

INTERNATIONAL JOURNAL OF RESEARCH IN COMPUTER APPLICATION & MANAGEMENT

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CONTENTS

Sr. No.	TITLE & NAME OF THE AUTHOR (S)	Page No.
1.	ATTITUDE OF M. Ed. STUDENTS TOWARDS e-LEARNING <i>DR. SARABJEET KAUR</i>	1
2.	THE CONSEQUENCES OF TAX ASSESSMENT ON TAX COLLECTION OF CATEGORY 'C' TAXPAYERS IN ETHIOPIA: A CASE STUDY IN MEKELLE CITY, TIGRAY <i>NUGUSS MURUTS GEZAHEGN, DR. TEFATSION SAHLU DESTA & YRGALEM GEBRESELISSIE ADANE</i>	4
3.	A COMPARATIVE STUDY OF JOB SATISFACTION LEVELS OF EMPLOYEES IN TWO INDUSTRIES: AN EMPIRICAL REVIEW <i>DR. S. M. MURALI KRISHNA, DR. P ATHMA KARAN REDDY & DR. Y RAJENDRA PRASAD</i>	13
4.	LIQUIDITY PERFORMANCE: A CASE STUDY OF NAGARJUNA FERTILIZERS COMPANY LIMITED <i>S. SHOBHA & DR. P. MOHAN REDDY</i>	19
5.	RANKING OF PAYMENT SYSTEMS ON THE BASIS OF PERCEIVED USEFULNESS (PU) AMONG USERS IN NIGERIA <i>CLEMENT IKENNA OKEKE</i>	24
6.	A STUDY ON CUSTOMERS' ATTITUDE IN LIFE INSURANCE TOWARDS LIFE INSURANCE CORPORATION OF INDIA, TIRUCHIRAPPALLI <i>HARIHARAN, K & DR. K. KUMAR</i>	29
7.	CREATIVITY AND INNOVATION: IMPORTANT DRIVERS OF ENTREPRENEURSHIP <i>S. BALASUBRAMANYAM</i>	35
8.	RETAIL MERCHANDISING AND BRAND BUILDING: A CASE STUDY OF BASMATI BRANDS <i>G SRI LAKSHMI & PITTA ISAAC NEWTON</i>	40
9.	DATA MINING OF THE ASSOCIATION RULES BASED ON THE CLOUD COMPUTING <i>A. THIRUGNANASAMBANDHA MURTHY</i>	48
10.	SKEW DETECTION AND CORRECTION OF INDIAN SCRIPT DOCUMENTS <i>VIKRAM SHARMA</i>	51
11.	CONSUMER BEHAVIOR TOWARDS GOLD PURCHASE <i>DEEPTHI SANKAR</i>	55
12.	MERGERS AND ACQUISITIONS IN BANKING SECTOR <i>DR. R. RADHIKA DEVI</i>	58
13.	DISSATISFACTION OF EMPLOYEES DUE TO MOTIVATION AND LEADERSHIP: A CASE STUDY <i>AJIT SINGH NEGI</i>	66
14.	CONTRIBUTION OF WOMEN IN THE COMMON PROPERTY RESOURCE BASED ACTIVITIES IN TAWANG DISTRICT OF ARUNACHAL PRADESH, INDIA <i>GEPI JINI</i>	69
15.	CUSTOMER SATISFACTION ON MOBILE-PHONE MONEY TRANSFER SERVICES' USAGE IN DODOMA URBAN, TANZANIA <i>NGILANGWA, ESTON & V VENKATAKRISHNAN</i>	73
	REQUEST FOR FEEDBACK & DISCLAIMER	80

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ATTITUDE OF M. Ed. STUDENTS TOWARDS e-LEARNING

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ABSTRACT

E-learning identifies the needs of the people in terms of knowledge and address them by making available knowledge packages freely and seamlessly so as to bridge the knowledge gaps. E-learning is naturally suited to distance learning and flexible learning but also be used in conjunction with face to face teaching. Consequently it has been the endeavor of educational reformers to make by adopting diverse strategies towards the same. E-content development is that it is correctness of facts free from biases and prejudices and finally attractive to teacher and students as well, it has identified the needs of the people and students as well In the present context anytime, anywhere accessibility and availability of knowledge progress has become the norm. Hence, the shifts from broadcast television to E-learning became imperative. In the present study ,in order to measure the attitude of M.Ed students towards E-Learning, an attitude scale was developed which involved framing and editing the items attitude scale, choice of attitude scale format, administration of the preliminary draft of the attitude scale and selection of items for the final draft of the attitude scale.

KEYWORDS

education students, e-learning.

INTRODUCTION

In conventional courses, the preparation of quality teaching and teaching materials require sophisticated and specialist knowledge. Similarly, expert knowledge is required in order to decide whether or not a particular course should be produced. In the United States, professionals in this field are given authority to work literally as 'designers' they have established a role for number of inquiries of expert and the use of threaded FAQ discussions (posted lists of questions and answers). The concept of teacher as the primary source of knowledge in the classroom is gone. It is learning with, not from or about, that makes computer based technology an imported tool in a new paradigm of learning. There is nothing like an ultimate reality rather should be viewed as the out come of the constructive process of the learner.

E-learning identifies the needs of the people in terms of knowledge and address them by making available knowledge packages freely and seamlessly so as to bridge the knowledge gaps. In the present context anytime, anywhere accessibility and availability of knowledge progress has become the norm. Hence, the shifts from broadcast television to E-learning became imperative.

JUSTIFICATION OF THE STUDY

E-learning is naturally suited to distance learning and flexible learning but also be used in conjunction with face to face teaching. Consequently it has been the endeavor of educational reformers to make by adopting diverse strategies towards the same. E-content development is that it is correctness of facts free from biases and prejudices and finally attractive to teacher and students as well, it has identified the needs of the people and students as well, it has identified the needs of the people in terms of knowledge and reduces the gap in between. E-learning material designed effectively facilitates the achievement of desired learning out come for learner and it needs to be viewed broadly and systematically.

Jane Kanway, Annette Gough (2007) Conducted a study on attitude of Gender towards science education in school they found that there is significant difference in the attitude of male and female attitude towards science education.

Rhodes, Susan.R(2009) Conducted a study on age related differences in work attitude and behaviour and found significant differences in the attitude of work and behaviour.

Gupta Vandana(Feb.2008) conducted a study on e-learning pedagogies new approaches to teaching and assessment and found that e-learning has new approaches to teaching and positivity effect our teaching process.

Chudasama K Rajesh, Godara K Naresh, Shirivastana K. Ratan (2009) conducted a study on Assessing computer literacy and attitude towards e-learning final year medical students. And found that there exists high interest and positive attitude of medical student in e-learning.

STATEMENT OF THE PROBLEM

ATTITUDE OF M.ED STUDENTS TOWARDS E-LEARNING

OPERATIONAL DEFINATIONS OF THE TERMS

An **attitude** is relatively enduring organization of interrelated beliefs that describes, evaluates and advocates action with respect to an object or situation, with each belief having cognitive, affective and behavioural components.

E-learning is that form of learning which uses a network for delivery, interaction or facilitation. It is also known as distributed learning 'distance learning'.

OBJECTIVES OF THE STUDY

1. To study the attitude of M.Ed students towards E-learning
2. To study the difference in attitude of urban and rural M.Ed students towards E-learning.
3. To study the difference in attitude of science and arts M.Ed students towards E-learning.
4. To study the difference between attitude of M.Ed boys and girls towards E-learning.

HYPOTHESES OF THE STUDY

1. M.Ed students have positive attitude towards E-learning.
2. There is no significant difference between attitude of urban and rural M.Ed students towards E-learning.
3. There is no significant difference between attitude of science and Arts M.Ed students towards E-learning.
4. There is no significant difference attitude of M.Ed boys and girls towards E-learning.

DELIMITATIONS OF THE STUDY

Boundaries of the study should be made with reference to the scope of study by specifying the areas to which the conclusions can be confined. So the delimitations are follows:

1. The study is delimited to 120 students.
2. The study is delimited to students of M.Ed only.
3. The area of study is delimited to educational colleges existing in Fazilka, Ferozepur and Muktsar cities and its adjoining Rural areas.

4. The study is confined to study the attitude towards E-learning only.

TOOL USED

Self constructed and standardized attitude scale was used to study the attitude of M.Ed students towards E learning.

SAMPLE

A random sample of 50 students of M.Ed Colleges Fazilka district was used for testing preliminary draft of the scale and convenient sample of 120 students of M.Ed Colleges, Ferozpur and Muktsar was used for testing the final draft of the attitude scale.

STATISTICAL TECHNIQUES USED

Test for proportion of success was worked out to find out the attitude of M.Ed students towards E-learning.

- Mean and S.D. were calculated.
- T-ratio was calculated to find out the difference.

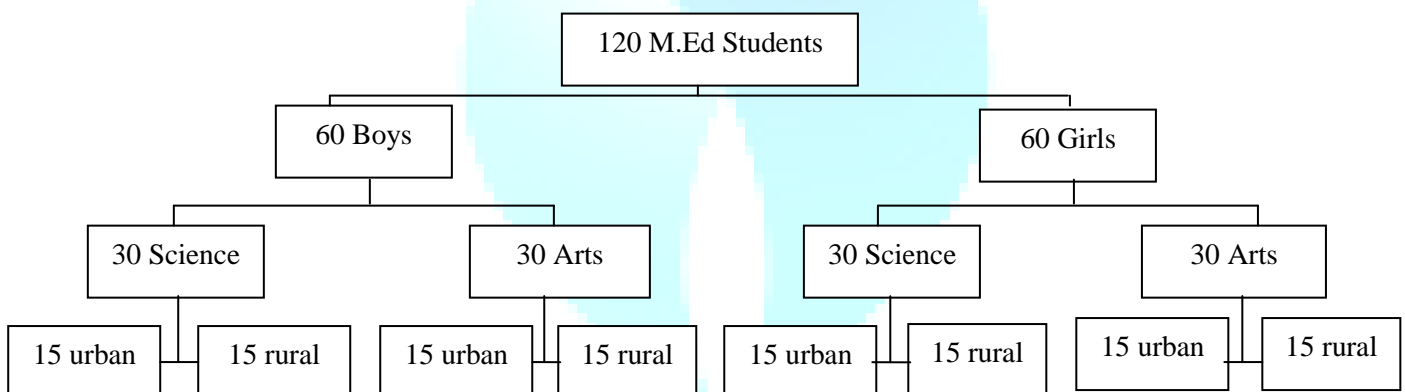
PROCEDURE

In order to measure the attitude of M.Ed students towards E-Learning, an attitude scale was developed which involved framing and editing the items attitude scale, choice of attitude scale format, administration of the preliminary draft of the attitude scale and selection of items for the final draft of the attitude scale. Their first concern was to work out the various aspects of E-learning. Those aspects were considered as the basis of constructing the items of the attitude scale. In all 35 items were developed. Those items were cast into options (opinion) ranging from strongly disagree to strongly agree responses. Out of the 35 items 33 were positively worked and were named direct items and 2 were worded negatively and these were reverse items. The items were then randomly placed. 60 photostat copies of 35 items preliminary draft of the attitude scale were got prepared. The preliminary draft of the attitude scale was given to 10 lecturers and 50 students of M.Ed. colleges of Fazilka district for the selection of items for the final draft of the scale.

Validity : To find out the validity of attitude scale regarding E-learning, content validity was found out. Preliminary draft consisting of 40 items were distributed to 10 experts (lecturers) of GURU RAM DASS B.ED College of Education, JALALABAD. Personal rapport was established, discussion were held whether this test has some relevance for M.Ed students were done and those items were deleted which 90% experts opined that these should not be there in attitude scale and 8, 16 items were added on the basis of their suggestions.

Reliability : Test- retest method was used to find out the reliability of attitude scale towards e-learning. After content validity, a scale comprising of 40 items was given to 50 students of M.Ed. class in the second week of January. Scoring was done by the Researcher. Same test was given to same students in the first week of February. Scores were obtained. The direct items were scored from 1 to 5 for strongly disagree to the strongly agree responses i.e. a score of '1' was given to strongly disagree response '2' for disagree response, '3' for no opinion, '4' for agree response and '5' and while the strongly agree response was given a score of '1'.

DESIGN OF THE STUDY



RESULT

The following conclusion were drawn from the above discussion

1. M.Ed students have positive attitude towards E-learning.
2. There is no significant difference in attitude toward E-learning of Urban and Rural students.
3. There is no significant difference in attitude toward E-learning of Science and Arts students.
4. There is no significant difference in attitude toward E-learning of Boys and Girls students.

EDUCATIONAL IMPLICATIONS

1. E-learning should be made meaningful for learners. The learning materials should include examples that relate to students, so that they can makes sense of the information.
2. The learners should be told the explicit outcomes of E-learning so that they can set expectations and can judge for themselves whether or not they have achieved the outcome of E-learning.
3. Learning materials must be sequenced appropriately to promote learning. The sequencing could take the form of simple to complex, known to unknown, and knowledge to application.
4. Learners must be provided with feedback so that they can monitor how they are doing and take corrective action as required.
5. E-learning materials should include activities for the different learning styles, so, that learners can select appropriate activities based on their preferred style.
6. Educational institutions are moving towards the use of the internet for delivery, both on campus and at a distance. However for organizations and institutions to make this often expensive move, there must be a perception that using E-learning provides major benefits.

SUGGESTIONS FOR FURTHER RESEARCH

1. The present study is confined to Fazika Ferozpur & Muktsar only. Whereas a similar study could be conducted in other parts of Punjab as well as national also.

2. The present study is conducted on M.Ed students whereas same study can be conducted at school levels, colleges and business executives also to have awareness.
3. The present study upon E-learning can also be conducted on each and every field of life whether it be domestic or professional.
4. A comparative study can be done by comparing the E-learning of two states.
5. In the present study a basic research also could be conducted upon the E-learning as how it could be helpful in villages as India is basically a agricultural country.

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THE CONSEQUENCES OF TAX ASSESSMENT ON TAX COLLECTION OF CATEGORY 'C' TAXPAYERS IN ETHIOPIA: A CASE STUDY IN MEKELLE CITY, TIGRAY

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ABSTRACT

The objective of this study was to evaluate the consequences of tax assessment on tax collection of category "C" tax payers in Mekelle city, Tigray. Data were collected from primary sources. A Logit regression model was applied to determine the relationship between the tax assessment and tax collection of category "C" tax payers in Mekelle city, Tigray. The hypotheses test revealed that service delivery, awareness creation, tax assessment fairness and law enforcement were significant; whereas gender, trust on tax collectors, trust on tax assessment and collection and convenience (season) were not found to be significant. Service delivered by the tax authority for tax payers was not found to be efficient; majority of the law enforcement by tax authority was not properly applied; most of the time, the awareness creation sessions were not effective and negatively affected the tax collection efficiency; and majority of the tax assessment was unfair. Furthermore, the study has analyzed the consequences of the tax assessment on tax collection and found that the tax assessment directly affected the tax collection efficiency of category "C" taxpayers in Mekelle city, Tigray. On the other hand, the awareness creation programs by the tax authority negatively affected the tax collection efficiency. Therefore, the tax authority should improve the service delivery, the application of the law enforcement, fairness of the tax assessment and the awareness creation on the category "C" tax payers. This research focused on category "C" tax payers in Mekelle city, Tigray; the study has excluded category "A" and "B" tax payers. Therefore, future researchers may conduct further on the category "A" and "B" tax payers in Mekelle city as well as at regional level.

KEYWORDS

Awareness, Category "C", Convenience, Enforcement, Fairness.

1. INTRODUCTION

Many scholars have explained taxation in different ways. Accordingly, Cobham (2005) explained that tax is a fundamental issue, but neglected element of the development policy. The structure and administration of taxation are frequently omitted from discussion and research agenda. Questions of a primarily redistributive nature may be believed political, and so unsuitable for neutral economic analysis, and moreover as questions to be resolved by the democratic process in individual countries. On the other hand, many questions are posed in terms of system reform and these may instead be considered as purely 'technical' matters of economic and bureaucratic efficiency to be settled by experts.

Taha and Roshaiza (2007) explained that taxation is becoming a critical economic apparatus to govern the economy of any country. The globalization and internalization trend is going on through to warding and this prototype indicates prototype that the time that economists should concern to the tax revenues and economic growths significantly across countries. Lately, Malaysia has been also performing brightly and shows alike the pattern of growth economy. That is, the government is facilitating the development of the nation through the collected money from the taxation. Other than that income tax is one of the surest way to make sure the Government fund is available for spending. The importance and role of taxation is also explained by Pfister (2009) that taxation plays a key role in helping African countries to reach their Millennium Development Goals (MDGs). African governments aim to use taxation to:

1. Finance their social and physical infrastructure needs;
2. Provide a stable and predictable fiscal environment to promote economic growth and investment;
3. Promote good governance and accountability by strengthening the relationship between government and citizens; and
4. Ensure that the costs and benefits of development are fairly shared.

When taxes are levied on, citizens are liable for their payment at the time and in the manner required and provided by the law authorizing their assessment and collection. Every country aspires to have a good taxation policy. Kayaga (2007) explained that tax policy is concerned with the reasoning behind how much revenue is the government collecting, how much revenue is being used for and whether or not the government collects the revenue in the most appropriate manner. The tax policy analysis follows a two-step process that the first step identifies the purposes of specific tax instruments, and the second step evaluates how much those instruments achieve their purposes. The tax policy analysis is necessarily examines the nature and role of the state and most of the purposes of tax instruments are identical to the function of government itself. But, the implementation of the tax policy is not a simple thing rather it is challenging. Accordingly, CTPA (2004) discussed that implementing tax policy in an increasingly globalized world is becoming more challenging for tax administrators. Recognizing this, the administrators should exploit the potential values and working together to look for this approach is key deliberate issue.

Adams (2006) said that taxation has been a best measurement of the social need and orders. There is nothing that can reflect the nation other than the tax system and society is being evaluating accordingly who pays taxes and why for pays taxes, how tax is assessed, collected and consumed. Generally, the human being history is very related and linked with the history of taxation. The Ancient tax collector's recording system cannot compare with the latest tax collection system. Romans paid property taxes on the value of land, buildings, livestock, trees, vines and other personal property. In some other countries also taxation started late hundreds of years. In Kenya, the first recorded treaty that involved a form of taxation was in 1502 (Waris, 2007).

The taxation history of Ethiopia also tells us that started before many decades. As cited by Lemessa (2007), the history of taxation in Ethiopia has a relationship or linkage with the government structures and policies of the country; in this case there is existence of hardly and consistent documentary indications that can justify the relation of the appearance of government and taxation, when and how exactly taxation was introduced. Different stories and suggestions point out

that Emperor Zeria-Yakob has started taxation in Ethiopia during the 15th century. When Governments which came to power in Ethiopia at different eras; then also comes many revisions and changes, such as tax rate, the time and mode of payments, exemptions and offences. But, even though there were many changes, there has been no document or materials formed which compiles tax proclamations issued at different periods.

The initial constitutional bases for all the tax proclamations were the 1931 Constitution of Ethiopia which was later revised and become revised Constitution of Ethiopia. Because of the most Ethiopian products was agricultural, then most of the taxation is lived on was in kind, very traditional and unstructured. Taxation in that period was varying highly from area to area, from the chief tax collector to chief tax collector and the availability and kind of resources in that area.

According to ERCA (2011), the country total recurrent expenditure (regional government + federal government) and capital expenditure (regional government +federal government) grows from 24,571 million to 57,775 million in 2009 and the tax revenue (regional government +federal government + non tax revenue) grows from 15,582 million to 40,174 million in 2009. Specifically, in 2005 from the total Capital Expenditure (Regional Government +Federal Government) of 11,343 million the only 2,354 million were covered from tax and non-tax revenue, Regional and Federal Tax Revenue and in 2009 also from Capital Expenditure (Regional Government + Federal Government) of 30,599 million the only 12,998 million were covered from tax and non-tax revenue of the country.

Therefore, this research was designed to study the consequences of tax assessment on tax collection of category "C" taxpayers in Mekelle city.

2. RELATED LITERATURE REVIEW

According to the Ethiopian Council of Ministers (2002) Regulations No. 78/2002, Taxpayers are classified into the following three major categories:

- 1) Category "A" Taxpayers,
- 2) Category "B" Taxpayers, and
- 3) Category "C" Taxpayers.

CATEGORY 'A' TAXPAYERS

This category of taxpayers includes:

- a) Any company incorporated under the Ethiopian country laws;
- b) Any business activity having an annual turnover of Birr 500,000 or more. The Category "A" taxpayers are required to submit to the Tax Authority at the end of the year; a balance sheet and a profit and loss statement which is having the following details:
 - a) Gross profit and its computation;
 - b) General and administrative expense;
 - c) Depreciation expense; and
 - d) Provisions and reserves.

In addition to this, taxpayers should register with the Tax Authority the type and quantity of vouchers they use. Before having such documents and any printing vouchers of taxpayers shall ensure that the type and quantity of tax such vouchers is registered with the Tax Authority.

CATEGORY 'B' TAXPAYERS

Unless already classified in category "A", any business having an annual turnover of over Birr 100, 000 and under Birr 500000 is classified under the Category of "B" taxpayers. This category should submit profit and loss statement to the Tax Authority at the end of the year.

CATEGORY 'C' TAXPAYERS

Unless classified in Categories "A" and "B", those businesses whose annual turnover is estimated below Birr 100, 000 are classified under this category. This research, however, focused only on the Mekelle city tax assessment and tax collection of the category "C" taxpayers.

The following part of the literature review focused on the review of the previous research findings that are related to the research being conducted. It presents the empirical evidences researched on the global level, African level and Ethiopian cases to date.

2.1. GLOBAL STUDIES

According to Kumar (2004), the Indian tax collection challenges were low gross national product and low rate of capital formation, poverty and inequality, occupational pattern unsuitable for taxation, large population with unemployment and underemployment, abundance of exemptions for political reasons (exemption on agricultural income and ambiguous exemptions on commodities under VAT System), predominance of cash transactions with no trails, huge black economy (Such as under reporting of income to avoid taxes, under invoicing of goods and services to avoid commodity taxes, real estate transfer at lower value to avoid taxes and to use black money earned elsewhere etc.), extremely narrow tax base and heavy burden on the corporate sector, predominance of regressive indirect taxes, rampant tax evasion (very low percentage of GDP is collected in taxes).

Rizal (2010) with regards to the perceptions and trust on government spending; those who engage in tax evasion often justifying and suggesting that the government wastes tax revenue unwisely. Thus, the tax collection will also decrease.

On the other hand, the study also revealed and verified that people in financial distress (the lower tax payer's category) would tend to priorities their financial needs and obligations first rather than paying taxes. This propensity of taxpayers to pay their personal obligations first rather than tax liabilities is considered a 'normal' situation in Malaysia, as the penalties and fines imposed by the tax authority are not serious and the action of not paying is not considered to be an offence this may be due to low level understanding about importance of tax. Regarding to the official assessment system the results of the study and previous researches, it can be showed that female taxpayers are more compliant or more open in comparison with males (Rizal, 2010).

The tax assessment sometimes can be unclear to the tax payers. Regarding to Dekan (2003), the complexity of tax assessment system (not simple and clear) may result in unintentional non-compliance if taxpayers have problems with filling the tax form. Furthermore, such noncompliance differs from other crimes. Because, it can be conclude that the errors occurred unintentionally due to the misinterpretation of the rules. Results from a survey shown that only 55% of the taxpayers were certain, that they had neither overstated a deduction nor understated taxable income on their return. Thus, by enhancing complexity, it is difficult to distinguish honest from dishonest taxpayers. By this virtue, tax examiners in the tax administration will have greater problems to identify a case of noncompliance and comparing whether the violation was deliberate or unintentional. And this can be increased tax collection costs.

In USA, Dekan (2003) found the results that regardless of the category of tax payers, there is a significantly positive correlation between trust in officials and taxpayers confidence. An increase in the trust scale by one unit increases the share of subjects indicating the highest tax self-esteem by 3.5 percentage points.

