following gender pay gaps: United States (40%), Britain (37%), Japan (85%), and Slovenia (44%).

Apart from people living with disability being underrepresented in the world of employment, studies have shown they are also underrepresented in official and managerial positions while they are overrepresented as sales, clerical, and service workers. The UNECE (2008) found that, except for the United States and Lithuania, where the proportion of PLWDs legislators, managers, and senior officials was rather high (54 and 47%, respectively), the rest of Europe and North America has a clear majority of PLWDs among legislators, managers, and senior officials. Trends in Europe and North America also show that PLWDs are less likely to be employed or self-employed, and no country within 18 the UNECE has attained a 5% proportion of PWDs among employees (UNECE, 2008).

Despite the awareness of employment disparities and the need for equal pay for equal work, disparities in employment persist, with PWDs being disadvantaged. Inadequate human capital, low participation rate in the labor force, and discrimination are attributed to the predicament of women in the labor force (Azmat et

al., 2006). In Africa particularly Tanzania and Kenya have entrenched in their constitutions law that compel the employer to at least set a site 3% and 5% plus progressive employment opportunities for people living with disabilities, Constitution of Tanzania and Kenya (2010) respectively.

THE REGIONAL PERSPECTIVE

Variations in the treatment of persons with disabilities are manifest in Africa as in other parts of the world Amoako (1977). Among the Chagga in East Africa, the physically handicapped were perceived as pacifiers of the evil spirits. Hence, care was taken not to harm the physically handicapped. Among the citizens of Benin (formerly Dahomey in West Africa), constables were selected from those with obvious physical handicaps. In some communities in Benin, children born with anomalies were seen as protected by supernatural forces. As such they were accepted in the community because they were believed to bring good luck Wright (1960). Nabagwu (1977) observed that among the Ibo of Nigeria, treatment of persons with disabilities varied from pampering to total rejection.

STATEMENT OF THE PROBLEM

Wilkins (2013) established that majority of people with disabilities unemployed, improvement in the last decades has been below targets and expectation. Kwek a (2010) revealed that employment of people with disabilities have improved only marginally and continue to be a serious concern for economic and social policy alike, but his study is questionable for generalization since the population used was 197, while his sample size was only 26 people living with disabilities and only involved people from just Dar-es salaam. Another study by Mkumbo (2012) established that people living with disabilities do not get employment opportunities easily because of lack of education. Makwena (2012) established that people living with disabilities especially people on wheel chairs do not access employment opportunities due to their nature as they cannot utilize the organizational facilities in many of the country's buildings. In the study carried out on employment opportunities among the ethnic communities in the Kenyan Universities and colleges, it was found that only Egerton University, Technical University of Mombasa, and Multimidia University had complied with the National cohesion and integration Act (2008) by employing less dominant ethnic groups in their regions, since people with disabilities are part of affirmative issues, then one is left to wonder why the rule of ethnicity balance in employment has been complied to but why not disability rule? Charles, J. (2015). Reported that there is an increase in unemployment for people living with disabilities. Daily Nation (2015). Multimidia University, Rongo University Colloge, and Kibabii University College advertised job vacancies and clearly indicated that people living with disabilities are encouraged to apply. In Kenya besides the constitution guideline of at least 5% plus progressive employment opportunities, according to National council for people living with disabilities less than 2% of the employment positions are occupied by persons with disabilities NCPWD (2013). Scanty research has been done on challenges facing employment opportunities for people living with disabilities. Therefore the gap exist as there is scanty research on challenges facing employment opportunities for people living with disabilities, these triggered the need for investigation into the challenges facing equal employment opportunity for people living with disabilities in Kenya to address the gap.

OBJECTIVES OF THE STUDY

GENERAL OBJECTIVE

To investigate the challenges facing employment opportunity for people living with disabilities in selected Universities in Kenya

SPECIFIC OBJECTIVES

To find out how stereotype affects employment opportunities for people living with disabilities.

RESEARCH HYPOTHESES

HO_1 Stereotype does not affect employment opportunities for people living with disabilities

JUSTIFICATION OF THE STUDY

i. The republic of Kenya will benefit from the findings as the problems inhibiting employment of disabled is known and the corrective measures have been recommended on how to increase employment of the people living with disabilities.
ii. Researchers and Scholars in the field of disabilities will benefit from the findings it adds knowledge in the academic field.
iii. The Human Resource Managers will benefit from the study as they can utilize the recommendations of the study to solve employment problems of the people living with disabilities at workplace.
iv. The National Council for People Living with Disabilities will benefit as they will utilize the findings of study to champion for the rights of people living with disabilities.

SCOPE OF THE STUDY

There are many factors that affect employment for people living with disabilities. The study concentrated on how Skills, Stereotype, Employer perception, Organizational Culture, and Organizational facilities affect the employment opportunities of the Blind, the Deaf, and the physically handicapped. The study was conducted among the public Universities in Nairobi County as these Universities have the largest population of employees hence the findings from the institutions can be generalized as true representative of the people living with disabilities and unemployed PLWDs in Murang'a County between February and April 2015.

LIMITATION OF THE STUDY

There are some factors that limited the comprehensive coverage of the study. One of the difficulties encountered was the release of information; the respondent were not willing to give correct information as they feared repercussions, however the study overcame the problem as the respondents were assured that the information given was confidential and was to be used only for purposes of academic. The other problem was communication barrier especially when dealing with people that have hearing impairment, however problem was overcame by the help of specialist in sign language

CRITICAL RACE THEORY

According to Derrick B. (1970), Critical race theory (CRT) recognizes that racism is engrained in the fabric and system of the society. The individual racist need not exist to note that institutional racism is pervasive in our culture. This is the analytical lens that CRT uses in examining existing power structures. CRT identifies that these power structures are based on people without disabilities privilege and people without disabilities supremacy, which perpetuates the marginalization people living with disabilities.

Schur (2009) reported that organizational cultures that are responsive to the needs of all employees are particularly beneficial for disabled workers. Similarly, culture that value flexibility, social justice, personalization and embraces diversity would be one in which disabled people will be treated more favorably than another that is more rigid and bureaucratic. Supportive organizational culture will also focus on changing non-disabled employees' negative attitudes toward disability as eliminating behaviors that reflect subtle forms of discrimination and exclusion, hence promoting more effective interaction among non-disabled and disabled employees. The CRT theory is relevant to the study as the disabled group is seen as people of different group and so they are discriminated by the virtual of being people living with disabilities which is unwanted group, the theory address the independent variable organizational culture.

STEREOTYPE

SHY/DISTANT

From findings in Stone & Colella (2011), Supervisors and co-workers attitudes people living with disabilities are shy have a profound impact on the employment experiences of people with disabilities. Even in corporations that are committed to hiring employees with disabilities, negative attitudes from supervisors and coworkers have affected the socialization of new employees with disabilities, and limited their ability to become fully accepted and well functioning insiders. The study further found that employees with disabilities remain distant; this limits their job performance and opportunities for training and advancement. Shy employees are resistant to change since people selectively attend to information consistent with pre-existing stereotypes (Blanck, 2001). Negative affect or discomfort in being around people with disabilities. Negative affect varies by type of disability, with greater discomfort for mental and sensory impairments than for mobility and other physical impairments (Stone & Colella, 2006). The study indicates that negative affect may be counteracted in many instances by a ''norm of kindness,'' although such a norm can lead to condescending attitudes or overly helpful behavior.

The study further noted that Strain caused by communication difficulties due to shyness in some disabilities, such as speech or hearing impairments, make communication more difficult. Co-workers avoid interacting with employees who have such disabilities because of the extra time and strain involved John Wiley & Sons, (2005). Personality factors; Prejudice is greater among employees who are high on distant or poor self-concept and body satisfaction (Colella, 1996). The study pointed out that previous contact helps counteract the effects of negative stereotypes, since it allows ''individuals to gather detailed information about out-group members (e.g., disabled individuals) so that they are viewed as individuals rather than members of a stereotyped group'' (Stone & Colella, 2012). Makas (2008) found that greater contact leads to more positive attitudes toward people with disabilities. Supervisor and co-worker attitudes in turn affect the Performance expectations. Shyness and negative affect lead to biased views of how well a person with a disability is likely to perform.