On the other hand, taxpayers are sensitive regarding the way the government uses (utilizes) the tax revenue. There is an input-output relation between what an individual pays with his/her taxes and what comes back from the government. Thus, individuals' tax agreement might be influenced by the benefits received from the government in the form of public goods compared to the price that they paid for. Individuals might feel cheated if taxes are not spent adequately. Moral costs of evading taxes decrease and tax morale is crowded out. The reason "because taxes are ill spent" catches such a fiscal connection between revenues and expenditures. On average, 32.4% was mentioned this point. The highest value was measured in Mexico (50.3 percent) followed by El Salvador (46.4) and Ecuador (45.8). On the other hand, the lowest values are observed in Guatemala (20.1), Chile (22.6) and Peru (23.2) (Dekan, 2003).

Tax assessment is an effective tool for tax collection. Lopez and Packman (2012) found that most economies have adopted the principle of self-assessment and then taxpayers determine their own liability under the law and pay the correct amount. Based on this, government officials also using the computer system and software for tax assessment and they determine the tax liability if this function well ensure and effective quality control is implemented. Self-assessment systems generally make it possible to collect taxes earlier and reduce the likelihood of disputes over tax assessments.

This also lessen the discretionary powers of tax officials and reduce opportunities for corruption for instance, to be effective, however, self-assessment needs to be properly introduced and implemented, with transparent rules, an automated reporting process, and penalties for noncompliance and risk assessment procedures for audit processes this was observed in East Asia, the Pacific, the Middle East, North Africa, and South Asia (Lopez & Packman, 2012).

According to the gender regarding to tax knowledge, Rizal (2010) finding shows that there is a significant difference between males' and females' tax knowledge. This indicates that males' tax knowledge was significantly better than females'. The reason why is moreover males were also found to be more significantly knowledgeable in terms of familiarity with employment income.

In summary, regardless of the tax payer's category, the global issues related to the tax assessment and collection problems steamed from poverty, large population with unemployment and underemployment, inequality, corruption, tax evasion, huge black etc. The government utilization of the tax revenue is also the factor of the tax collection and finally, researchers found that the tax assessment as a significant tool for tax collection.

2.2. AFRICAN STUDIES

Researches were also conducted in different African countries that are related to the tax assessment and collection problems. Kasimbazi (2004) found that every year the Assessment Committee sits to assess the potential taxpayers for the coming year. This regular assessment of taxpayers' ability to pay the assessed tax enhances their rights in that no one is presumed to pay a tax, which he or she cannot afford to pay. At the same time, it reminds the taxpayer of his or her obligation to be assessed and pay tax annually. The problem, however, is that this is not usually done, which affects the rights of tax payers.

In addition to this, there are several problems associated with administration, assessment and collection that affect the rights and obligations of tax payers. Kasimbazi (2004) found the following problems:

- Assessment Methods: assessment of tax is difficult because tax payers do not keep accounts. That is to mean that there are no guidelines to determine one's income. This leads to under or over assessment of taxpayers. In addition, the assessment rules are not observed by the Tax Assessment Committee (TACs). Their assessment depends upon the accurate reading of the taxpayer's sources of livelihood and Sometimes assessment committees do not complete assessment forms and there is no record of the method of liability, which was adopted to compute the tax. This also leads to strong suspicion that assessments have been based upon arbitrary judgment of the individual circumstances rather than an arithmetical connection between the sources of income and the tax grade.
- Gross Ignorance: there is no adequate tax collection staff and those that are employed lack training and experience or may be biased or succumb to political pressure. The high percentage of illiteracy in Uganda for both tax collectors and payers make them fill the assessment forms improperly or not fill them at all. Moreover those who fill them do not follow computation rules.
- Corruption: another problem is corruption and fraud by the tax collectors. The most commonly used method of perpetuating these frauds includes: double numbering of tax tickets and actual embezzlement of the money collected.
- Poverty: Poverty is another obstacle for graduated tax. In the north, eastern and parts of western Uganda, there has been insecurity and poverty is rampant. People do not have money to pay tax but even in other regions most people rely on subsistence economy therefore their income is meager; and
- Tax evasion: there is a widespread evasion of tax. The recent Local Government study has revealed that the problems of tax evasion are more complex.

On the other hand, a study was investigating the revenue generation of Lagos state to analyze the tax administration system in the state. Based on the analysis it carried out in the course of the study, the following findings were reported (Olabsisi, 2012):

- Tax assessment, collection and remittance have a significant relationship with the revenue generated by local government in the state. The implication of the fact that when the system of tax administration is not efficient, then, the revenue generated in the state is also affected;
- Most tax payers avoid or evade tax as a result of the corrupt practices of tax officials, which in turn affect the revenue generated by the state; and
- The study showed that the Lagos State government tax system is not efficient in its totality but during recent years the Lagos state government has put in place better means of achieving the best tax administration through rigorous campaign on the need for better tax system and curbing the activities of corrupt tax officials by putting in place various devices to curb the excesses of these tax officials.

In addition, according to Nghaamwa (2011), facts shown that the majority of the respondents felt that collected taxes were not spent on public services and as a result they were of the view that they would refuse to pay their taxes unless public services improve. However, they also felt that if public services improve they would be more willing to pay their taxes. For instance, in Tanzania, taxpayers were of the view that taxes that are collected were not spent on public services and this was seen as a major problem that hampered tax collection. The same sentiments were shared by the South African taxpayers who felt that waste and corruption in government was high and that a large proportion of taxes were used by the government for meaningless purposes.

The small economic agents are a major problem facing tax authorities in low-income countries. According to Fambon (2006), many factors can be explained in this situation, the first factor is the complexity and the costs involved in the registration procedures, which deter small enterprises from taking the registration steps. Despite of the single identification of tax systems in Cameroon, the procedures for obtaining a business license; for instance, requires complying with many obligations at specific tax administrative or official agencies.

The research conducted in Uganda supported about the above findings. Kayaga (2007) examined that Uganda has definitely made improvements in tax policy over the years. But, it still lacks sufficient administrative capacity and lack of modern technology especially computers to facilitate the taxation process is another impediment to effective tax administration. Until recently, Uganda, like most developing countries, had to rely on manually entering taxpayer data into record books, and keeping a voluminous amount of tax information in print. Even with the advent of modern technology, the lack of resources to purchase equipment means that a number of tax offices still use highly ineffective manual systems of recording tax information. This has been attributed to numerous barriers to efficient tax administration.

Besides, the Kwabena (2011) findings on the knowledge of tax systems revealed that most self-employed are not knowledgeable of the tax system in Ghana. To affirm this internal revenue service organizes educational programmers, for the self-employed category of the taxpayers and find out the possible impact on revenue mobilization from the informal sector. The analyses on education the research shown that, only 27 out of 189 respondents representing 14.3% have received some tax education while the remaining 85.7% have never received any form of income tax education.

Regarding to the tax assessment and collection problems and the relationship between them, African and Global findings showed similarity in the tax revenue utilization of the government, poverty of the country as well as the taxpayers, inefficiency of the tax authority regarding to modern technology and tax collectors, inefficient tax system and inefficient data system, corruption, tax evasion, lack of tax education and awareness and complexity of the tax assessment methods. In addition, the importance of efficient tax assessment to strengthen the efficient tax collection was the finding of both the Global and African researches. The difference among those findings is intensity and depth of the findings.

2.3. ETHIOPIAN CASES

The tax authority has a decisive role in the tax administration and what has been implemented, in the Ethiopian context also shown like the other countries. Lemessa (2007) conducted a research on 'determinants of Taxpayers' voluntary compliance with taxation on category "C" tax payers: in Dire Dawa City. He concluded that the tax authority was the responsible body for assessing and collecting the city's tax revenue. The amount of revenue collected is directly depending on the efficiency and effectiveness of the authority. Similarly, Araya (2011) found that majority of the respondents have low understanding about their responsibility and accountability in relation to tax collection. As a result, they did not perform their obligations related to tax collection activities, and the required tax has not been collected even from governmental bodies.

According to Araya (2011), the survey result showed the tax authority of the city administration is not efficient and effective in various aspects such as improving the tax assessment and collection system, creating awareness, enforcing the tax law, providing services, and information regarding tax. Furthermore, Wbshet (2011) concluded that there is no administrative consistency in respect of the provisions of business profit tax system and this contradicts the principles of administrative fairness across business profit taxpayers. Therefore, it is not easy to bring about voluntary compliance and narrow the tax gap; hence, the problems in this regard were visible and needs improvement.

On the other hand, Suresh and Wendyefraw (2012) with respect to tax law enforcement, more than 60% tax payers replied as poor respectively. According to them, this showed that majority of the respondents replied the tax law enforcement capacity of the tax authority was good. However, still there were respondents who replied that is inefficient. According to Suresh (2012), the respondents were also asked concerning the tax collection efficiency of the tax authority and replied that 13.5% excellent, 31.25% very good, 34.5% good and 20.75% poor. This demonstrates that the tax collection efficiency of the tax authority is relatively better and more efficient than its tax law enforcement.

In terms of tax assessment and collection problems, Asamenew (2012), Hailemariam and Wbshet (2011) found that the major causes for the aforementioned assessment and collection problems are summarized as: Inefficiency and ineffective organization of computerized system in tax administration and inflexibility of

the software in use, absence of frequent discussion concerning various problems encountered in the tax office, lack of sufficient, competent and motivated tax officers, lack of adequate skills and absence of willingness and poor understanding about the concept of tax by tax payers, frequent change of taxpayers address without acknowledgement of the office, lack of willingness to provide information by third party, electric power failure, and complexity of the tax laws and proclamation.

In addition to this, a detailed research was conducted on the case of assessment on challenges of business income tax collection process in Aksum. Accordingly, Hagos (2011) shown that the respondents of the category "C" tax payers were more associated with challenges than of the other categories. This was answered by the open ended questions and interviews. The respondents answered that lack of experience of paying tax, problems related tax collectors, a lack of awareness of tax payers were associated problems of category "C" tax payers during the tax collection.

Regarding to the simplicity or complexity of the tax laws, Amin (2010) found that Over 80 percent of the sample considers the laws to be either complex or very complex, with only a very small or minority believed as it is simple. It is interesting to note that even though the tax official's interview did not consider the tax laws as simple as for effectiveness of tax law, transparency was a critical issue. Taxpayers should know that a tax exists and how and when it is imposed upon them and others. However, the majority of respondents (70 percent) considered the tax system was lacking to some extent in transparency.

The manipulation of the tax system is not as simple as the tax payers expected. World Bank Group (WBG) (2007) argued that the challenge of designing a simplified (presumptive) tax system for (micro & small enterprise) MSEs often is underestimated. Good presumptive systems need to be: well-coordinated with the standard tax administration to avoid a conflict of rules, as well as obstacles for the move from one system to the other, in particular for the presumptive to the standard regime; based on thorough data analysis to avoid both over as well as under-taxation of small businesses; transparent and fair to be accepted by the small business community and to avoid disputes between tax administration and small businesses over the amount of tax due.

According to IMF (2010), the findings that the tax reform measures comprehensively cover key tax assessment (TA) and envisage swift implementation. Specifically, the efficiency of tax collection is expected to be significantly improved by (i) transferring the collection of direct (business and personal income taxes) and indirect taxes (VAT and excise duty) from Addis Ababa City to the Ethiopian Revenues and Customs Authority (ERCA), (ii) reviewing current exemptions and exemption approval procedures, and (iii) increasing the large tax payers office (LTPO) audit and enforcement and capacity

Concerning to the business income tax collection procedures, Hagos (2011) analyzed about identifying how the business income tax procedure was operated and implemented. In this case, the tax assessment provision was not good, on the other hand the procedures of applying and selection of review committee make dissatisfied by the respondents. Generally, Hagos (2011) concluded that the higher proportions around 65.1% of the total respondents were replied disagreed on the procedure of appeal and selection of review committee. This shows that unbalanced decisions come from the review committee.

Hagos (2011) and Lemessa (2007) found that the service delivery by the authority was below enough and poor when evaluated by the category "C" tax payers. In the case of tax collection efficiency, the findings shown that those were poor and below enough which was found and rated 74% and 64% and concluded that the higher proportion of the category "C" taxpayers in Aksum and DreDawa were dissatisfied. As cited by Araya (2011), Getnet (2010) also added majority of the tax payers have good understanding and recognition in the existing tax regulation. But they have a negative attitude on the tax offices regarding their service delivery. He stated that the tax authority officers have less performance in creation of awareness and their understanding on the taxation is not much.

However, Suresh (2012) found that the service delivery to the public as 10% of the respondents replied that it is excellent, 27.5% replied very good, 30% replied good and 32.5% replied poor. This showed that majority of the respondents were said that service provision is good. But, still there were respondents who replied that it was poor. Hence, the tax authority's capacity of delivering service to the public is not yet sufficient enough.

A research was conducted regarding to the service delivery in Arada Sub-City of Addis Abeba, Teklu (2011) found that the service delivery practice of the office was rated that the tax officials, 5.55%, 61.11%, 22.22% and 9.53% of the respondents revealed it is excellent, good, fair and poor respectively. They were also asked whether there is simple filing and payment procedures according to this, 22.22%, 50.01% and 27.77% of the respondents said it is good, fair and poor respectively. Even though most of the respondent tax officials rated good, according to the 60.3% of VAT registered taxpayer respondents were replied the office facility is poor. In addition, the summary response of open-ended questions given to VAT registrant taxpayers showed that the computer system which repeatedly cut-off and delay is one of the problem in the office.

According to Hagos (2011) and Lemessa (2007), awareness creation by the authority on category "C" taxpayers were rated about 87.8% and 74% of the respondents responded that below enough and poor and this shows that the awareness creation activities of the tax authority were ineffective and inefficient in according to awareness creation. Therefore, they established that the awareness creation problem was a series and the root cause of all problems relating to the tax collection and assessment.

Due to this, ERCA may not achieve the expected future voluntary compliance in the absence of services along with the taxpayer's lack of tax awareness. Without educating taxpayers and creating tax awareness, making power visible to the community might detect the deliberate evasions and frauds but not be a solution to create a compliant taxpayer those does not comply unknowingly (Getaneh, 2011).

Regarding to Hagos (2011) and Lemessa (2007) the reason why the absence of adequate training, follow up, education and limited knowledge on the respective business profit tax systems resulted difference in the perception of taxpayers towards income tax system. But, the government ought to obtain the intended revenue from the taxpayers. Furthermore awareness is a corner stone as far as voluntary compliance is concerned. As the finding shows, lack of awareness was cited as the major and leading reason for tax related problems.

Concerning to the creation of awareness of the tax payers, Suresh (2012) found that even a single respondent didn't reply that it is excellent (0%). However, 17.5% replied very good, 32% good and remaining 50.5% poor. Therefore, this shows that half of the respondents agreed that the tax authority is not doing to the maximum of their capacity in order to create awareness to the rental tax payers about the purpose of tax payments and where the payment is made; still the rental tax payers were not well aware of that.

Hagos (2011) also analyzed honesty of the tax collectors. His finding indicated that 57% of the tax payers of category "C" responded negatively as below enough and poor, also 77% of the respondents believe that there was high corruption at the time of the registering, assessments and payments of taxes. On the other hand, Lemessa (2007) and Asamenew (2012) found that the majority of the respondents trust on the employees but don't have trust in tax estimation, assessment and collection procedures. Even though, the loyalty of the taxpayers in assessment procedures is still under question mark and the ratio does not take the major share. Hence, it calls for further action from tax authorities.

On the other hand, Ministry of Economic Development and Cooperation (MEDC) (1999) found that the sales tax is too much for the tax payers and as much as possible they try to evade by trying to hide from the tax collectors. The traders (tax payers) also openly admit the fact that they bribe the tax collectors and assessors to partially evade sales tax. Thus, the traders get receipts for the lower amount of the actual tax payment made to the tax collectors and the tax collectors apparently retain the differences. It is also possible that for the tax collectors pocket that the whole amount of tax collected from traders..

In another case, tax should encourage investment. (EBDSN)(2005) proved that the organized business community is unanimous about some basic principles:

- Tax policy should promote investment and production so as to broaden the economic tax base of the country and not only aims at over imposing taxes on existing incomes
- Taxes must be fair, i.e., citizens should be taxed in proportion to their abilities to pay "in proportion to the benefit they derive from the government "(principle of equity)";
- The possibilities and mechanisms to appeal should be improved and entrepreneurs be regarded as partners who contribute their share to the national revenue (and not as objects that need to be controlled first with a general suspicion that they are evading their civic duty);
- Tax penalties should be aimed at correcting and guiding the business community and not be regarded as a source of additional revenue for the government. The prevailing tax penalties are considered to be beyond the common businesses ability to pay, which makes it very hard for government as well to enforce payment and leads to the closure of enterprises, which otherwise could have continued to provide income and jobs to the national economy.

Regarding to the fairness of the income tax and ability to pay principle, Wbshet (2011) found that the low income earners receive more benefit from the government but a significant ratio (30%) opposed this and this needs more work to be fair and equitable for the citizens.

On the other hand, Lemessa (2007) found that most of the respondents sense that people should pay taxes according to their ability; but actually they feel that they do not pay about the same amount of tax as others in similar situations. However, according to World Bank Group (WBG) (2007), the Small/micro firms comprise 80–90% of taxpayers, but pay only 5–10% of revenues. In addition, many constituents in poor countries are of course not taxpayers; and these non-tax-paying voters are most likely to be politically concerned about the interests of the 80–90% of the taxpaying business population in the informal, micro, and small sectors. They are also least politically connected to the interests of the 1% of taxpayers in the largest business section.

Wollela (2009) also indicated that it was shown that in Ethiopian provisions pertaining to penalties are being implemented to some extent. However, as survey respondents emphasized, it is unfair to impose the same amount of penalty regardless of the ability to pay tax. Generally as long as the tax being levied is not fair and equitable, it may nearly negate the principles of fairness and ability to pay.

According to Lemessa (2007) and Desta (2010), the reasons why people pay taxes were because of the obligation of the citizens to the government or state and in the anticipation of public services from the government. This majority response indicated that there is a positive understanding as to why people pay taxes and if successive works done probably better results can be registered. On the other hand, some of the respondents said that because they have no opportunity to evade, and to avoid disturbances and penalties.

Regarding to producing annual reports and proper plans, Asamenew (2012) indicated that the tax office does not produce report and separate annual plan for collection in each category of taxpayers and also found that most of the tax payers do not know the rules and regulations of different types of taxes they pay. Due to this, negligence, delay in tax payment and evasion are taken by taxpayers as solution to escape from payment of taxes.

According to the participation of the tax payers, Emerta (2010) analyzed that the collecting small taxes must also be examined that participatory and encouraging tax rate could be an incentive to achieve the target. On the other hand, one possible explanation for the individual tax payers had a commitment of large amount of time itself contributed to a low value for taxable income, since they were a low income group relative to the other class, so they devote more time to save the income tax liability (Addisu, 2011).

In 2008, Mesfin found that there were two types of tax assessment in the Ethiopian context. These are administrative assessment and self-assessment. It is clear that administrative assessment is basically based on estimation which may either complain on behalf of the tax payer or a revenue decline on behalf of the government. It is unquestionable that tax assessment based on estimation without evidences creates inconvenience on either the tax payer or the government. Accordingly, he found that the Ethiopian tax authority faces many challenges in the massive task of tax collection. Such as, lack of a taxpaying culture, weak accountability, lack of transparency, weak audit performance, and unstable tax amendments.

To date, regarding to the Ethiopian tax legislation concerning to the tax laws, Taddese (2012) analyzed that the Ethiopian tax legislation field is chaotic, disorganized, uncoordinated and worse, making it difficult for an average taxpayer to make sense of their obligations under the various tax laws in force. As he said this was because tax laws are uncoordinated, most tax legislations repeat certain provisions as if they were not already provided for in other tax legislations. He mentioned that one area where so many links could surely have been saved is in the definition sections, where certain terms appear repetitively as if they were not already defined in another tax law. One can, for example, take the definition of “body” for tax purposes which is found in many tax proclamations of Ethiopia.

There is reason to believe that the definition of “body” should be uniform for all tax laws, but because of the absence of a tradition of having certain general tax laws, we find ourselves reading the same definition repeated in so many tax laws of Ethiopia. The same can be said for the definition of terms like “person,” “related person,” and “authority” in different tax laws of Ethiopia.

To summarize, the empirical findings found that the determinants of the tax assessment and tax collection problems were lack of equity and fairness of the tax system, low level of awareness of taxpayers, ineffectiveness and inefficiency of tax the authority, poor service delivery, lack of trust of the tax payers on tax collectors and tax assessment system procedures. Other factors such as taxpayers’ attitude and honesty/loyalty were found to be the result of lack of awareness. While political factor found to have little impact on taxpayers’ attitude towards taxation. Even though there is similarity on the global, African and Ethiopian findings, the problem is worse in Africa including Ethiopia than other parts of the global.

3. STATEMENT OF THE PROBLEM

Governments are responsible to finance the countries’ expenditure to provide the social services and economic benefits to citizens of the countries. The finance can be mobilized through different funds, such as loans, grants and taxes. Among the alternatives, tax revenue is the principal source of the revenue. But the developing countries like Ethiopia, however; face difficulty of covering their expenditure using tax revenue. The consequence is insufficient service and budget deficiency.

The report of Ethiopian Revenue and Customs Authority (ERCA) (2012) revenue to Gross Domestic Product (GDP) ratio of different countries showed that the developed countries average ratio is 34.8%, the developing countries ratio is 18-25%, and the sub Saharan ratio is 15.4%. According to the report, the Ethiopian revenue GDP ratio is 13.7% which is very low when it is compared with the least ratio of the sub-Saharan countries.

In Ethiopia, we can also see another comparison from the ERCA (2012) report which indicated the revenue generation cannot cover the expenditure of the country. For instance in 2005 the revenue was 7931 million and grows to 23583 million in 2009. Also, in 2005 the government expenditure (regional & federal) was 11343 million and grows to 30,599 million in 2009. Hence, the capacity of revenue expenditure coverage is low and because of this low coverage, the capital expenditure depends on the external funds such as loans and grants.

TABLE 1: TIGRAY REGION 4 YEARS REVENUE GDP RATIO (in birr)

Year	Regional GDP	Regional Revenue	Revenue GDP Ratio (%)
2007	9,660,553,270.00	252,206,663.95	2.61
2008	13,907,727,030.00	349,068,164.71	2.51
2009	20,458,773,760.00	486,812,731.65	2.38
2010	23,366,684,060.00	633,317,368.75	2.71
Average	16,848,434,530.00	430,351,232.00	2.55

Source: TRSDRA (2013) and BoFED (2011) Report

According to the Table 1.1 above, the Tigray Regional State Developmental Revenue Authority (TRSDRA) (2013) and Bureau of Finance and Economic Development (BoFED) (2011) estimation of the Tigray region revenue GDP ratio is less than that of the country level 13.7%. Based on the data (Table 1), the Tigray regional state revenue GDP ratio in average in 4 years (2007-2010) is 2.55 %. This shows that there is a serious problem of revenue generation and accordingly the government suffers to finance the social and economic agendas of the region. Moreover, the tax assessment and collection was not planned and controlled category basis that is category A, B and C tax payer’s basis. Secondary data was not available on what has been assessed on and collected from category C taxpayers. In order to generate sufficient tax revenue, increasing parallel to the government expenditure as well as to have sustainable economic development and to reduce the dependency of the region, there should be corrective actions on the gap of tax administration systems. Specifically, the tax assessment and tax collection on the category ‘C’ taxpayers needs a special attention. To improve the tax revenue, the government should work with category ‘C’ taxpayers. Therefore, examining the tax assessment and collection problems at tax offices and taxpayers helps to take corrective actions so as to improving the tax revenue. Thus, this study intended to examine the consequences of tax assessment on tax collection of category “C” taxpayers in Mekelle city.

4. OBJECTIVES

The overall objective of this study was to examine the consequences of tax assessment on tax collection of the category 'C' tax payers in Mekelle city. Its specific objectives were:

- To assess the tax collection problems.
- To examine the consequences of tax assessment on tax collection.

5. RESEARCH METHODOLOGY

5.1. RESEARCH DESIGN

The research design used in this research was both the qualitative and quantitative method of survey research to analyze the consequence of the tax assessment on the tax collection on category 'C' taxpayers in Mekelle city. For the quantitative approach, sample survey was used and for the qualitative approach an in-depth interview was used. This study applied a sample survey study. This was because the total population of Mekelle city category "C" tax payers was 16,447 a complete survey cannot be used for this large number.