Of the 13 studies of expectations of future performance or promotional potential for employees with disabilities, ten found evidence of negative bias (DeNisi, & Varma, 2008). Negative attitudes lead to lower employment of employees with disabilities, although in some cases there may be a positive bias due to the norm of kindness or initial low expectations. The evidence from employer surveys does not point to a bias in employment, but the evidence from experiments is mixed, depending on the existence of recruitment standards, the presence of objective selection data, and the supervisor-employee relationship (Colella *et al*., 2008). According to the study by Varma *et al* (2008) desire to work with an individual with a disability, negative affect and concern about the effects on one's own performance lead to unwillingness to work with an employee with a disability. This depends on the type of job and the nature of rewards, an experiment found that there was negative bias against choosing a coworker with a disability when (a) the job was viewed as a poor fit for the person with a disability, and (b) there were interdependent rewards, for example if the pay of the co-worker would be affected by the performance of the person with a disability (Colella *et al*., 2008).

Hiring people with discretionary work activities, negative effect, low expectations, and expected co-worker strain cause employers to deny employees with disabilities access to jobs with substantial responsibility, leaving them in generally lower paying jobs that do not allow them much opportunity for developing their skills (Colella, 2006). Negative attitudes and treatment in turn affect the responses of persons with disabilities. Equity theory predicts that employees decrease their work effort when they believe they have not been justly rewarded; more generally, negative attitudes such as low performance expectations cause employees with disabilities to become alienated and withdrawn, which may itself ''confirm'' the low expectations (Blanck *et al*., 2013). Employees with disabilities use a number of strategies to shape expectations in the workforce, including (a) concealing the disability, (b) communicating information about the disability to reduce discomfort and clarify norms, (c) requesting help to clarify expected behaviors, (d) emphasizing similarity to others through shared interests, opinions, and values, and (e) becoming a ''super-worker'' to dispel Corporate culture and employment of persons with disabilities John Wiley (2005). In addition, they may take an activist approach and seek to change organization policies on their own or in concert with others, or use cognitive strategies to protect or change themselves, such as by attributing negative outcomes to bias rather than to their own performance problems (Sandler & Blanck, 2005).

DEPENDENT/NONCOMPETITIVE

From the study conducted by Wordsworth (2013), which aimed at identifying barriers faced by organizations in Gauteng when employing people living with disabilities in the business and financial sectors. The study conducted qualitative interviews with human resource managers from ten organizations in business and financial sectors. The results of the study indicated that the most common barrier identified by the participants was dependence/noncompetitive of people with disabilities. The factor recurred through all the studies was the fact that barriers of employing people with disabilities were mainly looked at from an employer's perspective in which a top–down approach was used in order to formulate the research questions.

Stone & Colella, (2010), in their study carried out in America, found out that low employment rate of PWDs was due to negative stereotypes are dependent held by employers about disabled that result in unfavorable selection decisions. The study reveals that Stereotypes are largely false "over generalized" beliefs about members of a category that are typically negative. The study also revealed that non-competency ascribed to persons with disabilities may be used as a basis for generating expectancies about persons with disabilities (Stone & Colella, 2010). The study found that Expectancies are anticipatory beliefs about the individual based on category membership and stereotypes. The study found that if a person is categorized as dependent, the observer also derives expectancies about the person from stereotyped assumptions made about people with disabilities as a group.

BITTER/UNHAPPY

Another research done in Australia by Greenwood, et al. (2011) found that Physical disabilities are generally viewed as bitter/unhappy. The study found that Projects With Industry placement specialists rated employers as being more unwilling to hire individuals with physical disabilities than those with emotional, mental, or communication disabilities, to have the least difficulty in recruiting and selecting these workers, and to expect better work performance from them. In another study done by Hazer & Bedell, (2000), where students and human resource professionals were asked to employment suitability of applicants, results showed that candidates with disability were given significant lower suitability ratings than candidates with no disabilities because they are termed bitter or unhappy.