5.2. SAMPLING TECHNIQUE

This research sampling design included a detailed plan of the sample size, sample area and sampling techniques. Depending on the nature of the respondents, the study used two sampling design methods: the cluster random sampling and the purposive method. The cluster sampling technique used homogeneous tax payers and the purposive sampling method used to select proper officials from whom relevant information was gathered. From the total population of the category "C" tax payers of Mekelle city, the sample size was determined and then the sample population was also divided proportionally to sub cities and within sub-cities. The selection of individual tax payers was done by systematic random sampling. On the other hand, the tax collectors were selected to gather proper and relevant information. For this case, purposive (nonrandom) sampling technique was used on their responsibility; one respondent from expert and one from the heads from each Woreda.

The total population of this study was the whole category "C" taxpayers in Mekelle city and the employees of Mekelle Zone Developmental Revenue Authority. The number of respondents were determined wisely and properly, and considered the affordable cost and the manageable number of respondents. Thus, this study has applied Yemane (1976) sample size determination formula in order to determine the sample size. Based on this formula,

- a. The sampled size of the tax payers was 390 where $N=16,447$ and the $e=5\%$
- b. From the total employees of the sub cities (170), 2 employees were selected from each sub city and 2 officials were selected from the zonal level, through purposive sampling. Therefore, $2*7$ sub-cities + 2 zone level = 16.

Moreover, sample respondents were selected proportionately from each sub-city as follows:

$$S_n = 390 * (P_s / P)$$

Where, S_n = sample size of sub-city; P_s = the sub city population; P = the city population, and 390 the sample size of the study.

TABLE 2: POPULATION AND SAMPLE SIZE OF SUB-CITIES

S/No	Sub-city name	Sub-city population	Number of sample size		
			Tax payers	Employees	Total
1	Kedamayweyane	5893	139	2	141
2	Ayder	882	21	2	23
3	Semien	1622	39	2	41
4	Hadnet	2250	54	2	56
5	Hawelti	4111	97	2	99
6	Quiha	894	21	2	23
7	Adi-Haki	795	19	2	21
8	Mekelle	16447	-	2	2
Total			390	16	406

Source: FRDPMC (2011)

According to the above Table 2, questionnaires were distributed to the respondents of the 7 sub-cities. The ratio of the distributed and collected questionnaire shows that from a total of 406 questionnaires distributed 373 from the taxpayers and 14 from employees (i.e., a total of 387) filled and returned the questionnaire, this shown 95.3%, only 4.7% of the questionnaire was not returned.

5.3. TYPES AND SOURCES OF DATA

The types of data that were used in this research were primary data. It was collected from two sources; from the taxpayers and from tax authority officials. The data collected from the tax payers was through questionnaire and the data collected from the tax collectors was through questionnaire and interview.

5.4. DATA COLLECTION METHOD

Primary data was collected through questionnaire which includes closed and open ended questions for the tax payers as well as officials. The questions prepared for the tax payers included close ended; that have four alternatives, three alternatives and with two alternatives. On the other hand, some questions designed open and this type of question was prepared to gather information freely which is not covered by the close ended questions. The interview questions were designed only for the tax collection officials and this was designed to gather information from the respective bodies and to strengthen the data collected from tax collectors.

The interview was prepared to collect the data from the government employees of 7 sub-cities and Mekelle Zone Development Revenue Agency. An in-depth interview was conducted on face-to-face basis by using structured and unstructured questions.

5.5. DATA ANALYSIS

Even though, there is no compelling reason to choose logit over the probit, in practice many researchers choose the logit model because of its comparative mathematical simplicity. Accordingly, this research has applied the logit model; then the dependent and independent variables are presented as follows:

- Dependent variable (binomial) = the tax collection (the tax collection efficiency)
- The independent variable = the tax assessment variables affecting the tax collection

The logit model was specified as follows:

$$Y_i = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \beta_7 X_7 + \beta_8 X_8 + e \quad \dots \quad (1)$$

Where,

Y_i = Tax collection efficiency; α = Constant; β_i = Vector of unknown parameters; X_1 = Service delivery by the DRO;

X_2 = the law enforcement; X_3 = trust on assessment procedures; X_4 = Tax assessment awareness creation; X_5 = convenience; X_6 = trust on tax collectors; X_7 = fairness of the tax assessment and collection; X_8 = gender; and e = error term.

The logit model was tested for the existence of multicollinearity and heteroskedasticity. As a rule of thumb, if the VIF of an explanatory variable is greater than 10, there is a multicollinearity problem (Dereny & Rashwan, 2011). Accordingly, the model test of the study shown that the VIF result was 1.12, which is very low compared to the acceptable measurement that is less than 10. Therefore, the multicollinearity problem of this study is within the considerable range and then the model has not multicollinearity problem. Besides, the logit regression model was tested for heteroskedasticity through Breusch-Pagan heteroskedasticity test and the result showed that $Prob > \chi^2$ was 0.4504 (45.04%), which is greater than that of the significance level of 1%, 5% as well as 10%. This result indicated that there is no heteroskedasticity problem and there is equal variance among the error terms and the model properly specified and well fitted.

The dependent variable of the logit model was the tax collection efficiency which represents the efficiency of the tax collection by the tax collectors (authority) and is binomial logit model for which good represents 1 and poor represents 0. This was hypothesized to be influenced by many factors of the tax assessment such as, service delivery, the tax assessment awareness creation, the trust of tax collectors, the trust of taxpayers on tax assessment procedures, tax assessment convenience (season), the tax assessment fairness, and law enforcement of tax assessment.

RESEARCH HYPOTHESES

- Hypothesis 1: Good service delivery of the tax authority affects positively the tax collection efficiency.
- Hypothesis 2: The law enforcement of the tax authority in Mekelle city is not applied and then negatively affects the tax collection efficiency.
- Hypothesis 3: The taxpayers have trust on the tax assessment and tax collection procedures of the tax authority, and affect positively the tax collection efficiency.
- Hypothesis 4: Effective awareness creation on tax payers by the tax authority positively affects the tax collection efficiency.
- Hypothesis 5: The convenience of tax assessment season negatively affects the tax collection efficiency.
- Hypothesis 6: Because of trust of tax payers on tax collectors is low, the tax collection efficiency is affected negatively.
- Hypothesis 7: Tax collection efficiency positively affected by the fair tax assessment.
- Hypothesis 8: Tax awareness creation on females' positively affects the tax collection efficiency than of males'.

Finally, all the data that was collected from different sources was edited, coded, entered in to the SPSS and then analyzed by using the binomial logit regression model in order to identify the tax assessment and tax collection problems, and to analyze the consequences of tax assessment on tax collection of category 'C' taxpayers in Mekelle city.

6. RESULTS AND DISCUSSIONS

This section presents result of the model through regression analysis including *p-value* computed BY using SPSS.

TABLE 3: VARIABLES IN THE EQUATION OF LOGIT REGRESSION MODEL

Variable	R ²	Adj R ²	Prob> F	B	Std. Err.	Df	Sig Z- value	Exp(B)	Significance Level
TAXEFFIC	0.2920	0.2764	0.000						
GENDER (8)				-.0710569	.0451127	1	0.116*	-1.58	
SERVDELIV (1)				.2671034	.0493073	1	0.000***	5.42	0.01
LAWENFOR (2)				.3595897	.0492149	1	0.000***	7.31	0.01
AWERTAXASS (4)				-.1190955	.0501636	1	0.018**	-2.37	0.05
CONVINIENCE (5)				-.0330801	.0208212	1	0.113*	-1.59	
TRUSTAXCOLL (6)				-.0638352	.0485584	1	0.189*	-1.31	
TRUSTAXASS (3)				-.0612496	.0462492	1	0.186*	-1.32	
TAXASSFAIR(7)				.0926562	.0327947	1	0.005***	2.83	0.01
_cons				.4342672	.0861549	1	0.000***	5.04	0.01

Source: Own computation, 2013

(***=at 1%, **= at 5%& *= at 10% and above)

$$\text{Logit}(Y_i) = .4342672 + .2671034X_1 + .3595897X_2 - .0612496X_3 - .1190955X_4 - .0330801X_5 - .0638352X_6 + .0926562X_7 + .0926562X_8 + \epsilon_i$$

Table 3 above portrayed the effect of tax assessment on tax collection of the category "C" taxpayers in Mekelle City with corresponding sig-values to determine whether or not the tax assessment affects the tax collection. Regarding to the result of the model, of the eight variables included in the model service delivery, law enforcement, awareness creation on tax assessment and tax collection fairness found to be significant at 5% level.

According to the binomial logit regression output, the estimate of B₍₁₎ is 26.7% with standard error of 4.9%. The estimated odds ratio of efficient tax collection of good service delivery from the tax collector as compared to bad service delivery is Exp (B₁) equals 5.42. In other words the odds of tax collection are about 5.42 times higher for good service delivery holding other variables constant. This can be due to the fact that good service delivery by the tax authority satisfies tax payers there by encourage them to pay the levied tax on time.

In addition, the law enforcement result of the logit model estimate B₂ is 36% with standard error of 4.9% and the estimated odds ratio of tax collection of strong law enforcement from the tax authority as compared to weak law enforcement is Exp(B₂) 7.31. This means, the odds of tax collection are about 7 times higher for strong law enforcement holding other variables constant. This implies that strong law enforcement by tax authority can shape tax payers behavior in a good way.

The estimate of B₍₄₎ is -11.9% with standard error of 50.2%. The estimated odds ratio of efficient tax collection of awareness creation by the tax collector as compared to poor awareness creation is Exp(B₄) -2.37. In other words, the odds of tax collection are about 2.37 times below for a good awareness creation holding other variables constant. The negative coefficient shows that the awareness creation activities done by tax authority did not bring positive effect on tax collection efficiency.

Regarding to the tax assessment fairness, the estimate of B₇ is 9.3% with standard error of 3.3%. The estimated odds ratio of efficient tax collection of equally treated tax payers by tax collectors as compared to unequally treatment is Exp(B₇) 2.85. In other words, the odds of tax collection are about 2.85 times higher for equal treatment on tax assessment holding other variables constant. This implies if there is nepotism in tax assessment the tax collection will be negatively affected.

The other four variables included in the model gender, convenience (season), trust on tax collectors and trust on tax assessment and tax collection procedures found to be insignificant at 5% level. This implies that those variables have no significant effect on efficiency of tax collection from category "C" tax payers.

The above results and discussions indicated that service delivery, tax laws enforcements, awareness creation on tax assessment and fairness on tax assessment have statistically significant effect on efficiency of tax collection. This implies that the tax collection efficiency is influenced by those variables consequently, if tax authority try to work on these variables, it can improve tax collection efficiency.

As stated in Section 5.5 above there were eight hypotheses concerning to the broad and specific objectives of the research. Those hypotheses were mainly related to tax assessment and tax collection specifically to analyze the consequence of tax assessment on tax collection on category 'C' taxpayers. From the hypothesized variables gender (**Hypothesis 8**), convenience (season) (**Hypothesis 5**), trust of tax payers on tax collectors (**Hypothesis 6**), and trust on tax assessments and collection procedures (**Hypothesis 3**) found statistically insignificant at 5%. Therefore, those four variables are rejected. Thus, the next discussion focuses on the hypotheses testing of the remaining four variables found significant at 5%.

Hypothesis 1: Good service delivery of the tax authority affects positively the tax collection efficiency.

The variable good service delivery by tax authority is significant with P-value of 0.000 at 1% and the coefficient is positive (0.267) then the hypothesis is accepted. This supports the hypotheses that states good service delivery influences tax collection efficiency positively. In other words, the result implies that good service delivery by the tax authority on category 'C' taxpayers positively affects tax collection efficiency. Moreover, the descriptive analysis shows that 42% of the surveyed tax payers were not happy with the service delivered by the authority. This indicated that there is a big room for the tax authority to improve its service delivery system.

Hypothesis 2: The law enforcement of the tax authority in Mekelle city is not applied and then negatively affects the tax collection efficiency.

The result of logit regression shows that strong law enforcement by the tax authority found significant with p-value 0.000 at 1% and the coefficient is positive (0.359), therefore the hypothesis accepted. This result supports the hypothesis which states strong law enforcement can maximize the likelihood of efficient tax collection. As can be seen in the descriptive analysis, a very great number of respondents believed that law enforcement is weak and the authority is demanded improvement.

Hypothesis 4: Effective awareness creation on tax payers by the tax authority is positively affects the tax collection efficiency.

The significant value of the variable awareness creation by tax authority is accepted at 0.018 at 5%. This implies that the awareness creation on tax payers by the tax authority significantly affects tax collection efficiency. However, the coefficient is negative (-0.119) which is the awareness creation affects negatively to the tax collection efficiency. The negative sign indicates that the awareness creation has been done but the tax collection affected negatively. This may be due to poor (boring) awareness creation session (which in turn may be caused by problems of agenda setting, gap identification, time selection, quality of the facilitators etc). This implies that even though the tax authority budgets money, man power and time, still the awareness creation impact is negative.

Hypothesis 7: Tax collection efficiency is positively affected by the faired tax assessment.

The sig-value column shows that 0.005 is accepted at 1% in the dimension of tax assessment fairness to category 'C' tax payers and the coefficient of the logit regression is positive 0.093; thus, the hypothesis is accepted. This result supports the hypothesis that states 'tax collection efficiency is positively affected by the faired tax assessment.' This implies that if tax assessment is perceived to be fair by tax payers, it would have a positive impact on tax collection efficiency, otherwise negative.

7. CONCLUSIONS AND RECOMMENDATIONS

The focus of this research was on the problems of tax assessment and collection on category "C" tax payers, then thoroughly identifying the consequence of the tax assessment on tax collection. This helps to deal how assessment factor affects efficient tax collection. Though, many problems can affect the tax collection, identifying the more critical ones was the focus of this study. Accordingly, the binomial logistic regression revealed that tax assessment affects the tax collection efficiency. The most significant variables affecting tax collection were awareness creation, law enforcement, tax assessment and collection fairness, and service delivery. Therefore, the study concluded that unless good service delivery is provided, tax related laws are enforced and implemented, effective awareness creation is done and fair tax assessment is conducted, there may not be efficient and effective tax collection.

Even though efficient tax assessment and collection cannot be made over night, it is up to tax administrators to ensure sufficient tax revenue. Multiple approaches are needed to enhance tax collection efficiency. No single approach is likely to fully and effectively address the tax collection efficiency of category 'C'. Since it has multiple causes of tax related problems, the category "C" tax payers needs more attention.

Based on the conducted survey, factors that determine the relationship between tax assessment and tax collection were identified and the following possible recommendations are forwarded so that it may help the tax authority, policy makers and other stakeholders to deal with the issue.

- One of the most important points is mobilizing tax payers towards government agendas. This is because tax payers are the foundation for the government existence and should have a strong bondage between the government and the tax payers. Therefore, to strengthen the relationship between the government and the tax payers through persuasion and continuous communication is a matter of awareness creation.
- Awareness creation in general is making tax payers positive thinkers towards the taxation and equipped them through knowledge of the reason why paying tax, the benefits of the tax payers from paying the tax, how the assessment and collection made, the role of the government and tax payers during the tax assessment and tax collection. Thus, Mekelle tax authority should give more emphasis on awareness creation of tax payers. To do so, the Authority has to use own tools such as regular educational sessions through politicians, professionals, role models of the tax payers, through visiting and experience sharing on the results of paid tax and using electronic and printing medias. On the other hand, knowledge gaps should be identified, agendas should be set accordingly and well prepared catering to the seasonal issues, considering demographic characteristics and specific business areas are the important techniques. Another way of awareness creation is also challenging and fighting to those who try to escape from tax payments.
- The furthest requirement for efficient tax collection is treating equal tax payers in equal situations and an equal manner. Maintaining tax equity and tax assessment fairness is not achieved only through levying equal taxes on individual who have equal income, but also each taxpayer should pay according to his/her ability to pay. In addition, bringing non taxpayers to tax system has to be considered as a measure of ensuring tax equity. In other words, it is unfair to say that the tax assessment is equitable as long as several capable traders are not paying tax. In this case, taxpayers will be discouraged to the extent that the tax assessment is believed to be unfair and inequitable. Hence, the question of fairness or equity is not only dealing with existing taxpayers but also concerned with people outside the tax system. Ensuring equity means encouraging and protecting honest and loyal taxpayers by adopting fair competition. This can be achieved by incorporating in to the tax system all those who are eligible. The authority must also involve the taxpayers or their representatives while estimating the daily sales or revenue of taxpayers to address the question of fairness and equity. Generally, the authority has to try its level best in ensuring tax fairness and equity so that voluntary compliance behavior can be developed.
- The regulations of tax assessment are the duty and power of the tax authority. But, actually there are problems related to the tax assessment. Due to this, tax assessment is done with no enough data of transaction of the tax payers and this is not convenient for both the government as well as the tax payers. Therefore, participation of the tax payers at the tax assessment is essential. This could be through the legal representative associations or representatives can be directly elected from the tax payers in the sub city. This also helps to create cooperation between government and taxpayers towards the development agendas as well as fostering the clarity of government regulations. Then this helps to make tax collection efficient.
- Even though many factors affect efficient tax collection, one of the essential factors is service delivery. Therefore, the tax authority needs to consider corrective actions; such as, providing fast service delivery. Hence, tax authority should employ enough man power considering the number of tax payers in the sub-cities. In addition to this, the educational back ground of tax collectors should be upgraded. Most of the activities of the sub-cities are operated manually and this makes the service delivery unsatisfactory. So, to make the service delivery effective, efficient and economic; the authority is demanded to support the tax assessment and collection by computerized system; Such as, all departments in each office, Wereda to Wereda, and Wereda to region should be connected by network system. Moreover, all records that are related to tax assessment and tax collection should be kept in a computerized system and be secured and available to users.
- Implementing tax related laws affects tax collection efficiency. The tax authority should give emphasis applying to the law enforcement in important aspects; such as controlling to those who are active in business but not paying tax. In addition to this, those who repeatedly by pass the tax laws should be subjected to penalty. Or else, a tax payer who pays tax on time will be backfired and forced to escape from tax. Finally, the tax collection efficiency will be affected negatively.

LIMITATIONS AND SUGGESTIONS FOR FURTHER RESEARCH

There were limitations on the study such as insufficiency of updated secondary data and the respondents' openness. Besides, this study focused only on the Mekelle city tax assessment and tax collection of the category "C" taxpayers. It is difficult to generalize about the overall tax assessment and tax collection. Therefore, other researchers can make further research on the category "A" and "B" tax payers as well as category "C" taxpayers at regional level by considering more representative samples.

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A COMPARATIVE STUDY OF JOB SATISFACTION LEVELS OF EMPLOYEES IN TWO INDUSTRIES: AN EMPIRICAL REVIEW

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ABSTRACT

Job satisfaction is an individual's general attitude towards the job. But it is a complex summation of a number of discrete job elements, such as employees interaction with peers and superiors, following organization rules and policies, meeting performance standards, living with working conditions that are often less than ideal and the like (Wicker, 1969). Important factors conducive to job satisfaction include mentally challenging work, equitable rewards, supportive working conditions and supportive colleagues (Locke, 1976). Employees tend to prefer job that give them opportunities to use their skills and abilities and over a variety of tasks, freedom and feedback. Under conditions of moderate challenge most employees experience, pleasure and satisfaction. The satisfied employee expects the job climate with the conditions that the Job satisfaction generally refers to a variety of aspects of the job that influence a person's level of satisfaction with it. Locke (1976) defined it as a pleasurable or positive emotional state resulting from the appraisal of one's job or job experience. This job satisfaction encompasses attitudes towards pay, working conditions, colleagues and bosses and the intrinsic aspects of the job itself. A person's job satisfaction is influenced directly by the characteristics of his job. Some of the important contributing factors for the job satisfaction are mentally challenging work, equitable rewards, supportive working conditions, working environment that produce a positive work experience. An employee's level of satisfaction varies with specific aspects of the job which is diversified into five distinct dimensions: satisfaction of the work (e.g. Nature of work, autonomy, and responsibility), rewards (e.g. Pay, promotion, and recognition), other people (supervisor, coworkers), the organizational context (policies, procedures, working conditions) and self or individual differences (internal motivation moral values).

KEYWORDS

job satisfaction, persistent behavior, job climate, mentally challenging work, autonomy, psychological, recognition, pleasurable, individual differences.

INTRODUCTION

Job satisfaction is an individual's general attitude towards the job. But it is a complex summation of a number of discrete job elements, such as employees interaction with peers and superiors, following organization rules and policies, meeting performance standards, living with working conditions that are often less than ideal and the like (Wicker, 1969).

Important factors conducive to job satisfaction include mentally challenging work, equitable rewards, supportive working conditions and supportive colleagues (Locke, 1976). Employees tend to prefer job that give them opportunities to use their skills and abilities and over a variety of tasks, freedom and feedback. Under conditions of moderate challenge most employees experience, pleasure and satisfaction. The satisfied employee expects the job climate with the following conditions:

EQUITABLE REWARDS

Employees want pay systems and promotion policies that they perceive as just, unambiguous and in line with their expectations. Satisfaction results when pay is seen fair based on job demands. Some people may prefer to accept less monetary benefit to work in preferred location, or in a less demanding job or to have a greater discretion. But important consideration in linking pay with satisfaction is not the absolute amount one is paid but it is the perception of fairness Likewise, promotion policies and practices. Promotion provides opportunities for personnel growth, more responsibilities and increased social status. The job satisfaction is experienced when the employees perceive that promotion decisions are made in a fair and just manner.

SUPPORTIVE JOB CONDITIONS

Employees are concerned with their work environment for both personal comfort and facilities for doing a good job. Employees prefer physical surroundings that are not dangerous or uncomfortable. Temperature, light, noise and other environmental factors should not be at extreme.

SUPPORTIVE COLLEAGUES

The employee's job satisfaction is created when the immediate supervisor understands and friendly, provides conditions for good performance, listens to the employees' opinions and shows a personal interest in the employees.

People with personality types consistent with their chosen vocations should find that they have right talent and abilities to meet the demands of their jobs and thus more likely to be successful on those jobs; and because of this success they have greater probability of achieving high satisfaction from their work (Feed man, et al, 1985).

REVIEW OF EMPIRICAL STUDIES

In America, (Chalet et al, 1982) several studies have indicated high, i.e., 70 – 80 per cent job satisfaction and older people report very high percentage (92%) of satisfaction.

JOB SATISFACTION AND PRODUCTIVITY

Several studies were conducted to establish the relationship between satisfaction and productivity during 1950's and 60's but no consistent trend could be established. But in the early 1990's some studies are conducted out of which some inferences are drawn. The studies summarized the relationship between satisfaction and productivity as "a happy worker is a productive worker".

But this summation has drawn severe criticism and showed many lacunae. If there is a positive relationship between satisfaction and productivity the correlations were consistently low, in the vicinity of 0.14 (Vroom, 1985). Introduction of modern variables has improved the relationship (Herman, 1973), as in the case where the employee's behavior is not constrained or controlled by outside factors. An employee's productivity on machine – paced jobs is much more influenced by the machine than by satisfaction of the employee. Similarly, a stockbroker's productivity is largely, constrained by the general movement of a stock market. When the market is moving up and volume is high both satisfied and dissatisfied brokers reap huge amounts of commission. Conversely, when the market is slump, the level of satisfaction does not mean much.

Job level also seems to be an important moderating variable. The satisfaction performance correlations are stronger for higher level employee.

Another important concern is that cause and effect. Most of the studies on the relationship used research designs that could not prove cause and effect. The studies that took notice of this factor have concluded that productivity leads to satisfaction rather than the other way around (Green, 1972). Increased productivity results in recognition, verbal, salary hikes and promotional possibilities. These rewards, in turn, increase the level of satisfaction with the job.

There is a consistent negative relationship between satisfaction and absenteeism, but the correlation is not high, usually less than 0.40 (Locke, 1984). An example was cited to illustrate this low correlation. Organizations that provide liberal sick leave benefits encourage all their employees including those who are highly satisfied to take days off. It is possible that those who find work satisfying tend or inclined to take off work to enjoy a three day week end. Thus outside factors can act to reduce the correlation. But, it is not correct to conclude that satisfaction is always correlated (Smith, 1977). Smith narrated the incidence of a snow storm at Chicago. While at New York the weather was quite nice, the storm disrupted the transportation giving an inbuilt excuse for the Chicago workers to absent themselves without penalty. If satisfaction leads to attendance, for those there is absence of outside factors, the more satisfied employees should have not stayed at home. The study found that absenteeism rates in New York (control group) were just as high for satisfied groups of workers as for dissatisfied groups. But in Chicago, the workers with high satisfaction scores had much higher attendance than those with lower satisfaction levels. These findings are exactly what would have been expected if satisfaction is negatively correlated with absenteeism.

Job satisfaction is important to increase productivity Sisk (1969) considered job satisfaction is only one of the several factors making up the complex of needs. He felt that there is no demonstrable relationship between job satisfaction and productivity.

Herzberg, et al (1959) considered that feeling of job satisfaction was more important than money for motivating people to increase productivity. Thus, attempts are made to apply the knowledge gained so as to increase job satisfaction by job enlargement and enrichment.

Job enrichment consists of making job more challenging and interesting by increasing the variety of tasks to be considered. The job enrichment consists of adding different types of tasks and providing greater worker participation and involvement. Employees who are satisfied and happy with their jobs are less likely to be absent from work regardless of their moods. Those employees who supported high negative moods but are satisfied with their jobs showed less absenteeism. Same is true of those who have low positive mood and were satisfied with their jobs (Lisa Hope et al, 1999).

Taking steps to improve job satisfaction such as enrichment of jobs, reasonable workload, flexible hours, good benefits, training, good equipment, perks that the organization cares, nice work environment and wages comparable in the job market will improve the organization ability to maintain productivity and keep employees.

Dave Motta (1999) opines job satisfaction or employees satisfaction, also referred to as morale, is one of the most used variable in organizational behavior. It is an employee's attitudinal response to his organization. As an attitude job satisfaction is summarized as an evaluative component and comprises of cognitive, affective behavioral component. The relationship between satisfaction and behavior, most specify as job performance and membership is complex. Job satisfaction combined with employee's motivation influences certain behavioral patterns.

OBJECTIVES OF THE STUDY

1. To assess the motivational levels of the female and male employees;
2. To evaluate job satisfaction levels of the female and male employees;
3. To assess the job commitment/organizational commitment;
4. To assess the levels of motivation and job satisfaction as influenced by age, gender, caste, income, years of education and years of job experience; and
5. To examine linkages between motivation, job satisfaction and organizational commitment

HYPOTHESES

Following are the hypotheses of the present study.

1. The variations in individual groups between males and females in case of their profile and organizational differences can be noticed.
2. The level of motivation, job satisfaction and commitment differ between the gender groups and organizations.
3. The personal factors such as age, income and job experience positively influence motivation, job satisfaction and commitment. Education influence may be negative.

DATA ANALYSIS

The collected data are analyzed by using statistical package "Statistic", for computing simple percentages, averages, t-test and multiple regressions.

DATA ANALYSIS AND INTERPRETATIONS

The in-depth analysis on individual aspects of job satisfaction is presented below:

JOB DESIGN

The nature of job affects the satisfaction level of the employees. If the job is sophisticated the employees feel higher level of satisfaction whereas tough job results in lower level of job satisfaction. Hence views on nature of job are elicited. The data of the employees reveal that in MAHINDRA SATYAM, majority of the employees (71.16 per cent) express high level of satisfaction with the nature of job. The remaining employees (27.21 per cent) state that they are either

dissatisfied or very much dissatisfied. The average value (\bar{X} : 3.98) shows that there is high satisfaction level towards the nature of job. In case of PDSL, those satisfied form only 54.39 per cent and the average (3.16) shows that the employees are silent on this aspect. The difference of opinion between the organizations is significant (t: 7.05).

The male–female analysis in MAHINDRA SATYAM indicates that most of the male employees i.e., 93.76 per cent are satisfied with the nature of job. (\bar{X} : 4.03)

while the females in this category form 83.94 per cent (\bar{X} : 3.97). The variation between males and females is marginal.

In PDSL nearly half of the male employees (52.38%) express that they are satisfied and those employees dissatisfied form 33.34 per cent. The average of (3.10) also shows that the employees express no opinion on this aspect. A group of 55.56 per cent of female employees expresses satisfaction and 33.34 percent of the females are dissatisfied. Their average (3.19) shows that women are also silent on this aspect. The variations in individual groups between males and females are marginal.

Overall analysis shows that the employees in MAHINDRA SATYAM are having higher level of job satisfaction compared with those of PDSL and male female difference in the organization is absent.

The amount of variety in job provides better scope for satisfaction of the employees. The data of the employees show that in MAHINDRA SATYAM majority of them (55.62%) express satisfaction. Next in order, 29.58 per cent state that they are not sure. The remaining 14.79 per cent reveals dissatisfaction. The average of the employees (3.60) also confirms the same. In PDSL the largest proportion of the employees (47.62 per cent) state that they are not sure about the variety in job while 29.82 per cent expresses dissatisfaction and only 24.57 per cent of the employee's states that they are satisfied. Overall, MAHINDRA SATYAM employees are more satisfied with the variety of job than the PDSL employees and the difference is significant at the (t: 4.67).

The male female analysis indicate that the majority of the male respondents i.e., 56.25 per cent is having higher level of job satisfaction (\bar{X} : 3.56), while the females in the category also account to 55.47 per cent (\bar{X} : 3.61). The variation in individual groups is marginal.

The male female analysis of PDSL shows that 47.62 per cent of the males are not sure about variety in their job and 33.33 per cent express satisfaction (\bar{X} : 3.00). The data about the females show that highest proportion (44.44 per cent) is not sure and 27.78 per cent expresses their dissatisfaction.

Overall analysis shows that the employees of MAHINDRA SATYAM are just satisfied with the variety in job; the PDSL employees are silent on this aspect. Male female differences are absent.

JOB SAFETY

Job security is one of the key elements which influence the job satisfaction level of the employees. In MAHINDRA SATYAM the data of the employees show; that majority of the employees (62.72%) feel that they have job security in the organization (\bar{X} : 3.76). In PDSL only 40.35 per cent accept that they have job security (\bar{X} : 3.07). The difference is significant (t: 4.98).

The male female analysis of the MAHINDRA SATYAM indicates that 56.25 per cent of the males (\bar{X} :3.69) and 64.23 per cent females (\bar{X} :3.78) express that they have job security.

The male-female analysis of the PDSL indicates that 38.09 per cent of the males (\bar{X} : 3.00) and 41.67 per cent of the females (\bar{X} :3.11) are satisfied regard to job security and thus variation in between males and females is marginal.

Overall analysis shows that the employees in MAHINDRA SATYAM feel more job security and the employees of PDSL feel that they are not sure about job security.

MONETARY BENEFITS

The pay and perks satisfy the needs and aspirations of the employees and in turn lead to job satisfaction. In MAHINDRA SATYAM the data of the employees revealed that majority of the employees (78.11%) are satisfied with the pay and other benefits. (\bar{X} :3.92). In PDSL 52.63 per cent employees express their dissatisfaction regarding pay and perks provided by the management (\bar{X} : 2.67). The organizational differences are significant (t: 8.98).

The male-female analysis in MAHINDRA SATYAM indicates that most of the employees (81.25%) among the males have higher level of job satisfaction (\bar{X} :4.03), while the females in this category account to 77.37 per cent (\bar{X} : 3.90). The variations in individual groups between males and females are marginal.

The male-female analysis of P.D.S.L indicates that among the males 52.38 per cent (\bar{X} :2.62) and among the females equally i.e., 52.77 per cent (\bar{X} : 2.69) are dissatisfied with pay and prerequisites.

Overall analysis shows that in MAHINDRA SATYAM the employees are satisfied with their pay and perks, where as the employees are dissatisfied with their pay and perks in PDSL.

The retirement benefits of the employees also are a factor of perception to job satisfaction. Most of the employees in MAHINDRA SATYAM (75.15%) express that they are satisfied with the retirement benefits (\bar{X} : 3.80). In PDSL those satisfied form only 52.63 per cent (\bar{X} :2.67). The difference of opinion is significant (t: 7.40).

The male female analysis of PDSL indicates that most of MAHINDRA SATYAM male (75.01%), (\bar{X} :3.81) and the female (75.18%), (\bar{X} :3.80) employees are satisfied.

The male female analysis indicates that most of the employees 66.66 per cent among the males are dissatisfied (\bar{X} : 2.33) with the retirement benefits, while the females in this category work out to 44.44 per cent (\bar{X} :2.86).

Overall analysis shows that most of the employees in MAHINDRA SATYAM are just satisfied, whereas in PDSL, the employees are dissatisfied with the retirement benefits.

PERFORMANCE APPRAISAL

Through performance appraisal the work is evaluated and rewards be given to the employees who influence the satisfaction level of the employees. Relating to mode of evaluation of performance of the employees most of the employees (72.19%) in MAHINDRA SATYAM express they are satisfied (\bar{X} : 3.83), while only 40.35 percent of PDSL employees belong to this group (\bar{X} : 2.71). The difference is significant (t: 5.77).

The male-female analysis in MAHINDRA SATYAM indicate that 68.75 per cent of males express that their work is evaluated in proper manner by the management (\bar{X} :3.66), while the females in this category form 72.99 per cent (\bar{X} :3.88). Thus, difference is marginal.

The male female analysis of PDSL indicates that the largest proportion of the male employees i.e., 38.09 per cent are dissatisfied and 33.33 per cent express that they are not sure about the statement (\bar{X} :2.71), while the females who are not sure account to 47.22 per cent (\bar{X} :3.17) and those dissatisfied form 30.55 per cent. The variations in individual groups between the males and females are not significant.

PROMOTION FACILITIES

The opportunities for promotion enhance job satisfaction. In MAHINDRA SATYAM the data of the employees indicate that two thirds of them (66.27%) express satisfaction (\bar{X} : 3.77) about the promotion opportunities, while in PDSL the largest proportion (38.59%) are dissatisfied (\bar{X} : 2.82) and the difference is significant (t: 6.13).

The male female analysis indicate that among the males, 65.63 per cent accept that they are satisfied (\bar{X} : 3.72) while the same group of the females (66.42%) (\bar{X} : 3.78) also express satisfaction in regard to the opportunities for promotion.

The male female analysis of PDSL reveals that among the males, 47.61 per cent (\bar{X} : 2.57) and 38.89 per cent of females (\bar{X} : 2.97) are satisfied. The satisfaction level of males is higher than the females.

Overall analysis shows that the employees in MAHINDRA SATYAM are having better promotion opportunities compared to the employees of PDSL and the males of PDSL are more satisfied than the females in case of their promotional opportunities.

WORK ENVIRONMENT

The recognition given for good work improves the satisfaction levels of the employees. In MAHINDRA SATYAM the data of the employees reveal that most of them (79.28%) are satisfied with the recognition given to them (\bar{X} : 4.02) while in PDSL the satisfaction level is lower (45.61 percent \bar{X} : 3.04). The difference between organizations is significant (t: 6.90). The male female analysis of MAHINDRA SATYAM shows that most of the males (75.00%) express satisfaction (\bar{X} : 3.72) while the females in this category form 66.42 per cent (\bar{X} : 3.78).

The male female analysis of PDSL also indicates 47.62 per cent (\bar{X} : 2.95) males and 44.44 percent of the females (\bar{X} : 3.08) express their satisfaction. Overall analysis shows that the employees in MAHINDRA SATYAM are having higher level of satisfaction whereas in PDSL, the employees are either dissatisfied or not sure. No male female differences are noticed.

The good working environment within the organization creates job satisfaction to the employees. In MAHINDRA SATYAM the data of the employees indicate that most of the employees (78.10%) are satisfied with prevailing work environment (\bar{X} : 3.95) while it is not (49.12%) in case of PDSL (\bar{X} : 3.14) and the difference is significant (t: 5.64).

The male-female analysis indicates that most of the male employees (81.25%) and the females (77.37%) state that they are satisfied. The average of the males (\bar{X} : 4.13) and the females (\bar{X} : 3.91) confirm the same.

In case of PDSL majority of the male employees (52.38%) are satisfied (\bar{X} : 3.14) with the prevailing working environment while the female group form (47.22%), (\bar{X} : 3.14) and the averages confirm that they have common opinion.

Overall analysis shows that most of the employees in MAHINDRA SATYAM are having higher level of job satisfaction regarding work environment where as in PDSL the employees are not sure in regard with the working environment.

The facilities provided at work increase the satisfaction level of the employees. In this aspect most of the MAHINDRA SATYAM employees (75.73%) express that they are satisfied (\bar{X} : 3.88) while in PDSL only 45.61 per cent endorse this opinion (\bar{X} : 3.18). The difference is found to be significant (t: 4.98).

The male – female analysis indicates that most of the MAHINDRA SATYAM male (78.12%) state that they are having higher level of job satisfaction (\bar{X} : 3.97) than the females (75.18%), (\bar{X} : 3.86).

In PDSL most of the male employees (78.12%), (\bar{X} : 3.19) and only 44.44 per cent of the females (\bar{X} : 3.17) express that they are satisfied with the facilities at work. However the difference is not significant.

In overall employees of MAHINDRA SATYAM are satisfied, while in PDSL they are sure that they are satisfied with the facilities provided at work.

FACILITIES FOR PARTICIPATION

The relations with superiors and co-employees provide lot of scope for satisfaction. In MAHINDRA SATYAM the data of the employees show that most of the employees (78.70%) are satisfied with their relations with superiors, while 56.14 per cent express the same opinion (\bar{X} : 3.25) in PDSL. The difference of opinion is significant (t : 5.10).

The male - female analysis indicates that 84.38 per cent of the males state that they are satisfied (\bar{X} : 4.16), in case of the females this category forms 77.37 per cent (\bar{X} : 3.96).

The male-female analysis in PDSL indicates that majority of the male employees (52.38%) say that they are satisfied (\bar{X} : 3.14) with the relations while the females in this category account to only 47.22 per cent (\bar{X} : 3.14). However, the averages show that they are not sure and have no difference of opinion.

Overall analysis shows that the employees of MAHINDRA SATYAM are more satisfied with the relations of co-employees and superiors, where as the employees in PDSL are not of that level. Male female differences are absent.

The opportunities for participation influence the job satisfaction level of the employees. In MAHINDRA SATYAM the data of the employees show that two thirds of the employees (66.86%) express satisfaction (\bar{X} : 3.68) while the largest proportion of the PDSL employees (45.61%) are silent (\bar{X} : 3.07) and the difference between organizations is significant (t: 4.07).

The male female analysis indicates that 62.50 per cent of the males (\bar{X} : 3.50) and 67.88 percent (\bar{X} : 3.72) of the females express satisfaction regard to opportunities for participation.

The male-female analysis of PDSL reveals that among the males 42.86 percent (\bar{X} : 3.10) and 47.22 per cent of the females (\bar{X} : 3.06) express satisfaction and majority are either silent or dissatisfied in case of both the males and the females.

Overall analysis shows that the employees in MAHINDRA SATYAM are having more opportunities for participation compared to PDSL and no male female differences are noticed.

MANAGEMENT AND EMPLOYEES

The adoption of policies and procedures in the organization enhance the job satisfaction level of the employees. In MAHINDRA SATYAM the data of the employees show that majority of the employees, i.e., 70.41 per cent express that they are satisfied with the policies and procedures implemented by the organization (\bar{X} : 3.84). In PDSL the satisfied group form only 52.39 per cent (\bar{X} : 2.89) and the organizational difference is significant (t: 6.31).

The male - female analysis indicates that most of the males, 75.00 per cent, are satisfied with the policies of the management (\bar{X} : 3.88) where as the females in this category work out to 69.34 per cent in case of S.C.S.L. (\bar{X} : 3.83) and variation is marginal.

In PDSL majority of the males (52.38%) are satisfied (\bar{X} : 3.14), while the females in this category forms only 30.56 per cent and express their dissatisfaction (\bar{X} : 2.75). The variation in individual groups between males and females are noticed but not significant.

Overall analysis shows that in MAHINDRA SATYAM most of the employees express their satisfaction where as in PDSL they are dissatisfied with the organization policies.

The reaction of the employees towards the work irrespective of facilities in the organization is measured. In MAHINDRA SATYAM the data of the employees show that most of the employees (86.39%) express that they have high level of job satisfaction in work irrespective of job environment (\bar{X} :3.98), while in case of PDSL, majority (66.66%) (\bar{X} :3.46) endorse this opinion. The difference of opinion between employees of MAHINDRA SATYAM and PDSL is significant (t: 3.62).

The male female analysis indicates that 84.38 per cent among the males of MAHINDRA SATYAM state that they like to work irrespective of facilities at work (\bar{X} :3.84), while the females in this category from 86.86 per cent (\bar{X} :4.01).

The male female analysis of PDSL indicates that most of the employees 80.95 per cent among the males state that they are having high level of job satisfaction irrespective of job environment (\bar{X} : 3.76). The females in this category account to 58.34 per cent (\bar{X} :3.28). However the variation is not significant. It may be said that the employees like to work irrespective of the facilities provided. However, the MAHINDRA SATYAM employees are at the higher place in this aspect.

The difference between the males and females, when the two organizations are put together, are also assessed. The analysis indicates that in case of job design and working environment, there is no significant difference between the males and females. However, in case of retirement benefits, (t: -2.18), performance appraisal (t: - 2.85) and promotion facilities the significant difference is noticed between the males and females indicating more job satisfaction level of the females.

CONCLUSION

The most significant determinant of job satisfaction is the job itself, the core constructs of skill, variety, task identity, task autonomy and feedback.

The overall average level of job satisfaction of the employees is 3.63 while it is 3.83 per MAHINDRA SATYAM employees, 3.03 in case of PDSL employees. It is known that while MAHINDRA SATYAM employees are satisfied, the PDSL employees have no idea.

The individual components of job satisfaction show that the employees are highly satisfied in case of work environment (\bar{X} : 3.74) and relations between management and employees (\bar{X} :3.73), while in case of facilities for participation (\bar{X} : 3.65) monetary benefits (\bar{X} : 3.64), performance appraisal (\bar{X} : 3.63), job design and job safety (\bar{X} :3.56 each) and promotion facilities (\bar{X} : 3.53) it is lesser.

Overall analysis on job satisfaction reveals that the males and females in MAHINDRA SATYAM have satisfaction in case of job design (males \bar{X} : 3.80; females \bar{X} : 3.79), job safety (Males \bar{X} : 3.69; females \bar{X} : 3.75), monetary ;benefits (males \bar{X} : 3.80; females \bar{X} : 3.81), performance appraisal (males \bar{X} : 3.66; females \bar{X} : 3.88), promotion facilities (males \bar{X} : 3.72; females \bar{X} : 3.78), work environment (males \bar{X} : 4.04; females \bar{X} : 3.93), facilities for participation (males \bar{X} :3.77; females \bar{X} : 3.87) and relations between management and employees (males \bar{X} : 3.86; females \bar{X} : 3.92).

In case of Performance appraisal MAHINDRA SATYAM female employees are more satisfied than the males.

In PDSL the male (\bar{X} : 3.00) and female (\bar{X} : 3.11) employees express no opinion, in case of job safety, working environment, (males \bar{X} : 3.09; females \bar{X} : 3.11), facilities for participation, (males \bar{X} : 3.03; females \bar{X} : 3.06). In case of job design, (males \bar{X} : 2.79; females \bar{X} : 2.92), promotion facilities, (males \bar{X} : 2.57; females \bar{X} : 2.97) they are not satisfied.

In case of monetary benefits (\bar{X} :2.78) and performance appraisal (\bar{X} :2.71) the males are critical while the females (job safety \bar{X} : 3.11; monetary benefits \bar{X} :3.32) express no opinion. In case of management and employee relations the males (\bar{X} : 3.55) express just satisfaction, while females (\bar{X} :3.00) have no idea.

Overall MAHINDRA SATYAM employees are more satisfied than the PDSL employees and males of the PDSL are critical about monetary benefits, performance appraisal, promotion facilities and job design. The females of PDSL are not satisfied with the promotion facilities and job design.

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LIQUIDITY PERFORMANCE: A CASE STUDY OF NAGARJUNA FERTILIZERS COMPANY LIMITED

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ABSTRACT

Liquidity refers to the ability of the firm to meet the current financial obligations in the short run usually in one year. A firm should assure that it does not suffer from lack of liquidity and also it does not carry too much liquidity as this hampers profitability. To analyze the firm's liquidity position, liquidity ratios are used. These ratios are generally based on the relationship between current assets and current liabilities. The liquidity of the NFCL is analysed with the help of Liquidity ratios. The huge funds were unnecessarily blocked up in the current assets in the first part of the study period. This situation had negative impact on profitability of company. The current assets were not sufficient to meet the current liabilities in the later years of the study period. Hence, the liquidity performance was not satisfactory in the company. The NFCL had failed to achieve the balance between the twin objectives of working capital management i.e., liquidity and profitability. Undoubtedly, the short-term obligation could be comfortably meet from quick assets. But more quantum of working funds were blocked up in quick assets, particularly in the former years of the study period. Thus, the profitability of the company could be adversely affected. The variations in the cash ratio were due to variations in the current liabilities. The ratio never did less than the unity during the entire period of the study. Therefore, the liquidity performance was comfortable and NFCL did not face the problem of liquidity risk. The actual liquidity position was adequately comfortable only in two years out of 10 years. In other words, the NFCL had faced the problem of liquidity in actual terms. In other words, the actual liquidity performance was threatening in the company. The management of NFCL shall release the funds blocked up in current assets through quick conversion of current assets into cash. On the other hand, the company either shall have to improve the quantum of current assets or to reduce the magnitude of current liabilities in later years of the study. To this end, the management of NFCL shall bring the balance between the liquidity and profitability. The size of the quick assets shall be reduced so as to improve the profitability performance. The management of the company shall reduce the variations in the cash ratio by minimizing the variations in current liabilities. The management of NFCL shall improve the actual liquidity performance by improving the cash flows of the company.

KEYWORDS

Technical liquidity, Actual liquidity, current ratio, quick ratio, cash ratio.

INTRODUCTION

Several financial ratios computed from the accounting data can be grouped into various classes according to financial activity to be evaluated. As stated earlier, the parties interested in financial analysis are short-term and long-term creditors, owners and management. Short-term creditors' main interest is in the liquidity position or the short-term solvency of the firm. Long-term creditors, on the other hand, are more interested in the long-term solvency and profitability of the firm. Liquidity refers to the ability of the firm to meet the current financial obligations in the short run usually in one year. A firm should assure that it does not suffer from lack of liquidity and also it does not carry too much liquidity as this hampers profitability. To analyze the firm's liquidity position, liquidity ratios are used. These ratios are generally based on the relationship between current assets and current liabilities. The liquidity of the NFCL is analysed with the help of Liquidity ratios.

OBJECTIVE

The present research paper aims at evaluating the technical and actual liquidity performance of Nagarjuna Fertilizers Company Limited.

LIQUIDITY PERFORMANCE

The terms liquidity and short-term solvency are used synonymously. Liquidity or short-term solvency means ability of the business to pay its short-term liabilities. Inability to pay-off short-term liabilities affects its credibility as well as its credit rating. Continuous default on the part of the business leads to commercial bankruptcy. Eventually, such commercial bankruptcy may lead to its sickness and dissolution. Short-term lenders and creditors of a business are very much interested to know its state of liquidity because of their financial stake. The liquidity ratio include for the purpose of analysis are:

- ❖ Current ratio
- ❖ Quick ratio
- ❖ Cash ratio
- ❖ Net cash flows to current liabilities ratio

CURRENT RATIO

The current ratio is an acceptable measure of the firm's short-term solvency. Current assets include cash within a year, marketable securities, debtors and inventories. Prepaid expenses are also included in current assets. All obligations maturing within a year are included in current liabilities. Current liabilities include creditors, bills payable, accrued expenses, short-term bank loan, income-tax liabilities and long-term debt maturing in the current year. A current ratio of 2:1 is considered satisfactory. It indicates the availability of current assets in two rupees for every one rupee of current liability. The higher the current ratio is the greater the margin of safety; the larger the amount of current assets in relation to current liabilities, the more the firm's ability to meet its obligations. It is a crude and quick measure of the firm's liquidity.