In the study carried out in Germany by Koser *et al*. (2009) where human resource professionals were asked to choose one of two candidates with similar backgrounds. Results showed that a job applicant who uses a wheelchair was more likely to be hired than an employee taking medication for depression or anxiety this is because the ones on medication are unhappy which may lower moral of performance. In a survey of Fortune 500 companies, Jones, *et al.,* (2011) found that the physically handicapped ranked much lower as desirable employees than did those without disabilities. Furthermore, few employers had specific employment policies regarding the handicap. This perception of a hierarchy in disabilities regarded to be more or less desirable has been reported in other studies as well (Gilbride, *et al.*2000) found that employers in a Midwestern state reluctant hiring persons with hearing disabilities, while employers in a Southeastern state reluctant hiring persons with physical disabilities.

Many studies carried out by Fabian *et al*., (2005) investigated the relationship between employer attitudes toward hiring persons with disabilities and previous experience with PWDs on the part of the employer. Most of these studies found that prior positive contact has a direct relationship with favorable employer attitudes. Only two of the studies did not support the evidence. From the study by Stone & Colella, (2006) America found out that Jobs can also be stereotyped, and these stereotypes can be used to exclude applicants with disabilities as not well-suited. The study further found that the nature of the job elicits prototypical images about job requirements, the combination of stereotypes about applicants with disabilities and stereotypes about job requirements may lead to incorrect decisions and unfair discrimination. Stone and Colella (2006) provide a poignant example: observers may classify a hearing-impaired (deaf) person as incapable of performing the job of a supervisor because the job requires face-to-face communication and the ability to communicate with others on a telephone. The reason for this is that the prototypical hearing-impaired person cannot understand or orally communicate with others. This inference, however, may be incorrect about a particular hearing-impaired person who has the ability to read lips and communicate orally with others.

AGGRESSIVE

Greenwood and Johnson (2007) found that employers were more unwilling to consider the physically disabled for jobs that were sedentary, had less pressure, and had less interpersonal contact, this so because physically disabled persons are viewed aggressive. This seemed consistent with the concept of job prototypes that are congruent with stereotypes of PWDs. While aggressive is typically negative, some limited research has shown a positive bias in favor of

hiring PWDs. In one study, applicants depicted as having a disability were rated higher on employment and management potential scales than applicants without a disability Christman & Slaten, (2011). Another study had similar findings showing that job candidates with physical disabilities were rated more highly than those without disabilities Nordstrom, *et al* (2008). These studies suggest that in some cases, having a physical disability may be viewed as a desirable. However, more research is needed to substantiate these findings and understand the causal relationships.

REASEARCH METHODOLOGY

The study used both descriptive and exploratory method of study. The sampling frame was 14, 600 people, while the sample size was 191 people. The questionnaire was used to collect data and analyzed using SPSS package.

RESULTS AND DISCUSSIONS

Sixteen point seven (16.7%) percent of the respondents say that employees living with disabilities are shy. From the findings, it means that minority of the people living with disabilities are believed to be shy as indicated by 16.7%. Seventy people translating to fifty eight point three (58.3%) percent of the respondents say that employees living with disabilities are dependent. The table means that majority of the respondents are of the view that people living with disabilities are dependent/noncompetitive. Twenty people which is (16.7%) percent of the respondents say employees living with disabilities are bitter. From the outcome, it means that coworkers and employers believe that people living with disabilities are bitter. Ten people translating to eight point three (8.3%) percent of the respondents say that employees living with disabilities are aggressive. From the table, it shows means that majority of the respondents believe that people living with disabilities are aggressive/non-submissive.

THE REGRESSION OF STEREOTYPE AGAINST EMPLOYMENT OPPORTUNITIES FOR PLWDS

Stone & Colella (2011), in their study established that supervisors and co-workers categorized people living with disabilities as Shy and that employers were not willing to employ people living with disabilities as they were viewed as being reluctant to take up new challenges. Further study by Blank (2001), found that co-workers were discomfort to in being around with people living with disabilities.

In this study, the outcome established employment opportunities for people living with disabilities are affected by 0.401 as shown in the table below. This means that 40.1% change in employment opportunities for people living with disabilities can be predicted by unit change in Stereotype. This study was in line with that of Stone & Colella(2011), and that of Blank (2001), so we can confirm that stereotype is a challenge to employment opportunities for people living with disabilities. The regression formula for stereotype against employment opportunities is as below:

$Y=\beta_0 + \beta_2 X_2 + e$

$Y=\beta_0 + 0.401 Stereotype + 0.707$

TABLE 1: ANOVA MODEL FOR STEREOTYPE AGAINST EMPLOYMENT OPPORTUNITIES FOR PLWDS

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.633[a]	.401	.392	.707

a. Predictors: (Constant), STEREOTYPE

The table below shows that the relationship between stereotype and employment opportunity is very strong as indicated by sig 0.000, this means that the effect is not by change but by the presence of the stereotype. This also means that for any meaningful improvement for employment opportunities by people living with disabilities, stereotyping have to be discouraged.