The current ratio is calculated by using the following formula.

Current Ratio = Current Assets/Current liabilities

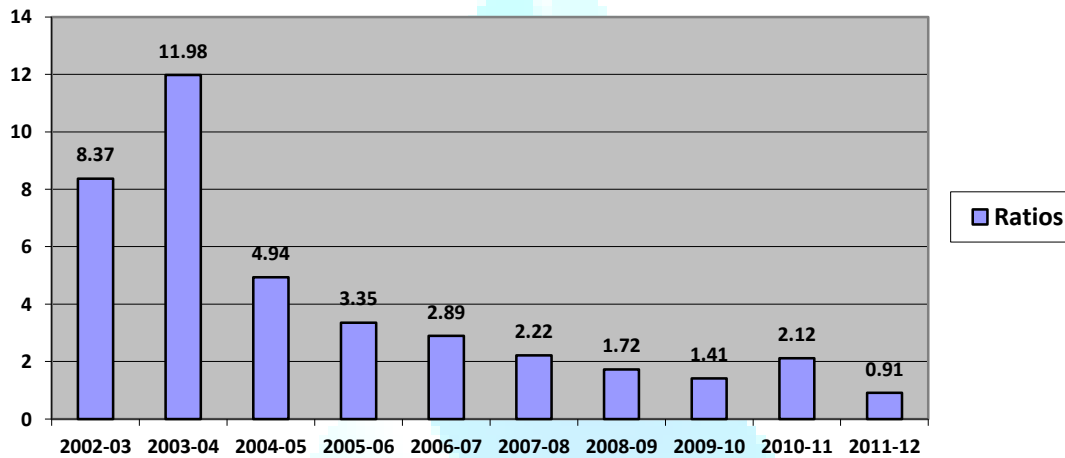
The current ratio of Nagarjuna Fertilizers and Chemicals Ltd. is presented in the Table.1.

TABLE 1: CURRENT RATIO OF NAGARJUNA FERTILIZERS AND CHEMICALS LIMITED (Rs. in crores)

Years	Current Assets	Current Liabilities	Current Ratio(times)
2002-03	1060.07	126.59	8.37
2003-04	932.61	77.83	11.98
2004-05	498.77	100.71	4.94
2005-06	675.14	201.52	3.35
2006-07	653.74	226.42	2.89
2007-08	934.52	420.11	2.22
2008-09	830.99	483.37	1.72
2009-10	534.47	380.22	1.41
2010-11	778.10	366.83	2.12
2011-12	2283.62	2502.76	0.91

Source : Compiled from Annual Reports.

FIGURE 1: CURRENT RATIO OF NAGARJUNA FERTILIZERS AND CHEMICALS LIMITED



It is evident that the current assets had reported a rise from Rs.1060.07 crores in 2002-03 to Rs.2283.62 crores in 2011-12. The quantum of current assets had depicted ups and downs over the study period. The current liabilities had advanced from abnormally from Rs.126.59 crores in 2002-03 to Rs.2502.76 crores in 2011-12. The magnitude of current liabilities had also shown ups and downs over the study period. The current ratio of NFCL had varied between the lowest of 0.9 times to the highest of 11.91 times over the study period under reference. The current ratio was abnormal in the first part of the study period while it was less than standard norm of 2:1 in the latter part of the study period with the exception of the year 2010-11. It may be observed that the current ratio of NFCL was not constant. It may be concluded that the huge funds were unnecessarily blocked up in the current assets in the first part of the study period. This situation had negative impact on profitability of company. The current assets were not sufficient to meet the current liabilities in the later years of the study period. Hence the liquidity performance was not satisfactory in the company. The NFCL had failed to achieve the balance between the twin objectives of working capital management i.e., liquidity and profitability.

QUICK RATIO

Quick ratio establishes a relationship between quick or liquid assets and current abilities. An asset is liquid if it can be converted into cash immediately or reasonably soon without a loss of value. Cash is the most liquid asset, other assets which are considered to be relatively and included in quick assets or debtors and bills receivables and marketable securities (temporary quoted investments). Inventories are considered to be less liquid. The inventories normally require some time for realizing into cash; their value also has a tendency to fluctuate. Quick ratio is calculated by using the following formula.

Quick Ratio = Quick Assets / Current liabilities.

Where; Quick Assets= current Assets – Inventory

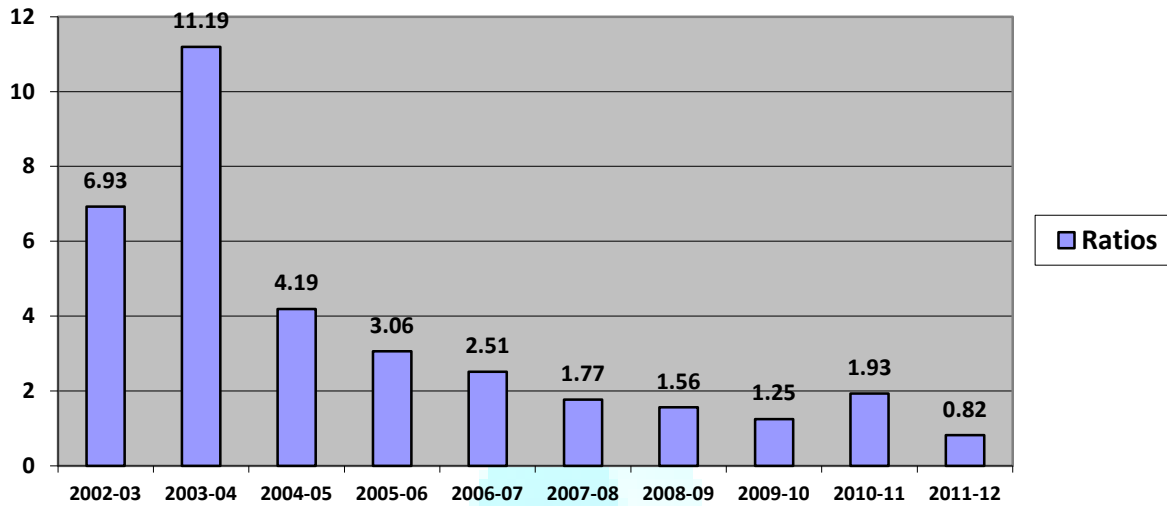
Generally a quick ratio of 1:1 is considered to represent a satisfactory current financial condition. Quick ratio is a more penetrating test of liquidity than the current ratio, yet it should be used cautiously. A company with a high value of quick ratio can suffer from the shortage of funds if it has slow-paying, doubtful and long duration outstanding debtors. A low quick ratio may really be prospering and paying its current obligation in time. The quick ratio of the fertilizer industry has been presented in the Table 2.

TABLE 2: QUICK RATIO OF NAGARJUNA FERTILIZERS AND CHEMICALS LIMITED (Rs. in crores)

Years	Current Assets	Inventories	Quick Assets	Current Liabilities	Quick Ratio (times)
2002-03	10600.07	183.43	876.65	126.59	6.93
2003-04	932.61	61.57	871.04	77.83	11.19
2004-05	498.77	76.20	422.56	100.71	4.19
2005-06	675.14	57.76	617.38	201.52	3.06
2006-07	653.74	84.88	568.85	226.42	2.51
2007-08	934.52	189.24	745.29	420.11	1.77
2008-09	830.99	74.94	756.05	483.37	1.56
2009-10	534.47	59.38	475.29	380.22	1.25
2010-11	778.10	68.00	710.09	366.83	1.93
2011-12	2283.62	227.50	2056.12	2502.76	0.82

Source: Compiled from Annual Reports

FIGURE 2: QUICK RATIO OF NAGARJUNA FERTILIZERS AND CHEMICALS LIMITED



It is obvious that quick assets had increased from Rs.876.65 crores to 2056.12 crores during the study period. Even after deduction of inventories from current assets the quick ratio was too high with exception of concluding year of the study period. It is evident that the quick ratio had fluctuated between the lowest ratio of 0.82 times in 2011-12 and the highest of 11.9 times in 2003-04. Undoubtedly, the short-term obligation could be comfortably meet from quick assets. But more quantum of working funds were blocked up in quick assets, particularly in the former years of the study period. Thus, the profitability of the company could be adversely affected.

CASH RATIO

Since cash is the most liquid asset, a financial analyst may examine cash ratio and its equivalent current liabilities. Trade investment or marketable securities are equivalent of cash; therefore, they may be included in the computation of cash ratio. If the company carries a small amount of cash there is nothing to be worried about the lack of cash if the company has reserves borrowing power. In India, funds have credit limits sanctioned from banks, and easily draw cash. Cash ratio is calculated by using the following formula.

$$\text{Cash Ratio} = \frac{\text{Cash Equivalents} + \text{Marketable Securities}}{\text{Current Liabilities}}$$

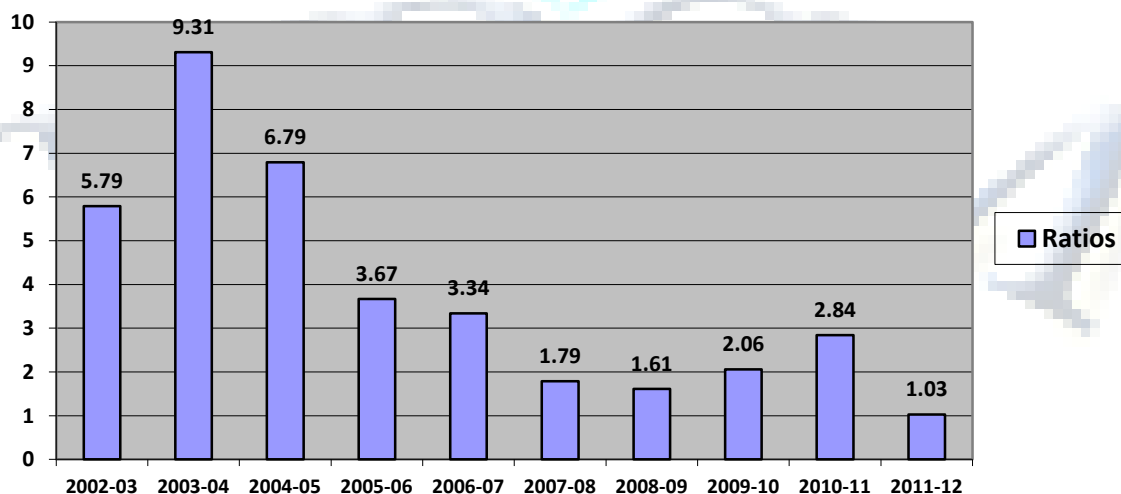
The cash ratio is presented in the Table 3.

TABLE 3: CASH RATIO OF NAGARJUNA FERTILIZERS AND CHEMICALS LIMITED (Rs. in crores)

Years	Cash	Marketable securities	Cash Flows	Current liabilities	Cash Ratio
2002-03	19.32	714.88	734.20	126.59	5.79
2003-04	14.64	710.18	424.82	77.83	9.31
2004-05	19.22	664.44	683.66	100.71	6.79
2005-06	60.84	679.12	739.96	201.52	3.67
2006-07	15.00	740.57	755.57	226.42	3.34
2007-08	31.20	722.46	753.65	420.11	1.79
2008-09	57.46	722.46	779.91	483.37	1.61
2009-10	61.96	722.51	784.47	380.22	2.06
2010-11	120.78	921.51	1042.30	366.83	2.84
2011-12	280.20	53.11	333.31	2502.76	1.03

Source: Compiled from Annual Reports.

FIGURE 3: CASH RATIO OF NAGARJUNA FERTILIZERS AND CHEMICALS LIMITED



It is clear that the quantum of cash had increased while the marketable securities had declined during the period under reference. The more evidently the quantum of cash had increased from Rs.99.32 crores to Rs.280.20 crores whereas the marketable securities had declined from Rs.714.88 crores to Rs.1453.11 crores over the study period. The total cash assets had depicted more or less consistency over the study period. The cash ratio had edged down from 5.79 times

to 1.03 times over the study period. The variations in the ratio were due to variations in the current liabilities. It may be observed that the cash ratio never did less than the unity during the entire period of the study. Therefore, it may be inferred that the liquidity performance was comfortable and NFCL did not face the problem of liquidity risk.

NET CASH FLOWS TO CURRENT LIABILITIES RATIO

Actual liquidity position of an enterprise mostly depends on its ability in paying-off its current financial obligations from the net cash flows (net profit and non-cash expenses) generated from its own operations but not by current assets alone when it is on the run. Irrespective of the source cash is generated from, it definitely provides coverage to the current obligations. Depreciation is non-cash expenses.

Net cash flows to current liabilities ratio is calculated by using the following formula.

Net cash flows to current liabilities ratio = Net profit + Non – cash expenses / current liabilities x 100

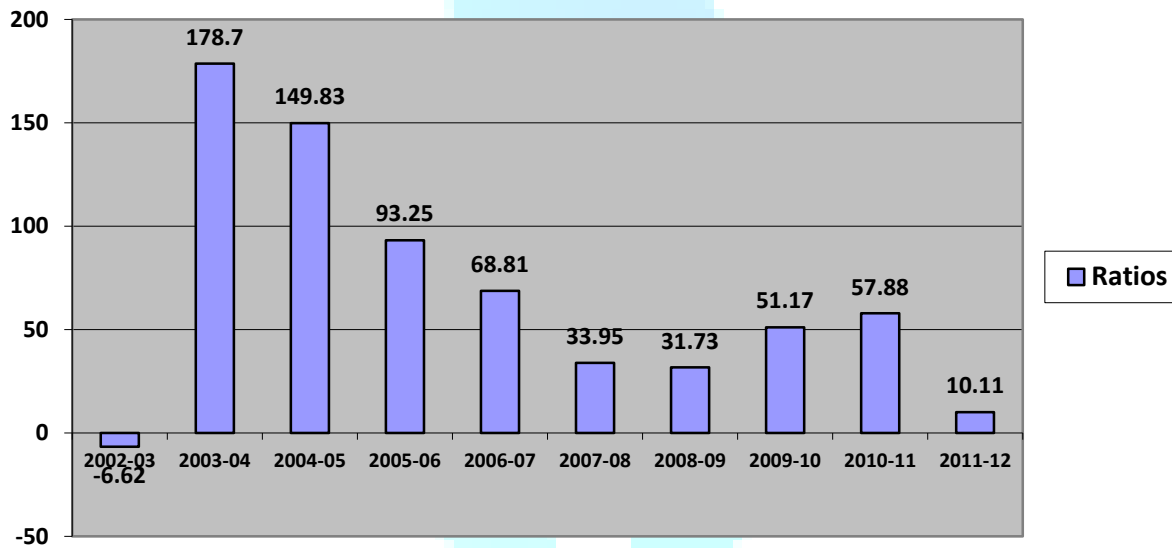
The net cash flows to current liabilities ratio is presented in the Tables 4.

TABLE 4: NET CASH FLOWS TO CURRENT LIABILITIES RATIO OF NAGARJUNA FERTILIZERS AND CHEMICALS LIMITED (Rs. in crores)

Years	Net Profit	Non–cash expenses (Depreciation)	Total	Current liabilities	Ratio (%)
2002-03	(127.47)	119.09	(8.38)	126.59	(6.62)
2003-04	17.4	121.64	139.08	77.83	178.70
2004-05	29.53	121.37	150.89	100.71	149.83
2005-06	66.85	121.05	187.91	201.52	93.25
2006-07	31.71	124.09	155.80	226.42	68.81
2007-08	22.49	120.15	142.64	420.11	33.95
2008-09	32.41	120.96	153.37	483.37	31.73
2009-10	66.37	128.18	194.55	380.22	51.17
2010-11	117.35	94.98	212.33	366.83	57.88
2011-12	135.96	117.01	252.97	2502.76	10.11

Source: Compiled from Annual Reports

FIGURE 4: NET CASH FLOWS TO CURRENT LIABILITIES RATIO OF NAGARJUNA FERTILIZERS AND CHEMICALS LIMITED



It is evident that net profit was negative in the beginning year of the study period. Further, the net profit had reached to Rs.135.95 crores in 2011-12 from Rs.17.44 crores in 2003-04. Depreciation as non-cash item was more or less static during the period of the study with the exception of the year 2010-11. The net cash flows which were negative in the beginning the year had reached to 8.38 ties to positive figure net cash flows to Rs.252.97 crores in the concluding year of the study. The lowest cash flows ratio (6.62 percent) was recorded while the highest cash flow coverage ratio was 178.80 percent followed by 149.83 per cent. The cash flow coverage ratio had never exceeded cent percent standard norm excluding the years 2003-04 and 2004-5. It is concluded that actual liquidity position was adequately comfortable only in two years out of 10 years. In other words, the NFCL had faced the problem of liquidity in actual terms. In other words, the actual liquidity performance was threatening in the company.

CONCLUSION

- The huge funds were unnecessarily blocked up in the current assets in the first part of the study period. This situation had negative impact on profitability of company. The current assets were not sufficient to meet the current liabilities in the later years of the study period. Hence, the liquidity performance was not satisfactory in the company. The NFCL had failed to achieve the balance between the twin objectives of working capital management i.e., liquidity and profitability.
- Undoubtedly, the short-term obligation could be comfortably meet from quick assets. But more quantum of working funds were blocked up in quick assets, particularly in the former years of the study period. Thus, the profitability of the company could be adversely affected.
- The variations in the cash ratio were due to variations in the current liabilities. The ratio never did less than the unity during the entire period of the study. Therefore, the liquidity performance was comfortable and NFCL did not face the problem of liquidity risk.
- The actual liquidity position was adequately comfortable only in two years out of 10 years. In other words, the NFCL had faced the problem of liquidity in actual terms. In other words, the actual liquidity performance was threatening in the company.

SUGGESTIONS

- The management of NFCL shall release the funds blocked up in current assets through quick conversion of current assets in to cash. On the other hand the company either shall have to improve the quantum of current assets or to reduce the magnitude of current liabilities in later years of the study. To this end the management of NFCL shall bring the balance between the liquidity and profitability.
- The size of the quick assets shall be reduced so as to improve the profitability performance.

- The management of the company shall reduce the variations in the cash ratio by minimizing the variations in current liabilities.
- The management of NFCL shall improve the actual liquidity performance by improving the cash flows of the company.

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RANKING OF PAYMENT SYSTEMS ON THE BASIS OF PERCEIVED USEFULNESS (PU) AMONG USERS IN NIGERIA

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ABSTRACT

The study ranked the three payment systems using the ten factors of Perceived Usefulness (PU) based on the experiences of Nigerian users. Analyzing data from 282 respondents, the study established e-payment as the first payment system in Nigeria based on PU factors. Cheque and cash payment systems were second and third payment systems respectively. Given the finding that e-payment is considered as the first payment system, the study concluded that the objective of making it the dominant payment system in Nigeria can easily be achieved. To facilitate this cashless policy objective, the following recommendations were made: government and financial institutions work to reduce the infrastructural and customer service challenges and enhance the Perceived Ease Of Use (PEOU) of e-payment system and emphasize the superior factors of PU in which e-payment scored highly in educating, informing, persuading and reminding Nigerians to adopt, accept and prefer it as the payment system of choice in relevant financial transactions.

KEYWORDS

cash system, cheque system, e-payment system, financial transactions and perceived usefulness (PU).

1.0 INTRODUCTION

A payment system according to Ovia (2005) refers to a set of instructions and procedures used for the transfer of value and settlement of obligations arising from the exchange of goods and services within a defined market. The three broad types of payment systems in operation in the Nigerian economy presently include cash, cheque and e-payment. The ultimate goal of a payment system according to Ovia (2005) is to ensure that exchange of monetary value is achieved using payment instruments that offer the least risk, inconvenience and cost. An efficient payments system must be defined by a few attributes. It must be: reliable, prompt, accessible, secure, and cost effective. A cursory look at the three types of payment systems will demonstrate that not all of them meet the critical requirements of least risk, inconvenience and cost. Not all of them also meet the criteria of reliability, promptness, accessibility, security, and cost effectiveness. Ovia (2005) had listed the major features and challenges plaguing cash and cheque payment systems. For cash the features are that (coins and notes) 80 – 90% of transactions in Nigeria are carried out through this means and we presently have, N545.8 billion cash in circulation. For cheques large value transactions are usually cheque based. E-payment though with great promises, is relatively new and yet to be adopted and/or accepted and preferred by many Nigerians.

As observed by Financial Derivatives Company Limited (FDCL) (2012) an effective payment system is a vital part of the financial infrastructure of any economy. A well-functioning payment system is important to boost the efficiency of the financial system, improve consumer confidence and facilitate economic interactions and trade in both goods and services. By enabling commercial transactions to be completed faster, safer and cheaper, it would have a positive impact on economic growth and global competitiveness. The importance of an effective payment system is therefore reinforced by the established relationship between it and the level of economic activity and national development. When the payment system is effective and efficient, it will translate to greater level of economic activity, higher level of consumer purchase and consumption, better revenue collection by governments and organizations, and indeed enhanced wellbeing of all economic actors and participants. The quest for improved payment system is therefore in the interest of all legitimate actors in the economic sphere.

A viable payment platform will make for financial inclusion, mainstreaming of Nigerian economy into the global financial system, greater economic activity and prosperity for all participants, increased tax revenue to government, increased sales revenue to businesses, reduced government and businesses revenue leakages, reduced money laundering and transparent financial transfers leading to reduction in corruption in the society, more employment creation, lower inflation rates, greater lending to productive businesses, safer society on account of need to carry cash, seamless financial transactions among many other benefits (Okeke,2013).

Against the backdrop of the great importance of a viable payment system, this study seeks to rank the three payment systems in Nigeria within the framework of Perceived Usefulness (PU) of Technology Acceptance Model (TAM).When completed the findings of the study will assist policy makers in objectively ascertaining what the rankings of the payment systems are and be in a good stead to formulate measures that will support the Central Bank of Nigeria (CBN) initiative of rapidly transiting from a cash-based to an electronic- based payment system. It will be pertinent to recommend ways in which e-payment system can be improved upon and enhanced so that we may be able to boast of a payment system that is efficient, reliable, convenient, and safe, secure and in line with global best practice.

The central question of the study is, based on their experiences and using the framework of PU, what is the ranking of the three payment systems in Nigeria? Given the answer to the first question, what must the promoters of e-payment system do to achieve the cashless policy of CBN in the shortest possible time?

2.0 LITERATURE REVIEW

CHALLENGES OF PAYMENT SYSTEMS

For challenges, cash is associated with High cost of handling and printing. About N1.3b is spent annually on printing Naira notes (Esan, 2004). Approximately N10.00 is spent on printing a N5.00 note (Akintola, 2004). Security: Cash transactions in Nigeria are hindered by fear of theft and loss to hoodlums. Mutilation: Much of the cash in circulation are mishandled, mutilated and exposed to wear and tear. Dearth of coins in the system: Although coins were the first form of modern legal tender introduced in the Nigerian payments system, they seem to have disappeared in the past decade. Absence of high denomination: Naira notes With N1000.00 as highest denomination, money spent on printing remains high. Currency counterfeiting: Currency counterfeiting poses a major obstacle to confident usage of coins and notes.

For cheques, the challenges include Lack of Quality Control of Instrument. The system records as high as 30-35% rate of rejection of cheques due to non-conformity with MICR cheque standards far above the tolerable rate of between 1-3%. Fraud and Forgeries: 249 forged cheques presented in 2003 leading to a loss of N209m (NDIC, 2003). Insider complicity remains a key factor in cases of frauds and forgeries. High incidence of returned cheques 238 cases In March 2004, 545,904 instruments were processed in the Lagos Clearing House. Out of this number, about 15,785 or 2.90% were unpaid. 75% of such returns were due to insufficient funds in the customers' account. Long clearing days Since the CBN's introduction of two clearing sessions in 2003, the clearing days for local cheques have been reduced from four to three days, while the upcountry cheques still take six days to clear. Non-enforcement of the Dishonored Cheques Act - The Dishonored Cheques (Offences) Act No. 44 of 1977 stipulates punishment for issuance of dud cheques; but this Act is not being enforced, to deter issuance of dud cheques. Poor banking culture in Nigeria Cash in circulation outside the banking system was put at about N545.8 billion as at December 2004. This represents about 90% of the total volume of cash in circulation compared to 4% and 9% in UK and USA, respectively.

Although forms of cheques have been in use since ancient times and at least since the 9th century, it was during the 20th century that cheques became a highly popular non-cash method for making payments and the usage of cheques peaked. By the second half of the 20th century, as cheque processing became automated, billions of cheques were issued annually; these volumes peaked in or around the early 1990s. Since then cheque usage has fallen, being partly replaced by electronic payment systems. In an increasing number of countries cheques have either become a marginal payment system or have been completely phased out (http://en.wikipedia.org/wiki/cheque#cite_note-3).

For e-payment system the following challenges have been articulated: Adewuyi (2011) articulated the following-Money laundering, fraud, electronically generated evidence, consumer protection, job cut, possibility of core banking business being swallowed, and systems operational risks. Okeke (2013) identified the following as its important disadvantages (challenges)-Cost, fraud, human factor (prefer being attended to by human beings and not a machine). E-Payment Providers Association of Nigeria (E-PPAN) (2013) - It may fail like other government initiatives for lack of proper implementation.

With this policy, people are no longer spending so much because they do not withdraw plenty cash any more.

It has caused reduction in sales.

There is insufficient and low presence of e-payment channels at various service points such as the hospitals, motor parks and other centres.

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It has caused reduction in sales.

There is insufficient and low presence of e-payment channels at various service points such as the hospitals, motor parks and other centres.

FDCL 2012)-The major reasons for not using cashless facility centred on safety and quality of service. The specific reasons mentioned include: safer to use cash (32%), high service charge (17%), customers rejection (16%), not reliable (10%), doesn't handle large sum of money (9%), prone to error (6%), increase spending (4%), not available everywhere (3%) and take time to get an ATM card (3%).

The other major challenges of e-payment in Nigeria have been identified to include: Udo(2013) identified challenges affecting e-payments system to include infrastructure deficit (Power, communication network, etc.); slow adoption of e-payments due to prevailing cash culture; merchant's apathy to point-of-sale (POS) terminals due to transaction fees; high illiteracy level and cost of electronic banking services.

Other challenges include low level of public awareness on the existence of some e-payment products; concentration of e-payment facilities in the urban centre and unavailability of financial services in most rural areas; lack of effective national identification system and absence of e-payment laws or National Payments System Act.

The problems militating against e-Payment as listed by Sumanjeet [2002] generally revolve around.

Integrity: to ascertain that transmitted financial information is unchanged in transit.

Non-repudiation: to ascertain that all parties have non-deniable proof of receipt.

Confidentiality: to ascertain that transactions are protected from possible eavesdroppers.

Reliability: to ascertain that there is reduced possibility of failure.

Authorization: to ascertain that individuals are recognized and granted the desired rights and privileges.

An ideal e-Payment system should possess the good point as identified by Dankwambo [].

Easy tracking of payments to beneficiaries' account hence it will assist audit trail.

It reduces cases of corruption.

It will assist corruption fighting agencies like the EFCC and ICPC in cases of investigation.

It is the beginning of a cashless society.

Overall increase in the efficiency of operation.

Reduced transactions of very low value.

Increase convenience of payments.

Payment can be made swiftly and remotely using various devices.

Accountants will appreciate IT more and this will improve the quality of financial reports generated by MDAs.

Economic Growth and Development as Transparency and Accountability improve.

Real Time Reporting and

Eliminate writing of cheques.

A good e-payment system will eliminate the challenges associated with cash system and those related to cheque payment system particularly the risk associated with cheques being stolen, forging of signature and disparity between amount in words and figures. The system which is still in its stage requires a lot of information and education of the public to enable them appreciate the laudable programme put together by government to protect their interests. The banks also need to be carried along in the implementation. If they are properly and adequately educated. Then the chances of the total acceptability of the programme can be assured (Ogedebe and Jacob, 2012). In a study of electronic retail payment system in Nigeria Nwaolisa and Kasie(2012) noted that that cash usage is still very high in Nigeria irrespective of the efforts of Central Bank of Nigeria towards the adoption of electronic payment system. It is caused by the challenges of inadequate power supply, shortage of critical technological infrastructures, lack of sociocultural support and absence of regulatory framework that are required to operate seamless and effective electronic payment system in the country. They concluded that there is the need for the government to remove barriers to innovation, including regulatory barriers to pave way for rapid development of the electronic payment systems in Nigeria.

For the understanding of the basis for acceptance and use of payment platforms, the most advanced and widely used model is Technology Acceptance Model (TAM). To specially address the challenge of acceptance and use of technology Davis (1989) and Davis et al. (1989) proposed TAM to address why users accept or reject technology. The Technology Acceptance Model (TAM) has emerged as a powerful and parsimonious model that belongs to the information systems (IS) field.

TAM hypothesizes that a person's acceptance of a technology is determined by his/her voluntary intentions to use that technology. The intention, in turn, is determined by the person's attitude toward the use of that technology and his/her perception concerning its usefulness. Attitudes are formed from the beliefs a person holds about the use of the technology. The first dimensions of the attitude are Perceived Usefulness (PU) and Perceived Ease of Use (PEOU).

A key purpose of TAM is to provide a basis for tracing the impact of external variables on internal beliefs, attitudes, and intentions. It suggests that PEOU, and PU are the two most important factors in explaining system use. Davis (1989) defines PU as the degree to which a person believes that using a particular system would enhance his job performance and PEOU as the degree to which a person believes that using a particular system would be free from effort. PU is majorly measured by ten independent factors. See section three (Research Methodology) for a listing of the ten factors.

3.0 RESEARCH METHODOLOGY

The data need of this study was defined in two broad areas. First is the articulation of core benefits of payment systems from the perspective of PU under TAM framework. Second is the ranking of the three payment systems in use in Nigeria using the ten factors contained in the PU framework from the perspective of enlightened and active users.

For the benefits of payment systems, the study relied on the ten factors used in Technology Acceptance Model (TAM) in explaining the Perceived Usefulness (PU) of technology based services (Davis (1989) and Davis et al, (1989)). These factors included the following:

- E-payment enables me to accomplish financial transactions more quickly.
- Using e-payment gives me greater control over my financial transactions.
- Using e-payment reduces my need to carry cash.
- Using e-payment increases the convenience of financial transactions.
- Using e-payment reduces incidences of fraud in financial transactions.

- E-payment application reduces the cost/bank charges of financial transactions.
- Using e-payment makes financial transactions more reliable.
- Using e-payment makes financial transactions more dependable.
- Using e-payment allows the minimization of mistakes/errors in financial transactions.
- Overall, I find e-payment helpful in my financial transactions.

To ascertain the relative importance of the benefit factors, the study requested respondents to rank the factors on a scale of 1-3 based on their experience of the three payment systems with 1 representing the first payment system, 2 representing the second payment system and 3 the third payment system. In calculating the cumulative points for the benefit factors, the system ranked first was assigned a scale of 3, the second a scale of 2 and the third a scale of 1. The aggregate point for the systems was used in ranking them from the first to the third.

The study relied on questionnaire as the survey instrument for collecting data on the ranking of the payment systems based on Nigerian experience of respondents. The questionnaire listed the factors and required respondents to rank them based on their personal experience. It became imperative therefore to select respondents from a population of highly literate and financially active Nigerians who are aware of the three payment systems obtainable in Nigeria.

To meet the outlined requirements of the data collection source, the study used a population of students of Enugu State University of Technology (ESUT) Business School, located in Enugu, the capital of Enugu state in south east, Nigeria. Being an executive programme with students mostly working, drawn from all states, tribes and religions in Nigeria, the population surveyed met the requirement of financially well to do and active users of e-payment system in Nigeria. This is in line with the Grounded Theorists rule of selecting purposive samples from participants who represent the major categories of people relevant to the research (Charmaz (2003) and Henwood and Pidgeon (1993). Being a lecturer on the ESUT programme facilitated access to the students and cooperation from them in completing the questionnaire. With a population of 600 students, the questionnaire was administered on all the students in MBA, MSc and PGD classes on the 14th and 15th of December, 2013. A total of 319 copies of the questionnaire were administered and retrieved within the two days. Given incompleteness and inconsistency in completion 37 returned questionnaire were rejected. Thus, 282 returned questionnaires were analyzed. This gave an effective response rate of xxx%.

The collected primary data were presented on tables and analyzed using frequency distribution and aggregation of points to arrive at cumulative points and enable ranking. Data were also collected and analyzed to define the profile of respondents.

4.0 RESULTS AND DISCUSSION

4.1 PROFILE OF RESPONDENTS

The profile of respondents is captured on table 4.1 (see appendix). The respondents are highly educated with 62.77% having a minimum educational qualification of first degree (BSc, BA and HND). Others hold higher educational qualifications. The major age bracket of respondents was 30-40 years, accounting for 58.51%. The least age bracket was 60 years and above with 1.06%. 62.77% of respondents are male, while 71.28% of the respondents are married, 25.89% are single and 1.42% are divorced. The major income brackets of respondents were N1M-N3M (39.36%) and N3M-N5M (22.34%) per annum. 94.68% of respondents are employed with 57.80% working in the public sector and 42.420% in the private sector. 100% of the respondents have been involved with all payment systems and maintain account with banks in Nigeria.

4.2 ANALYSIS OF RESEARCH QUESTIONS

TABLE 4.1 RANKING OF PERCEIVED USEFULNESS OF CASH, CHEQUE AND E-PAYMENT SYSTEMS

FACTOR	CASH	CHEQUE	E-PAYMENT
Reduces incidences of fraud in financial transactions	First -69(3)=207 Second -24(2)=48 Third -189(1)=189 Total =444(third)	First -51(3)=153 Second -207(2)=414 Third -24(1)=24 Total =591(second)	First -162(3)=486 Second -54(2)=108 Third -66(1)=66 Total =660(first).
Gives you greater control over your financial transactions	First -48(3)=144 Second -60(2)=120 Third -174(1)=174 Total =438(Third)	First -75(3)=225 Second -162(2)=324 Third -45(1)=45 Total =594(Second)	First -150(3)=450 Second -66(2)=132 Third -66(1)=66 Total =648(First).
Enables you to accomplish financial transactions more quickly	First -54(3)=162 Second -90(2)=180 Third -138(1)=138 Total =480(Second)	First -12(3)=36 Second -150(2)=300 Third -120(1)=120 Total =456(Third)	First -216(3)=648 Second -39(2)=78 Third -27(1)=27 Total =753(First).
Reduces the cost/charges of financial transactions	First -93(3)=279 Second -51(2)=102 Third -138(1)=138 Total =519(Second)	First -24(3)=72 Second -162(2)=324 Third -96(1)=96 Total =492(Third)	First -162(3)=486 Second -72(2)=144 Third -48(1)=48 Total =678(First).
Increases the convenience of financial transactions	First -15(3)=45 Second -48(2)=96 Third -219(1)=219 Total =360(Third)	First -9(3)=27 Second -222(2)=444 Third -51(1)=51 Total =522(Second)	First -258(3)=774 Second -9(2)=18 Third -15(1)=15 Total =807(First).
Reduces your need to carry cash	First -12(3)=36 Second -6(2)=12 Third -264(1)=264 Total =312(Third)	First -15(3)=45 Second -261(2)=522 Third -6(1)=6 Total =573(Second)	First -267(3)=801 Second -9(2)=18 Third -6(1)=6 Total =825(First).
Allows the minimization of mistakes/errors in financial transactions	First -57(3)=171 Second -30(2)=60 Third -195(1)=195 Total =426(Third)	First -78(3)=234 Second -177(2)=354 Third -39(1)=39 Total =627(Second)	First -144(3)=432 Second -84(2)=168 Third -54(1)=54 Total =654(First).
Makes financial transactions more reliable	First -57(3)=171 Second -39(2)=78 Third -186(1)=186 Total =435(Third)	First -54(3)=162 Second -180(2)=360 Third -48(1)=48 Total =570(Second)	First -171(3)=513 Second -63(2)=126 Third -48(1)=48 Total =687(First).
Makes financial transactions more dependable	First -57(3)=171 Second -66(2)=132 Third -159(1)=159 Total =462(Third)	First -63(3)=189 Second -162(2)=324 Third -57(1)=57 Total =570(Second)	First -159(3)=477 Second -57(2)=114 Third -66(1)=66 Total =657(First).
Overall, enhances your financial transactions/job	First -21(3)=63 Second -39(2)=78 Third -222(1)=222 Total =363(Third)	First -18(3)=54 Second -225(2)=450 Third -39(1)=39 Total =543(Second)	First -243(3)=729 Second -15(2)=30 Third -24(1)=24 Total =783(First).
Total points	4239(third)	5548(second)	7152(first)

Source: Field Survey, 2013.

Table 4.2 revealed the specific ranking of each of the factors of PU among the three payment systems:

On the basis of ability to reduce incidences of fraud in financial transactions, respondents ranked e-payment (660 points), cheque second (591 points) and cash third (444 points).

On the basis of the capacity to give greater control over financial transactions, respondents ranked e-payment (648 points), cheque second (594 points) and cash third (438 points).

On the basis of ability to enable the accomplishment of financial transactions more quickly, respondents ranked e-payment first (753 points), cash second (480 points) and cheque third (456 points).

On the basis of capacity to reduce the cost/charges of financial transactions, respondents ranked e-payment first (678 points), cash second (519 points) and cheque third (492 points).

On the basis of the capacity of the payment system to increase the convenience of financial transactions, the respondents ranked e-payment first, cheque second and cash third.

On the basis of ability to reduce the need to carry cash and consequently robbery attacks, respondents ranked e-payment first, cheque second and cash third.

For allowing the minimization of mistakes/errors in financial transactions, respondents ranked e-payment first (654 points), cheque second (627 points) and cash third (426 points).

For their ability to make financial transactions more reliable, respondents ranked e-payment first (687 points), cheque second (570 points) and cash third (435 points).

For their ability to make financial transactions more dependable, respondents ranked e-payment first (657 points), cheque second (570 points) and cash third (462 points).

On the basis of ability overall, to enhance financial transactions, respondents ranked e-payment first (783), cheque second (543 points) and cash third (363 points).

5.0 FINDINGS OF THE STUDY

The following constitute the major findings of the study:

1. On the aggregate respondents ranked e-payment the first payment system in Nigeria on the basis of PU with a cumulative 7152 points. They ranked cheque the second best payment system with 5548 points and cash the third payment system with 4239 points.
2. E-payment system was ranked first on the following factors in a descending order:
 - 1) Reduced Need to carry cash (825 points)
 - 2) Convenience in financial transactions (807 points)
 - 3) Enhancing financial transactions (783 points)
 - 4) Quickness of financial transactions (753 points)
 - 5) Reliability of financial transactions (687 points)
 - 6) Reduced cost/charges of financial transactions (678 points)
 - 7) Minimization of fraud in financial transactions (660 points)
 - 8) Dependability of financial transactions (657 points)
 - 9) Minimization of errors/mistakes in financial transactions (654 points)
 - 10) Control over financial transactions (648 points).
3. Cheque payment system was ranked second in all but two of the factors measured. These were: quickness of financial transactions and reduced cost/charges of financial transactions (cash payment system came second on these two factors 480 points and 519 points respectively).

6.0 CONCLUSION AND RECOMMENDATIONS

CONCLUSION

On the basis of PU, the study demonstrated that e-payment system is considered to be the number one payment system by educated, employed and financially active Nigerians. The second payment system is cheque with cash coming third. It is paradoxical however that in spite of the demonstrable benefits and superior features of e-payment over other forms of payment systems, the objective of making e-payment the dominant payment system according to the cashless policy of CBN has not been realized. If e-payment is considered better than other systems, but in practice, it is not the dominant payment system, there must be an explanation that will go beyond its usefulness.

In the next section, the study presents some measures that when implemented will position e-payment as the dominant payment system in Nigeria, in line with the cashless policy of CBN.

RECOMMENDATIONS

A. PROMOTION OF E-PAYMENT SYSTEM

The promotion of e-payment system should be sustained and made more effective by all agencies of government and relevant e-payment input manufacturing and service delivery organizations. The message in promoting e-payment system should emphasize the core benefits of e-payment system and stress its advantages over cash and cheque payment systems. The promotion campaigns should aim to inform, educate, persuade and remind users and prospective users of the core benefits of convenience, reduced transaction cost, reduced need to carry cash/robbery attack, accessibility, reliability, dependability and pay at all times/in all places made possible by e-payment platforms.

B. PROVISION OF INFRASTRUCTURE BY GOVERNMENT AND FACILITATING AGENCIES TO MAKE E-PAYMENT SYSTEM WORK

Trial, acceptance and preference of e-payment over other forms of payment systems are predicated on its usefulness, functionality and ease of use. It will be tried and accepted if it is useful, helpful and meets the demands and requirements of users. Its preference will derive from the perception and/or experience that it is as good if not better than other payment systems. The promoters of the system are therefore challenged to ensure that the infrastructures that will make e-payment platforms to work seamlessly are available and functioning at all times and in all places. The system must be working and seen to be working for it to be preferred over other forms of payment systems.

C. PROVISION OF CUSTOMER SERVICE TO MAKE E-PAYMENT AN EASY AND USER FRIENDLY PAYMENT SYSTEM

At the points at which customers/users encounter e-payment platforms, they must come out with the impression and/or experience that it is easy, helpful and entertaining to relate with. These calls for effective customer service that will make users feel good, well served and satisfied. When and where service failure occurs it should be addressed speedily & in a courteous manner. Customers should be delighted with a service if they are to prefer & use it always & exclusively.

7.0 LIMITATIONS OF THE STUDY AND FURTHER RESEARCH

The major limitation of the study was the segment of the population studied. The class of respondents represented the educated elite. With a minimum educational qualification of a first degree, this is an extreme segment of Nigerian population. Given that the literacy rate in Nigeria is 61.3 % (UNHDR, 2014), a segment as educated as this group cannot represent the reality of general Nigerian situation. Another extreme of the study sample is their level of employment which stood at 94.68%. This is a far cry from the employment circumstances of the Nigerian population. The unemployment level in Nigeria stands at 23.90 % (NBS, 2014).

Given the centrality of education and employment status of people in determining their PU and PEOU of e-payment platforms and level of financial activity respectively, the lopsidedness of the study sample in these two critical areas pose a limitation in drawing conclusions on the PU based ranking of payment systems in Nigeria. It is useful however studying this segment of the population as a basis for the articulation of targeted interventions that may be necessary in securing quick wins and building a critical mass of early adopters of e-payment system that will serve as a platform for subsequent spreading of the need for the

wider acceptance of the payment system by the general population. The choice of the sample studied was therefore deliberate and strategic. It nonetheless necessitates further studies to assess how other less educated and less financially active Nigerians rank payment systems in Nigeria. Other social issues like religion and tribe can also be explored in establishing the factors that define the ranking of payment systems in Nigeria.

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APPENDIX

PROFILE OF RESPONDENTS

Category	Statistics
GENDER	
Male	177(62.77%)
Female	105(37.23%)
AGE	
20-30 years	42(14.89%)
30-40 years	165(58.51%)
40-50 years	45(15.96%)
50-60 years	27(9.57%)
60 years and above	03(1.06%)
MARITAL STATUS	
Single	73(25.89%)
Married	201(71.28%)
Divorced	4(1.42%)
Widowed	4(1.42%)
GROSS ANNUAL INCOME	
Less than N1m	54(19.15%)
N1M-N3M	111(39.36%)
N3M-N5M	63(22.34%)
N5M-N7M	27(9.58%)
N7M-N9M	6(2.13%)
N9M- N11M	3(1.06%)
N11M-N13M	2(0.71%)
N13M and above	1(0.36%)
EMPLOYMENT STATUS	
Employed	267(94.68%)
Unemployed	15(5.32%)
SECTOR OF EMPLOYMENT	
Private	119(42.20%)
Public	163(57.80%)
AWARFENESS OF CASH, CHEQUE AND E-PAYMENT SYSTEMS OPERATION OF ACCOUNT WITH NIGERIAN BANKS	
Yes	282(100%)
No	282(100%)
HIGHEST EDUCATIONAL QUALIFICATION	
HND/BSc	177(62.77%)
PGD	33(11.70%)
M.Sc./MBA/MPA	69(24.47%)
PhD	03(1.06%).

Source: Field Survey, 2013.

A STUDY ON CUSTOMERS' ATTITUDE IN LIFE INSURANCE TOWARDS LIFE INSURANCE CORPORATION OF INDIA, TIRUCHIRAPPALLI

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ABSTRACT

The insurance policies are valuable assets to mitigate the financial risk of uncertainty death. As such every individual is facing financial risk, whoever can afford to pay for such a protection must seriously consider purchasing life insurance products. The level of penetration in life insurance needs to be increased since it holds 70 per cent of the market share in the insurance sector in India. Though it is growing, the penetration of the life insurance in India is between 2 and 4 per cent from 2000 - 08 while in the developed countries it is more than 40 per cent. The low penetration rate in India motivated to go in for selection of this present study where the customers are the right options to assess the market strategies since, 300 million individuals in India do not have insurance. Hence, the importance of the present study arose to view on the policyholders in selection of policies, attitude, the socio-economic status, the level of satisfaction on services and to offer suggestions to improve the services of Life Insurance Corporation of India in Tiruchirappalli

KEYWORDS

customer, life insurance, Life Insurance Corporation of India.

1. INTRODUCTION

Man is exposed to risk and uncertainties. For instance, the time of death of a person is not certain and in case of his premature death a man's dependents may find themselves deprived of all means of existence. Similarly, the property of a person is open to all risks of its being destroyed by fire. Every prudent man will carefully consider how best he can prevent such risks or minimize or provide against its effects. It is difficult for an individual or even a large business enterprise to invest million of rupees in the huge factory and equipment or ships unless the arrangement for covering the risk is possible. This arrangement is made possible through insurance (Chawla and Garg, 2000).

The essence of insurance is the elimination of risk and the substitution of certainty for uncertainty. Insurance is thus a cooperative way of spreading risk. However, it may be noted that insurance cannot prevent loss of property or goods by fire or other perils. It can merely provide a financial compensation for the effects of misfortune.

The growth of insurance industry is associated with the general growth of industry, trade and commerce. Insurance industry assists the development process of an economy. Basically, insurance industry acts as a facilitator of saving, financial intermediary, promoter of investment activity, stabilizer of financial market, risk manager and an agent to allocate capital resources efficiently although the insurance industry has grown rapidly in the industrial countries. Its growth in developing countries has neither been satisfactory nor in tandem with the growth of other sectors of the economy. The slow growth of insurance services in developing countries calls for an in-depth analysis of its nature and pattern of evolution of these services. Policies pursued to develop the insurance industry and constraints thereof also need a thorough examination. Despite the fact that general insurance services started in India about 150 years ago their growth has been dilatory, as well reflected by its low insurance penetration and density. Several factors are responsible for this state of affairs, the chief being the monopoly status of the industry till recently. Organization structure is the source of the most cunning, premeditated and potentially most destructive type of change resistance (Gorden Perch, 2004).

The marketing of insurance has some unique features. It has to identify uncertainties in the lives of individual and groups and in the functioning of an economic system and offer suitable insurance covers for them. The requirement of different groups of insurance seekers is diverse in nature. Consumers require insurance-linked savings with reasonable returns to take care of their consumer needs, old age and some periods of uncertainty in their lives. Social regulations require employers to the lives of their employees by obtaining group life insurance covers for them. Credit institutions demand insurance protection for the economic activities supported by them. With such a multiplicity of situations, uniform policies cannot fully render service to the masses.

2. AN OVERVIEW ACROSS INDIA

In those days, in India, insurance was in its crude form and it was cooperative and voluntary in nature. When, where and how it originated is still a matter of research. Evidences are available to show that insurance in one way or the other was prevalent in olden days. We can trace out its history from the evolution of human society from hunting stage to the modern industrial age. A word 'Yokakshema' occurs in the world's most ancient Hindu scripture Rig Veda, which means insurance. It clearly indicated that about four thousand years ago, insurance was prevalent in its crude form, it was voluntary in nature. People formed different groups of organisations to share the loss among themselves in case of a particular risk. Each member contributed some amount to a common fund to meet out the unforeseen losses. Sometimes they also considered equally compensating a person as and when he suffered a loss. Traces of insurance in the ancient world were also found in the form of marine trade loans or contracts, which included an element of insurance. Evidence is on record that arrangements embodying the idea of insurance were made in Babylonia and India at quite a concept of Insurance.