TABLE 2: SIGNIFICANCE OF STEREOTYPE AGAINST EMPLOYMENT OPPORTUNITIES FOR PLWDS

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	22.059	1	22.059	44.118	.000[a]
	Residual	33.000	66	.500		
	Total	55.059	67			

a. Predictors: (Constant), Stereotype
b. Dependent Variable: Employment Opportunities

FINDINGS

The literature showed that employment opportunities for people living with disabilities are affected by various challenges. In the organizations studied, employment opportunities for people living with disabilities are lower than expected. The study examined a population of three thousand people in University of Nairobi, Kenyatta University, Technical University of Mombasa, and Murang'a Association of people living with disabilities. Stratified random sampling technique was used to select one hundred and fifty (150) people for investigation, this was to ensure that even number of respondents are given chance to participate. The study was conducted by use of questionnaires. Out of 150 people only 120 responded giving a response rate of 80%. The instruments were pilot tested and analyzed for reliability and validity using Cronbach's Alpha formula. Confirmatory factor analysis to reduce the factors was also used. This confirmed the conceptual framework of the study, SPSS version 17 was used as the statistical tool for analysis all through the study. The data was analyzed and using descriptive and inferential statistics. Scatter plots were visually examined to check whether linear regression relationships existed after which linear regression was done to establish the magnitude and direction of relationship. Multi regression was used to test the combined effect of all the independent variables to the dependent variables. The study had the following findings:

CONCLUSION

The study further determined that employers perceived people living with disabilities as disturbing, expensive, lazy, and antisocial. This means that employer will not desire PLWDs as they will reduce profitability due to expenses involved during medication by meeting medical bills and accommodation. They are also not hard working due to the nature of disability this make coworkers view that they may let them down when the remuneration is tight on group performance. Also the issue of antisocial makes team work impossible as working together need personal friendship first.

RECOMMENDATIONS

The study therefore recommends that the negative stereotypes have to be changed in order to increase chances of employment for people with disabilities. This can be achieved by encouraging socialization of employees with disabilities with those without disabilities so as to learn how to accommodate each other. Co-workers should be encouraged to assist the disabled employees and lobby for team-work not individual responsibility.

AREAS FOR FURTHER RESEARCH

Due to constraints highlighted in the study, it was not exhaustive of all the challenges facing employment opportunities for people living with disabilities. Research should be conducted to establish other challenges that influence employment opportunities for people living with disabilities since only 67.5% of the employment opportunities were covered by the five independent variables, meaning that the 32.5% of the unexplained influence have to be accounted for by the next research. The other disabilities like Hyper, HIV/AIDS, and Slow learners should be conducted.

INTERNATIONAL JOURNAL OF RESEARCH IN COMPUTER APPLICATION & MANAGEMENT   102

A Monthly Double-Blind Peer Reviewed (Refereed/Juried) Open Access International e-Journal - Included in the International Serial Directories