By the mid-1950s, there were around 170 insurance companies and 80 provident fund societies in the country's life insurance scene. However, in the absence of regulatory systems, scams and irregularities were almost a way of life at most of these companies. As a result, the government decided to nationalise the life assurance business in India. The Life Insurance Corporation of India was set up in 1956 to take over around 250 life companies.

Life Insurance business in India was being transacted by private companies from 1956. The president of India promulgated on the 19th January 1956 the Life Insurance ordinance by which management and control of the insurance business in India of 245 India act came into being on the 1st September 1956, described as the Appointed Day in the LIC Act. "The nationalization of Life Insurance was the milestone on road the country has chosen in order to reach its goal of a socialistic pattern of society". In the implementation of the second five - year plan, it was bound to give material assistance. Into the lives of millions is the rural area; it introduces a new sense of awareness of building for the future in the spirit of calm and confidence. It is a measure conceived in a genuine spirit of service

to the people. It is for the people to respond, confound the doubters and make it a resounding success, "observed Sri C.D.Deshmukh from his broadcast to the nation on the eve of the promulgation of the Life Insurance (Emergency provision) Ordinance, 1956.

3. REVIEW OF LITERATURE

Roy (2004) highlighted the trends in the sale of life insurance companies, in a surcharged atmosphere where new entrants have increased their share. This article identified an important fact that only well capitalized insurers which are innovative and offer the right product can hope to survive. This article has dealt in detail on alternative distribution channels, lower investment returns and equity requirements. The author disclosed an alarming note about LIC on the extent of its issued guaranteed return policies. This article suggested that detailed actuarial calculations were necessary to determine its future liabilities and take appropriate measures if required.

Tripathy (2006) identified the five major factors that influence the consumers more. It also offers purchase divisions and suggested some measures to managers to design future products. The author has effectively employed factor analysis with the objective of examining the customer's preferences and priorities to the types of insurance products. It was also found out that the key features of insurance products and service attributes are essential in purchase decision of the customers.

Dilip Maitra (2008) had elaborately discussed the service rendered by the life insurance policies. He is of the opinion that if planned properly, life insurance would provide for the unusual needs like higher education of children or their marriage. The add on benefits take care of the loss due to disability or pay for the medical expenses and can generate higher benefits in case of the death of the assured due to accident. It also provides regular income after retirement expenses.

Kannan and Thangavel, 2008 revealed that life insurance has today become a mainstay of any market economy since; it offers plenty of scope for garnering large sums of money for long periods of time. A well – regulated life insurance industry which moves with the times by offering its customers tailor- made products to satisfy the financial needs is, therefore, essential if we desire to progress towards worry- free future.

Anuradha Sharma (2009) mentioned that economic factors such as prices of insurance, government tax, the general economic environment income and inflation also have a major impact on the life insurance sector. Individual's social environment like culture and society also have contributed to increased demand for the insurance products. Therefore, harnessing the enormous market potential is crucial to the success of every insurer.

4. STATEMENT OF THE PROBLEM

The key attributes for any business to success depends on the customers satisfaction towards the company. The Indian insurance industry registered a growth of 10.15 per cent in 2008-09. Insurance penetration in terms of premium volume as a ratio of GDP in Indian rupee stood at 4.74 per cent in which the life insurance alone is 4.17 per cent. The level of penetration in life insurance needs to be increased since it holds 70 per cent of the market share in the Insurance sector in India. Though it is growing, the penetration of the Life Insurance in India is between 2 and 4 per cent from 2000 - 08 while in the developed countries it is more than 40 per cent. The low penetration rate in India motivated to go in for selection of this present study where the customers are the right options to assess the market strategies since, 300 million individuals in India do not have insurance. Especially in rural areas the customer may not have any idea about the services offered by the life insurance companies. Even today, many of the LIC offices are not functioning on par with the international standards. Hence, the importance of the present study arose with the following objectives:

5. OBJECTIVES OF THE STUDY

1. To study the socio-economic status of the policyholders of LIC of India in Tiruchirappalli.
2. To ascertain the view of the policyholders in the selection of policies infrastructure facilities, and services offered by the branch office and to measure the level of satisfaction of policyholders towards services rendered by the branch offices in Tiruchirappalli.

6. METHODOLOGY

HYPOTHESIS

Few hypotheses guiding this study in understanding policyholders' attitude towards life insurance were formulated towards life insurance:

1. The gender of the respondents may influence the policies provided by the LIC in Tiruchirappalli
2. The location of the respondents may also influence the type of policies in the life insurance.
3. The educational qualification of the respondents may differ with regard to infrastructure and services provided by branch offices
4. The occupational status may influence on the services provided by the LIC
5. The annual income of the respondents may also differ with regard to policy offered by the LIC

a) SAMPLE DESIGN

A pilot study was made initially on random from the common public of 50 numbers. Based on the raw data collected from the public, the final questionnaire was fine tuned by the experts and officials working in the various branches of the LIC of India at Tiruchirappalli. In continuation, a survey on policyholders of life insurance was made in LIC branches of Tiruchirappalli who had at least one policy. Although it has six branches, 650 policy holders were selected on simple random method.

b) COLLECTION OF DATA

SAMPLING PLAN

The research work has been carried out with the help of the following sampling frame. The details as collected from branch officials were the basis for the sampling frame.

There were nearly a lakh of policy holders who had a single policy account approximately against which no lapse found by the branch offices as per the branch records which were maintained confidentially. Even then the receipt of the approximate policy holder's account in numbers, the researcher has decided the framework for the present study as follows:

For the research purpose the researcher has taken 10 per cent of the total policy holders for sampling purpose, which have been rounded off to the nearest number of thousands (Table 1 & 2).

Out of the total frame the researcher has again chosen 1 per cent of the total framed customers on simple random sampling (Table 3).

The primary data was collected using a structured questionnaire from the policyholder to understand their profile and preferences. A total of 650 customers of rural and an urban background were interviewed to assess the attitude of policyholders.

The secondary data used and referred in the study were compiled from various annual reports of IRDA, RBI, LIC and ICAFI, research journal, textbooks, the journal of insurances, The Economic times and also from the internet sources.

c) DESIGN OF THE STUDY

Out of the 650 successful policyholders drawn from the city, the individuals as male or female had their own income, between the age group of 20 and 65 years, adopting an unbiased random selection of individuals representing the population was the potential customer for the collection of the primary data.

As the questionnaire was comprehensive, it took about 20 to 30 minutes for every customer to complete and was unwilling to commit for such a long time. Considering this factor, customers were interacted in the evening at home or during weekend. There were also apprehensions about disclosing personal information like salary or insurance particulars and constant persuasion was made to get complete response from the customer.

d) AREA OF THE STUDY

The area of the study considered for this research study is the district of Tiruchirappalli in the State of Tamil Nadu, India.

e) STATISTICAL TOOLS USED

The collected data was analyzed by SPSS, a Statistical Package for Social Sciences which is a statistical and data management package and the tools used where,

- t Test
- ANOVA
- Chi square test

7. ANALYSIS OF CUSTOMERS ATTITUDE**a) GENDER OF THE RESPONDENT AND OPINION ON THE SERVICES**

Ho: There is no significant relationship between the gender of the respondent and opinion on the services provided by LIC of Tiruchirappalli

H1: There is significant relationship between the gender of the respondent and opinion on the services provided by LIC of Tiruchirappalli

To test the hypotheses the researchers has used the t – Test.

Since the significance is more than 0.05 per cent, the variables are not significant. Hence, it is concluded that the satisfaction of infrastructure facilities offered in the branches and the policy options are not determined by the gender. Since the significance is less than 0.05 per cent the variable is significant, i.e. the services offered at the branches are associated with the gender (Table 4 & 5).

b) THE AGE OF THE RESPONDENT AND THE OPINION ON INFRASTRUCTURE PROVIDED BY LIC

Ho: There is no significant relationship between the age of the respondent and the opinion on infrastructure provided by LIC of Tiruchirappalli

H1: There is significant relationship between the age of the respondent and the opinion on infrastructure provided by LIC of Tiruchirappalli

The Table 6 & 7 reveals the age group of the respondents and their opinion on the infrastructure available in the branches of the insurance companies. As the calculated value is higher than the table value, the null hypothesis is rejected. Hence, there is no significant relationship between the age and the opinion on the infrastructure available (Table 6&7).

c) THE AGE OF THE RESPONDENTS AND THE OPINION ON THE POLICY AVAILABLE IN THE LIC

Ho: There is no significant relationship between the age of the respondents and the opinion on the policy available in the LIC of Tiruchirappalli.

H1: There is significant relationship between the age of the respondents and the opinion on the policy available in the LIC of Tiruchirappalli.

The Table 8 & 9 reveals the age group of the respondents and their opinion on the policy levels of the branches of the insurance companies. As the calculated value is higher than the table value, the null hypothesis is rejected and hence it is concluded that there is no significant relationship between the age and the policy levels of the companies.

d) THE PER ANNUM INCOME IN THE FAMILY OF THE RESPONDENTS AND THE OPINION ON THE POLICY AVAILABLE IN THE LIC

Ho: There is no significant relationship between the per annum income in the family of the respondents and the opinion on the policy available in the LIC of Tiruchirappalli.

H1: There is significant relationship between the per annum income in the family of the respondents and the opinion on the policy available in the LIC of Tiruchirappalli.

The Table 10 & 11 reveals the income of the respondents per annum and their opinion on the policy levels. As the calculated value is less than the table value, the null hypothesis is accepted and the alternative hypothesis is rejected and hence it is concluded that there is a significant relationship between the income of the respondents per annum and their opinion on the policy levels (Table 10& 11).

e) THE EDUCATION OF THE RESPONDENT AND THE OPINION ON THE SERVICES PROVIDED BY LIC

Ho: There is no significant relationship between the education of the respondent and the opinion on the services provided by LIC of Tiruchirappalli

H1: There is significant relationship between the education of the respondent and the opinion on the services provided by LIC of Tiruchirappalli

The Table 12 & 13 reveals that, since the significance is less than 0.05 per cent there is no statistically significant association between the infrastructure and the literacy levels of the respondents. Since the significance is less than 0.05 per cent there is no statistically significant association between the policy options and the literacy level of the respondents. Since the significance is more than 0.05 per cent, there is a statistically significant association between the policy options and the literacy levels of the respondents (Table 12 & 13).

f) THE OCCUPATION OF THE RESPONDENT AND SERVICES PROVIDED BY LIC

Ho: There is no significant relationship between the occupation of the respondent and services provided by LIC of Tiruchirappalli

H1: There is significant relationship between the occupation of the respondent and services provided by LIC of Tiruchirappalli

Since the significance is more than 0.05 per cent, there is a statistically significant association between the policy options and the occupation of the respondents. Since the significance is more than 0.05 per cent, there is a statistically significant association between the service provided and the occupation respondents. Since the significance is less than 0.05 per cent there is no statistically significant association between the infrastructure provided and the occupation of the respondents (Table 14 & 15).

g) THE MARITAL STATUS OF THE RESPONDENT AND THE OPINION ON THE SERVICES PROVIDED BY LIC

Ho: There is no significant relationship between the marital status of the respondent and the opinion on the services provided by LIC of Tiruchirappalli

H1: There is significant relationship between the marital status of the respondent and the opinion on the services provided by LIC of Tiruchirappalli

Since the significance is more than 0.05 per cent the variables are insignificant. Hence, it is concluded that the satisfaction on infrastructure facilities offered in the branches and the policy options are not determined by the marital status. Since the significance is less than 0.05 per cent the variable is significant, i.e. the services offered at the branches are associated with the marital status (Table 16 & 17).

h) THE AREA OF RESIDENCE OF THE RESPONDENTS AND THE OPINION ON THE SERVICES PROVIDED BY LIC

Ho: There is no significant relationship between the area of residence of the respondents and the opinion on the services provided by LIC of Tiruchirappalli

H1: There is significant relationship between the area of residence of the respondents and the opinion on the services provided by LIC of Tiruchirappalli

Since the significance is more than 0.05 per cent the variables are insignificant. Hence, it is concluded that the satisfaction on infrastructure facilities offered in the branches and the services offered are not associated with the area of residence of the respondents. Since the significance is less than 0.05 per cent the variable is significant, i.e. the policy options were directly associated with the area of residence of the respondents.

Since the significance is more than 0.05 per cent, there is a statistically significant association between the policy options and the occupation of the respondents.

Since the significance is more than 0.05 per cent, there is a statistically significant association between the service provided and the occupation respondents.

Since the significance is less than 0.05 per cent there is no statistically significant association between the infrastructure provided and the occupation of the respondents (Table 18- 20).

8. FINDINGS OF THE STUDY

Consumer attitudes are identified as the direct outcome of the policyholders' experience. The analysis made in this study indicates that there is a huge potential for life insurance business in India. The important findings of the present study stemming out the responses from the policyholders are summarized below.

- The satisfaction of infrastructure facilities offered in the branches and the policy options are not determined by the gender.
- The services offered at the branches are associated with the gender, marital status, nature of the family
- The satisfaction on infrastructure facilities offered in the branches and the policy options are not determined by the marital status.
- The satisfaction on infrastructure facilities offered in the branches and the services offered are not associated with the area of residence of the respondents.
- The policy options are directly associated with the area of residence of the respondents.
- The satisfaction on infrastructure facilities offered in the branches and the policy options are not associated with the nature of the family.

- There is no significant relationship between the age and the opinion on the infrastructure available, policy levels and services of the insurance company.
- There is no significant relationship between the number of dependents in the family and the opinion on the policy levels.
- There is significant relationship between the education of the respondent and the opinion on the services provided by LIC of Tiruchirappalli
- There is significant relationship between the occupation of the respondent and services provided by LIC of Tiruchirappalli
- There is a significant relationship between the income of the respondents per annum and their opinion on the infrastructure available, policy and the services provided by the insurance company

9. CONCLUSION

Customer service is great important in the insurance sector. The expectation of customer and their demands are increasing day by day. In India with economic liberalization and insurance companies are functioning under tremendous competitive edge to focus on developing long-term relationship with customers. The salient features like social aspects, low end of technologies, sophistication, unionized work force and cumbersome legal system basically mark Indian life insurance. Therefore, Indian life insurance must develop its own body of concepts and principles revolving around distinctive characteristics of services tempered with the imperatives of Indian situation.

10. SCOPE FOR FURTHER STUDY

The study was restricted to a few categories of Infrastructure, policies, services provided by the Life insurance corporation of India, Tiruchirappalli branches only. The present study triggers to go into the various policies and services offered by the Private Insurance corporations operated in India for the betterment of every Indian for their economical security.

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TABLE - 1: NUMBER OF POLICY HOLDER'S BRANCH WISE IN 2008-09

Rockfort	Srirangam	Karumandapam	Thiruverumbur	Trichy Main	Cantonment
98673	102312	97444	99443	145445	102646

Source: Life Insurance Corporation of Tiruchirappalli

TABLE - 2: TEN PER CENT OF POLICY HOLDER'S BRANCH WISE IN 2008-09

Rockfort	Srirangam	Karumandapam	Thiruverumbur	Trichy Main	Cantonment
9867	10231	9744	9944	14544	10264
10000	10000	10000	10000	15000	10000

Source: Life Insurance Corporation of Tiruchirappalli

TABLE - 3: ONE PER CENT OF POLICY HOLDER'S BRANCH WISE IN 2008-09

Rock fort	Srirangam	Karumandabam	Thiruverumbur	Trichy Main	Cantonment
100	100	100	100	150	100

Source: Life Insurance Corporation of Tiruchirappalli

TABLE - 4: SHOWING GROUP STATISTICS USING T-TEST FOR GENDER AND INFRASTRUCTURE

	Gender	N	Mean	Std. Deviation
Infrastructure	Male	449	17.1114	6.62153
	Female	201	17.3433	6.35347
Policy	Male	449	12.0824	1.89804
	Female	201	11.8358	1.83519
service	Male	449	29.5857	7.06206
	Female	201	31.1045	8.00525

Source: Primary data

TABLE - 5: INDEPENDENT SAMPLES TEST FOR GENDER AND INFRASTRUCTURE

		t	df
Infrastructure	Equal variances assumed	-.418	648
Policy	Equal variances assumed	1.546	648
service	Equal variances assumed	-2.429	648

Source: Primary data

TABLE – 6: INFLUENCE OF INFRASTRUCTURE AND AGE USING CHI SQUARE TEST

		Age				
		<25	25-35	35-45	45-55	>55
Infrastructure	Low level	25	55	48	94	59
	High level	42	56	70	121	80
Total		67	111	118	215	139

Source: Primary data

TABLE – 7: CHI-SQUARE TESTS ON INFLUENCE OF INFRASTRUCTURE AND AGE

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.131	4	p>0.05 Not significant

TABLE – 8: SHOWING POLICY AND AGE CROSS TABULATION

		Age				
		<25	25-35	35-45	45-55	>55
Policy	Low level	34	54	52	104	66
	High level	33	57	66	111	73
Total		67	111	118	215	139

Source: Primary data

TABLE – 9: CHI-SQUARE TEST FOR POLICY AND AGE CROSS TABULATION

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	.955	4	p>0.05 Not significant

TABLE - 10: SHOWING POLICY AND INCOME PER ANNUM

Income per annum					
		< 50,000	50,000 - 75,000	75,000 - 1,00,000	> 1,00,000
Policy	Low level	67	61	55	127
	High level	33	60	110	137
Total		100	121	165	264

Source: Primary data

TABLE – 11: CHI-SQUARE TEST FOR POLICY AND INCOME PER ANNUM

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	28.957	3	P<0.05 (significant)

TABLE – 12: SHOWING ANOVA - ONE-WAY ON EDUCATION AND SERVICES OF LIC

		N
Infrastructure	No formal Education	92
	HSC	135
	Graduate	205
	Professional	218
Policy	No formal Education	92
	HSC	135
	Graduate	205
	Professional	218
Service	No formal Education	92
	HSC	135
	Graduate	205
	Professional	218

Source: Primary data

TABLE – 13: SHOWING ANOVA FOR ASSOCIATION BETWEEN EDUCATION AND SERVICES OF LIC

		Sum of Squares	df	Mean Square	F	Sig.
Infrastructure	Between Groups	744.124	3	248.041	5.939	P<0.05 (significant)
	Within Groups	26979.090	646	41.763		
	Total	27723.214	649			
Policy	Between Groups	26.406	3	8.802	2.505	p>0.05 (Not significant)
	Within Groups	2269.569	646	3.513		
	Total	2295.975	649			
Service	Between Groups	998.701	3	332.900	6.237	P<0.05 (significant)
	Within Groups	34481.305	646	53.377		
	Total	35480.006	649			

Source: Primary data

TABLE – 14: SHOWING ANOVA - ONE-WAY ON OCCUPATION AND SERVICES OF LIC

		N
Infrastructure	Government	272
	Private	140
	Business	126
	Professionals	91
	Others	21
Policy	Government	272
	Private	140
	Business	126
	Professionals	91
	Others	21
Service	Government	272
	Private	140
	Business	126
	Professionals	91
	Others	21

Source: Primary data

TABLE -15: SHOWING ANOVA ON THE SERVICES AND DIFFERENT GROUPS

		Sum of Squares	df	Mean Square	F	Sig.
Infrastructure	Between Groups	1570.730	4	392.682	9.685	P<0.05 significant
	Within Groups	26152.484	645	40.546		
	Total	27723.214	649			
Policy	Between Groups	13.517	4	3.379	.955	p>0.05 Not significant
	Within Groups	2282.459	645	3.539		
	Total	2295.975	649			
Service	Between Groups	309.259	4	77.315	1.418	p>0.05 Not significant
	Within Groups	35170.747	645	54.528		
	Total	35480.006	649			

Source: Primary data

TABLE – 16: SHOWING GROUP STATISTICS ON MARITAL STATUS AND THE SERVICES OF LIC

	Marital status	N	Mean	Std. Deviation
Infrastructure	Married	446	17.4484	6.48877
	Unmarried	204	16.6029	6.61646
Policy	Married	446	11.9395	1.82699
	Unmarried	204	12.1520	1.99048
service	Married	446	29.5942	7.24120
	Unmarried	204	31.0637	7.63843

Source: Primary data

TABLE – 17: INDEPENDENT SAMPLES TEST ON MARITAL STATUS AND THE SERVICES OF LIC

		t	df
Infrastructure	Equal variances assumed	1.532	648
Policy	Equal variances assumed	-1.337	648
service	Equal variances assumed	-2.360	648

TABLE – 18: SHOWING GROUP STATISTICS ON THE AREA OF RESIDENCE AND THE SERVICES OF LIC

	Area of residence	N	Mean	Std. Deviation
Infrastructure	Rural	213	17.4413	6.41288
	Urban	437	17.0572	6.59851
Policy	Rural	213	12.2864	2.03684
	Urban	437	11.8696	1.78652
service	Rural	213	29.9531	7.03949
	Urban	437	30.1053	7.56791

Source: Primary data

TABLE – 19: INDEPENDENT SAMPLES TEST ON THE AREA OF RESIDENCE AND THE SERVICES OF LIC

		t	df
Infrastructure	Equal variances assumed	.703	648
Policy	Equal variances assumed	2.664	648
service	Equal variances assumed	-.246	648

TABLE – 20: SHOWING ANOVA ON THE AREA OF RESIDENCE AND THE SERVICES OF LIC

		Sum of Squares	df	Mean Square	F	Sig.
Infrastructure	Between Groups	1570.730	4	392.682	9.685	P<0.05 significant
	Within Groups	26152.484	645	40.546		
	Total	27723.214	649			
Policy	Between Groups	13.517	4	3.379	.955	p>0.05 Not significant
	Within Groups	2282.459	645	3.539		
	Total	2295.975	649			
Service	Between Groups	309.259	4	77.315	1.418	p>0.05 Not significant
	Within Groups	35170.747	645	54.528		
	Total	35480.006	649			

Source: Primary data

CREATIVITY AND INNOVATION: IMPORTANT DRIVERS OF ENTREPRENEURSHIP

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ABSTRACT

The purpose of this paper is to bring into the light the entrepreneurial practices and its mechanisms, study the role played by creativity and innovation in this process and over and above determining the techniques and methods to encourage creativity and innovation. According to the Schumpeter (1934), the entrepreneur is the prime mover in economic development, and his function is to "innovate", or "carry out new combinations". Further, he opines that an entrepreneur needs to be "creative, and should be able to take risk". While Peter Drucker states that, an entrepreneur is "someone who maximizes his business opportunities". These two statements clearly stress on the fact that business prospects are at the core of entrepreneurship. The entrepreneur must be creative and innovative to recognize the actual entrepreneurial possibilities and duly employ them to his advantage. In this context, Innovation starts with creativity and that is why they are treated as two sides of the same coin. For conversion of a business idea into a lucrative marketable concept, it is important to maintain balance between creativity and innovation.

KEYWORDS

Creativity, Entrepreneurship, Entrepreneur, Entrepreneurial Process, Innovation, Small Enterprises.

INTRODUCTION

"Capital isn't so important in business. Experience isn't so important. You can get both these things. What is important is ideas. If you have ideas, you have the main asset you need, and there isn't any limit to what you can do with your business and your life".

Harvey Firestone

"Creative thinking is not a talent, it can be learnt. It empowers people by adding strength to their natural abilities which improves teamwork, productivity and where appropriate profits".

Edward de Bono

There is no scarcity of definitions of entrepreneurship and entrepreneur. After reviewing countless definitions of entrepreneurship, we can say that those terms, which explicate entrepreneurship, are ambition, perseverance, intuition, creativity, responsibility, commitment, but above all: passion. An entrepreneur can emerge because of any of the following: his own wish, knowledge acquired in product/service, opportunities offered by others, circumstances forced upon him, and support extended by the governments and so on. Nevertheless, an entrepreneur is a person who invariably looks for new business prospects, analyze, and develop ideas, and starts working on how to make them sustainable profitable concepts. Such conceptualized business ideas can produce the preferred end results provided the entrepreneur firmly believes in it. Throughout the journey from ideation to translation of a business idea into a reality, entrepreneur has to be creative and innovative and be ready to make sacrifices and accept the risks and uncertainty that the work involves. Creativity is the development of ideas about products, practices, services, or procedures that are novel and potentially useful to the organization and Innovation is the implementation of a new or significantly improved product, service, or process that creates value for business, government, or society. Thus, creativity and innovation play an unambiguous role in the course of identifying problems, methods of solving them and use of opportunities that firms face every day. The entrepreneur who continuously creates new ideas and innovates will be able to meet the challenges of changes and needs of modern society.