http://ijrcm.org.in/

REFERENCES

1. Acemoglu, D. (2000). consenquences of employment protection? the case of the Americans With DisabilitiesAc.t. *MIT Working Paper*. Retrieved February 12, 2015
2. Adya, M. (2004). *Genetic information use in hiring decisions: Psycho-legal possibilities arising from the Human Genome Projectst.* Nebraska: University of Nebraska-Lincoln.
3. Alade. (2004). community-based vocational rehabilitation(CBVR) for people with disabilities. *British Journal of Spacial Education*. Retrieved March 15, 2015
4. Aldersey, H. (2011). the United Republic of Tanzania's National Policy on Disability:Apolicy analysis. *Journal of Disability Policy Studies.* Retrieved February 09, 2015
5. Allbright, A. (2002). employment decisions under the ADA Title 1-Survey update. *Mental and Physical Disability Law Reporter*. Retrieved March 12, 2015
6. Avoke, M. (2002). Models of Disability in the Labelling and Attitudinal Discourse in Ghana:Disability and Society. *17*(7), 769-777. Retrieved March 15, 2015
7. Badwin, M. (20005). *A critical review of studies of discrimination against workers with disabilities* (Vol. 3). (Rodgers, Ed.) Northhampton: Edgar ELgar Publishing.
8. Bagshaw. (2006). Ignoring disability: a wasted opportunity. *Wellington, National Equal Opportunities Network*. Retrieved March 18, 2015
9. Baldwin. (2010). Labor market discrimination against men with disabilities. *The*
10. Bell, B. (2001). *Effects of disability, gender and job level on ratings of job applicants* (46 ed.).
11. Berkowitz, M. (1998). *Facilitating employment through vocational rehabilitation.* (Hyatt, Ed., & T. tirus, Trans.) Industrial Relations Research Association.
12. Blanck, M. (1997). *Attitudes, behavior, and the employment provisions of the American with Disabilities Act* (Vol. 42). Law Review.
13. Blanck, P. (2003). *DIsability civil rights law and policy.* (M. Paul, Ed.) thomson: West Publishers.
14. Blanck. (2013). Employment of people with disabilities-twenty-five years back and ahead, Law and Inequality. *A Journal of Theory & Practice*, 25(2):323-353. Retrieved March 5, 2015
15. Bowman, J. (1987). Attitudes towrd disabled persons: Social distance and work competence. *Journal of Rehabilitation, 53*, 41-4. Retrieved February 11, 2015

INTERNATIONAL JOURNAL OF RESEARCH IN COMPUTER APPLICATION & MANAGEMENT 103

A Monthly Double-Blind Peer Reviewed (Refereed/Juried) Open Access International e-Journal - Included in the International Serial Directories

http://ijrcm.org.in/

REQUEST FOR FEEDBACK

Dear Readers

At the very outset, International Journal of Research in Computer Application & Management (IJRCM) acknowledges & appreciates your efforts in showing interest in our present issue under your kind perusal.

I would like to request you tosupply your critical comments and suggestions about the material published in this issue as well as on the journal as a whole, on our E-mail**infoijrcm@gmail.com** for further improvements in the interest of research.

If youhave any queries please feel free to contact us on our E-mail **infoijrcm@gmail.com**.

I am sure that your feedback and deliberations would make future issues better – a result of our joint effort.

Looking forward an appropriate consideration.

With sincere regards

Thanking you profoundly

Academically yours

Sd/-
Co-ordinator

DISCLAIMER

The information and opinions presented in the Journal reflect the views of the authors and not of the Journal or its Editorial Board or the Publishers/Editors. Publication does not constitute endorsement by the journal. Neither the Journal nor its publishers/Editors/Editorial Board nor anyone else involved in creating, producing or delivering the journal or the materials contained therein, assumes any liability or responsibility for the accuracy, completeness, or usefulness of any information provided in the journal, nor shall they be liable for any direct, indirect, incidental, special, consequential or punitive damages arising out of the use of information/material contained in the journal. The journal, neither its publishers/Editors/ Editorial Board, nor any other party involved in the preparation of material contained in the journal represents or warrants that the information contained herein is in every respect accurate or complete, and they are not responsible for any errors or omissions or for the results obtained from the use of such material. Readers are encouraged to confirm the information contained herein with other sources. The responsibility of the contents and the opinions expressed in this journal are exclusively of the author (s) concerned.

ABOUT THE JOURNAL

In this age of Commerce, Economics, Computer, I.T. & Management and cut throat competition, a group of intellectuals felt the need to have some platform, where young and budding managers and academicians could express their views and discuss the problems among their peers. This journal was conceived with this noble intention in view. This journal has been introduced to give an opportunity for expressing refined and innovative ideas in this field. It is our humble endeavour to provide a springboard to the upcoming specialists and give a chance to know about the latest in the sphere of research and knowledge. We have taken a small step and we hope that with the active co-operation of like-minded scholars, we shall be able to serve the society with our humble efforts.

Our Other Journals