ENTREPRENEURIAL PRACTICE AND TRAITS OF ENTREPRENEUR

Small enterprises and entrepreneurs play a role of immense importance in the socio-economic growth of any nation because of their inbuilt strengths not only to create new jobs but also in creating and maintaining the welfare of the society. Nationally and globally, the small enterprises account for a remarkable 90% of all industries. Unquestionably, it is the driving force behind a large number of innovations, contributing a significant share to the respective national economy through employment creation, investments and exports. Encouraging entrepreneurship is seen as a means of releasing currently unused chances that are inherent in individuals, rejected technologies and combinations of resources.

LITERATURE REVIEW

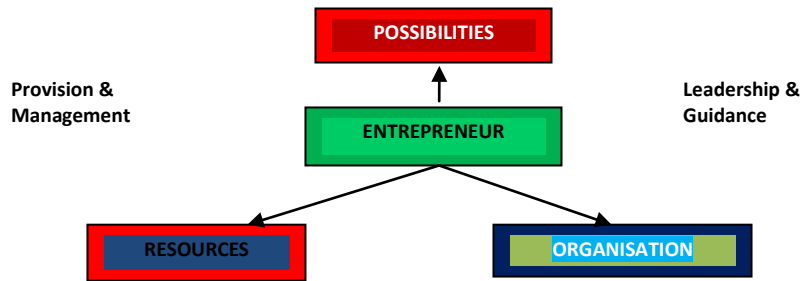
Entrepreneurship is all about the identification of an opportunity, creation of new organization, and pursuing new ventures (Carton et al. 1998). There are many studies done on entrepreneurship like external skills required in entrepreneurs. For example, Schumpeter (1934) has stated that an entrepreneur needs to be innovative, creative, and should be able to take risk. Wickham (2006) has also supported his views. Pajarinen et al. (2006) have said that entrepreneurs with higher academic background are more innovative and will use modern techniques and models to do business. Barringer and Bluedorn (1999) have described entrepreneurs as individuals who can explore the environment, discover the opportunities, and exploit them after proper evaluation.

From the above narrative of Entrepreneurship, it can be inferred that an entrepreneur should possess qualities such as higher academic qualification, creativity, innovativeness, risk-taking ability, responsibility, skill to discover opportunities, etc. Expertise to recognize the market potential is the focal point in entrepreneurship. The job of entrepreneur is not only to look into people's needs but also investigate whether there are areas in which these needs have not been met or have been met in a manner that is not acceptable to consumers⁶. Entrepreneur should recognize his opportunity in this. An individual or an entrepreneurial team can participate in implementation of perceived business opportunity.

Various researches show that an entrepreneurial team contributes to the growth and development of business and an individual entrepreneur contributes only to the creation of means of livelihood. Therefore, entrepreneurs who plan to develop a large and profitable business must constitute a team of managers who will help them do that.

Entrepreneurship is a combination of the following terms: new, innovative, creative, flexible, dynamic and prone to take risks. Entrepreneur, in addition to the resources, possibilities and organization, is a constituent of the entrepreneurial process. Figure below shows the importance of entrepreneur in the entrepreneurial process.

FIG. 1: COMPONENTS OF ENTREPRENEURIAL PROCESS



From the figure above it can be observed that entrepreneur is the core of the process. His expertise lies in linking the other three components of this process and such link results in the creation of value. Therefore, entrepreneur connects possibilities (through their identification in the market and the methods by which they can be used) with the resources (through their provision and the most efficient use) and organization (by directing activities towards the goal of the organization).

The extent to which an entrepreneur will be successful in managing the entrepreneurial process depends on the ability of entrepreneur to meet the exact needs of such entrepreneurial process. His competency is reflected through characteristics, such as self-confidence, independence, acceptance of risk, creativity, innovation and vision, which are relatively recognized with each entrepreneur.

Creativity and innovation occupy a special place among the traits of an entrepreneur. The entrepreneurial process begins by identifying and evaluating entrepreneurial opportunity, as well as by development of ideas in order to take advantage of the perceived business opportunity. Perceiving new business opportunities is often the result of knowledge and expertise of entrepreneur, emerging by the combination of education and experience, and the experience results from various business events. Creating and generating new ideas makes a creative process and the result of this process is invention. Thus, the invention is the design of a new idea, the creation of a new possibility for new or improved product or process. Creativity is a fundamental qualification for innovation, i.e. innovation is the change of creative ideas in a specific product/service/process.

Template below shows a relationship between invention, innovation and entrepreneurship. Through application of creativity and innovation, it is possible to solve problems and use possibilities which companies face. Therefore, creativity and innovation have a key role in the entrepreneurial process. Competitive advantage can be derived through the process of innovating and creating new products/services/processes or improving existing ones. The ability of entrepreneur is reflected in the fact that he uses changes creatively to change obstacles and constraints into advantages. It also shows the relationship of entrepreneur and his creativity and innovation, on one hand, and his expertise and knowledge of business, on the other hand.

FIG. 2

		Expertise and Knowledge of Business	
		Small	Large
Creativity and innovation	Large	Inventor	Entrepreneur
	Small	Promoter	Manager Administrator

By looking at the above template, it can be inferred that an individual who wants to become an entrepreneur must possess, in addition to a high level of proficiency and understanding of business, high creativity and innovation.

CREATIVITY AS A TRAIT OF ENTREPRENEUR

Creativity is the ability to create something new and valuable by the art of imagination, which also dominates among the above characteristics of entrepreneur. In the definition of entrepreneurship, the emphasis is on creativity, which includes the following:

- Creation of new business ventures and organizations;
- Creation of new combinations of goods and services, production methods, markets;
- Creative identification of new and existing opportunities;
- Creativity in using new and existing opportunities.

Creativity is usually defined as a continuous search for new and represents a forerunner to innovation¹⁶. This trait of entrepreneur is related to the insight of problems and finding suitable solutions. An individual is creative when looking at things in a new dimension. Creativity can also be defined as the ability to connect previously unconnected thoughts or ideas in a whole.

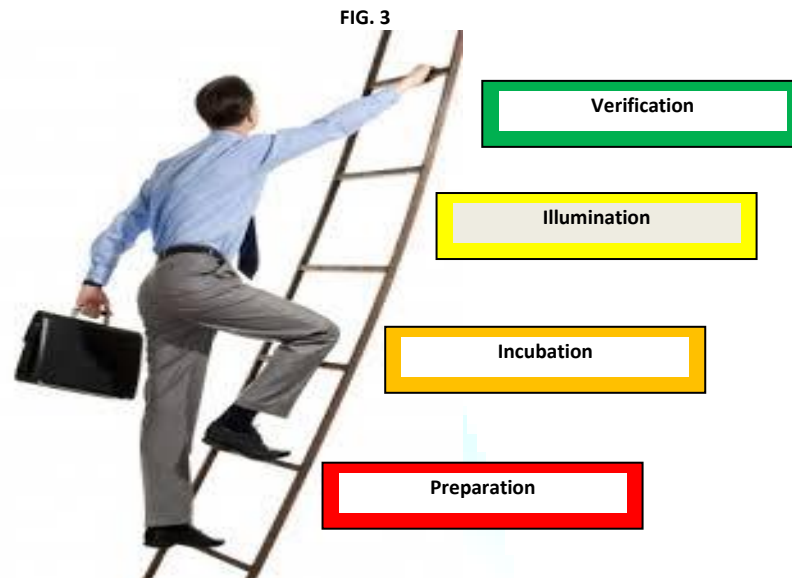
Therefore, only a creative entrepreneur can identify new business opportunities and chances, and he has skill to use them properly. In the words of Niccole Machiavelli "Entrepreneurs are simply those who understands that there is a little difference between obstacle and opportunity and are able to turn both their advantage"

More than ever before, it is increasingly accentuated that creativity depends on knowledge, intellectual abilities, personal characteristics and motivations. These four causes are also the qualities of a successful, creative entrepreneur. According to Guilford¹⁹, creative people think divergently, i.e. aspire to create more ideas and look for more ways to solve a problem.

A successful entrepreneur must constantly look for changes, play a little, know how to accept the risks and constantly introspect 'What if? In this way, entrepreneurs develop skills, acquire knowledge, and stimulate motivation, what is the key to entrepreneurial success.

STAGES IN THE CREATIVE PROCESS

Four stages of Creativity, according to Graham Wallas, are preparation, incubation, illumination and verification as illustrated in Fig. below.

**PREPARATION**

The first phase of creativity is preparation. It implies preparation in two senses. The primary sense involves the necessity to develop, over time, the basic skills and expertise that one must have to function creatively within the specific domain²². For example, if machine design is your forte, and you want to design new kinds of machines, you must first know a great deal about the medium itself and the principles behind the functioning of machine components and parts.

The next, the situation-specific kind, involves a period of concentrated mental activity. Suppose there is a problem to be solved, collect information that bears on this problem and on how identical problems have been solved in the past, and actively think, feel or see your way to a solution. In simple words, half the problem is solved if it is clearly-defined. Problem solving creatively requires a clear insight of the problem but, for better focus, entrepreneur needs to know what he wants, which is the ultimate goal. Experience, knowledge and information that entrepreneur has are very important for a satisfactory understanding of the problem, for only thus he can identify the right opportunity and create idea(s).

INCUBATION

Incubation is the next stage, and it involves taking time out from the problem. The presumption is that while your conscious mind takes a rest from active work on the problem, your subconscious still works behind the scenes to find a solution. And again and again, that does seem to happen. Pieces of the conundrum that you might not have consciously thought about during active preparation sometimes come together during this period. It is as though the intense work in the preparation phase has activated all your mental faculties, including subconscious ones, and the search for a creative breakthrough continues in some unconscious brain process.

ILLUMINATION

Illumination, once it follows incubation, typically arrives as a flash of insight — the famous Aha! Or Eureka, Experience! What comes might not be the absolute answer. Rather, it might be part of the answer, or maybe just a clue regarding where to find the answer.

VERIFICATION

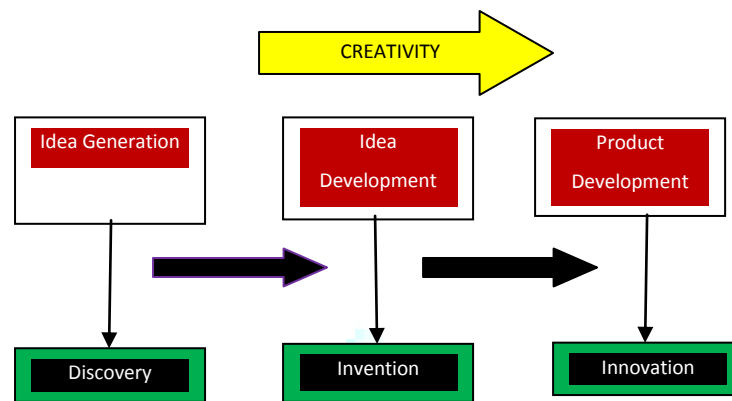
Verification, the last step of the process, involves either intellectually fleshing out the illumination in detail, or testing its practicality. In some situations you might create a model, a sketch, a “breadboard” circuit, or in the case of a work of art, the work itself. Some of the time this verification process is trivially simple; at other times it involves a great deal of work. This phase is most critical, because it is very important to test the viability of the solution itself. If the conclusion is that the solution is unfeasible, it is better revert to the preparation stage.

INNOVATION AS A TRAIT OF ENTREPRENEUR

A very important task of entrepreneur is to create value in the market. Value is created through the production of new products/services/processes or improving existing ones, which is achieved through the process of innovation and learning. Therefore, it can be said that innovation is a very important factor of vitality and competitiveness of companies and thus a very important characteristic of entrepreneur²². Therefore, innovation is a different way of performing some production, service, entrepreneurial activity that has not previously been seen in the market, whether a completely new product/service/process is being produced or an existing one is being improved. Or else, Peter Drucker defines innovation as 'a specific tool of entrepreneurs, the means by which they use changes as favourable opportunities for some other business or service activity, so entrepreneurs must create something new, something different, they must change or transform value'.

Creativity and innovation are the same is a myth even though they are frequently used as synonyms. Creativity refers to the process of idea generation. Innovation refers to the whole end-to-end process²⁴. Therefore, it is necessary to distinguish between the process of creativity and the innovation process. In fact, both are connected with each other. The process of innovation is built and based on the creative process. Specifically, the idea is created within the creative processes. New idea that has not yet been realized, that is, turned into a new product/service/process is an invention. In the process of innovation, a new idea is turned into a market product/service/process. Figure below shows the process of creation and development of a product.

FIG. 4: RELATIONSHIP BETWEEN INVENTION, INNOVATION AND ENTREPRENEURSHIP



According to Drucker, changes are the basis of all innovation. Therefore, the point is to find new products/services/processes, i.e. create an innovation so as to be 'a mighty weapon' in the armoury of entrepreneur while dealing with changes. Through innovations, entrepreneur is trying to use changes and turn them into advantages that can be a source of high profits. However, high profits are generated only in the beginning and for a short period. After some time, income decreases due to the appearance of imitators of innovation. For these reasons, an entrepreneur must permanently, constantly, continuously search for new ideas which he will successfully turn into innovations, and which will bring him monetary rewards.

TOOLS AND TECHNIQUES FOR DEVELOPMENT OF CREATIVITY AND INNOVATION

Creativity and innovation help to recognise the value of an entrepreneur. Schumpeter believes that entrepreneur is altogether a person of different mould. Therefore, entrepreneur is an individual who is exceptionally talented, competent to introduce novelty, prepare creative ideas, initiate and use changes. There was a time when it was believed that entrepreneurs were born, so an individual who had a good 'sixth sense' could carry out such work. However, the situation has changed today. Today's entrepreneurs grow into professionals who rely more on their knowledge, earned by education, and intellectual abilities they possess. There are three types of skills that prospective entrepreneurs must master before they enter the business project: technical, human and conceptual²⁵. Entrepreneurship can be learned like any other profession, if these skills are mastered. Therefore, entrepreneurs are not born, but created.

Creativity is an indispensable quality of any successful entrepreneur. With creativity the entrepreneur has different understanding of a situation due to varied form of ideas being generated. Creativity can be unlocked and creative innovative ideas generated using any of the techniques. The tools and techniques described in this paper have been derived from many other books, Internet sites, and from my own experiences. They are as follows:

BRAINSTORMING & TYPES OF BRAINSTORMING

Linus Pauling²⁶ once indicated that the only way to have a creative idea is to find as many answers as possible and to weed out what is inappropriate. We call it "brainstorming"! Brainstorming is a conference technique of attacking problems or creating original ideas by intense discussion and spontaneous idea exchange within a group. Unless it is well structured and expedited, a group action session will end up being a meaningless exercise. The four rules to be followed when using brainstorming are: a). No criticism is allowed by anyone in the group, b). "Freewheeling" is encouraged, c). Quantity of ideas is desired, and d). Combinations and improvements of ideas are encouraged, Over and above, Brainstorming sessions should be fun with no one dominating or inhibiting the discussion.

VALUE BRAINSTORMING

This is a form of brainstorming where the process is the same – but the content is different. Instead of brainstorming issues, problems, or potential solutions, the group brainstorms a list of things they value. Examples might be honesty, trustworthiness, recognition, etc.

ROLE STORMING

Role Storming is an evolution of Brainstorming, where you take on another identity to view problems and solutions from a different angle. People may be less embarrassed and more willing to provide unusual or 'off the wall' ideas if they are presented by an anonymous person.

REVERSE BRAINSTORMING

This is a group method for obtaining new ideas while focusing on the negatives; and, criticism is allowed as against the brainstorming approach. The technique is based on finding fault by asking the question "in how many ways can this idea fail". With the fact that it focuses on the negative aspects of a product or service, the group's morale must be maintained in the right direction. This approach can be effectively used before other creative techniques to stimulate innovative thinking. This method produces some meaningful results as it is easier for an individual to be critical about an idea than to come up with a new idea.

BRAIN WRITING

It is a silent, written generation of ideas by a group of people. The participants write their ideas on a special card, which circulates within the group (usually six members). Each group member generates and writes down three ideas during a five-minute period. The card then is passed on to the next person, who writes down three new ideas and so on, until each form has passed all participants. Examples of this include, Brain writing pool, Brain writing 6-3-5, etc.

CREATIVE ORIENTATION

A method which includes: bionics as a skill that is based on the application of knowledge on living systems for solving social problems; searching for solutions according to self-learning principles, starting from the existing product where possible changes in such product are examined; searching of examination area starting from observation of the current situation from another angle.

SYSTEMATIC STRUCTURING

It is a method which includes: morphological box, specifying the list of attributes, showing problem fields, sequential morphology, decision tree, process analysis. These methods try to encourage intellectual and rational thinking of people.

CREATIVE CONFRONTATION

A method which includes: classic synectics conference, visual synectics, analysis by stimulating words, BBB method, Force-Fit game, Tilmag method, method of integration of adjacent fields, semantic intuition, forced connection, and catalogue technique.

SYSTEMATIC SPECIFICATION OF PROBLEM

This method includes progressive abstraction, epistemological analysis, K-J method, N-M method, hypothesis matrix, relevance tree.

GORDON METHOD

The Gordon method involves developing new ideas when the individuals are clueless of the problem. This implies that group members do not know the exact nature of the problem. The entrepreneur begins by mentioning a general concept associated with the problem. The group thereafter responds by expressing a number of ideas. This can then lead to a concept being developed, followed by related concept through guidance by the entrepreneur. At last the actual problem is revealed, enabling the group to make suggestion for the implementation or refinement of the final solution.

CHEKLIST METHOD

In this method, a new idea is developed through a list of related issues or suggestions. The entrepreneur uses a list of questions or statements to guide the direction of developing entirely new ideas or focusing on specific idea areas.

FORCED RELATIONSHIPS

The steps followed in the process are: a). Isolate the elements of the problem, b). Find the relationships between these elements, c). Record the relationship in an orderly form, d). Analyze the relationships to find ideas, and lastly, Develop new ideas from these patterns.

PARAMETER ANALYSIS

Parameter analysis involves parameter identification and creative synthesis. Parameter identification analyzes variables in the situation to determine their relative importance. The relationship between parameters that describe the underlying issues is examined and a solution developed (creative synthesis.)

CONCLUSION

An individual who pilots and navigates the entrepreneurial ship is called an entrepreneur. He is oriented towards the future that has a vision and develops ideas, tries to foresee events and changes and use them in an adequate manner. He is able to recognize the opportunity that others have not noticed or have not given importance to. Entrepreneurs more or less differ among themselves, but successful entrepreneurs are branded by dedication, involvement, motivated team, transparency with stakeholders, hard work, strict monitoring of set procedures, determination and flexibility. Every entrepreneur must relentlessly innovate if he wants to survive in extremely competitive world today. Entrepreneur sees the possibility of innovation in changes and, therefore, it is said that entrepreneur is bound to stay alive with changes. Therefore, in order to take benefit of changes, entrepreneur must be creative and innovative. Creativity is the improvement of ideas about products, practices, services, or procedures that are novel and potentially useful to the organization. Innovation is the execution of new ideas at the individual, group, or organizational level with the sole objective of putting the idea into use. Individuals who do not have expressed these two characteristics of entrepreneur can improve them by techniques for development of creativity and innovation

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RETAIL MERCHANDISING AND BRAND BUILDING: A CASE STUDY OF BASMATI BRANDS

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ABSTRACT

Today, with the boom of organised retailing in India, the rice is no longer a commodity but is being branded. Earlier it was all about rice being sold in jute bags and under two categories like basmati and non basmati. Modern trade on an average contributes 40 to 50 percent of total packaged rice sales in India, Branding of agricultural commodities helps in creating value, across the supply chain process. Branding symbolizes the differentiation in the agricultural yield produced in India and gains an edge over the other commodities. Basmati rice is no exception where we find plethora of basmati brands. This paper studies the role of merchandising on the different brands of basmati rice and it attempts to explore the various brands of basmati rice which exist in the market and also to look at the retail format through which it is being sold.

KEYWORDS

Merchandising, Basmati Rice, Brands, Retail formats, and Instore Promotion.

1. INTRODUCTION

Rice is the staple food product in many parts of our country. In fact, rice provides more than one fifth of the total calories consumed by humans throughout the world. There are several varieties of rice, out of which a few are aromatic rice, known for their wonderful fragrance and they are famous as basmati rice. In the market, there is a huge difference as basmati itself has become quite diverse in means of varieties and various price points at which it is being sold in market and above all the beautiful packaging in which it has been retailed in various super and hyper markets..

Rice, the second most widely grown cereal crop, is the staple food for more than half of the world's population. Rice is endowed with amazing genetic diversity with more than one hundred thousand landraces and improved cultivars maintained in the germ plasma collections spread world over. A unique varietal group that has distinguished itself as a result of natural and human selection, which found wider acceptance all over the world as a speciality rice is called "Basmati rice".

Basmati is now a Geographical Indication (GI) belonging to the geographical area in the Indian subcontinent, India, at present, is the biggest exporter of basmati rice in the world. It produces nearly 7.5 million tons and exports approximately 2.5 million tons

Basmati has attained "heritage rice" status as it is considered as "farmers cultivar" being maintained and grown by farmers of Punjab region of India and Pakistan and Haryana and Uttar Pradesh regions of India for more than 250 years. The special quality of Basmati rice is attributed to unique combination of soil, water, climate and cultural practices under which it is grown, besides the inherent genetics governing the features.

India accounts for about 70 percent of the world's basmati production basmati rice, a variety of long grain rice with a fine texture, is the world's best rice that one can use for cooking and the leading aromatic fine quality rice in the world trade. Basmati rice is the "queen of fragrance" or the perfumed one. This type of rice is grown in the foothills of the Himalayas for thousands of years. basmati is generally preferred by consumers over the other varieties, as it elongates a 100 percent on cooking without increasing in girth and has a rich desirable aroma (Graham 2002). The cost differential between basmati and other varieties is therefore high.

2. MERCHANDISING

Termed as the planning, buying and selling of merchandise. It is an integral part of retailing and is also one of the most challenging functions. Retailers often say, "GOODS WELL BOUGHT ARE HALF SOLD".

Tender chicken cooked in hot and spicy served with aromatic basmati rice.



"This is a savory Indian style rice dish flavored with whole spices and fried onions. Soaking the basmati rice before cooking makes all the difference.

RETAIL MERCHANDISING

The developing of strategies to ensure that the right product

- Is bought at the right price

- Is available at the right place
- At the right time
- In the right amount
- In order to satisfy the needs of the target customer

FUNCTIONS OF MERCHANDISE

The merchandise manager is responsible for particular lines of merchandise. In a department store there may be separate merchandise Men’s wear, women’s wear, children’s wear etc. They would be in charge of a group of buyers and their basic duties could be divided into four areas: planning, directing, coordinating and controlling

ATTRACTIVE PACKAGING

The packaging of the merchandise goes a long way in improving the brand value of the product. A product kept in a nice box would definitely catch the attention of the customers

UNIQUE PRICING (DISCOUNTS)





Attractive prices, discounts, rebates also bring customers to the store.

PROMOTIONAL SCHEMES, GIFTS





Coupons and attractive gifts make shopping a pleasurable experience for the customers.

BASMATI RICE GIFTS AND MERCHANDISE

BASMATI RICE DESIGN GIFTS

 <p>Peacock Brand Basmati Rice T-Shirt \$29.50 \$22.99 Add to Cart See this design on other items ></p>	 <p>Bhaat - Its Whats For Dinner Tee \$29.50 \$14.99 Add to Cart See this design on other items ></p>	 <p>Basmati Rice (Fork And Knife) Bumper Bumper Sticker \$4.25 Add to Cart See this design on other items ></p>	 <p>Basmati Rice Lover Shirt \$38 \$31.99 Add to Cart See this design on other items ></p>
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BASMATI RICE DESIGN MUG

 <p>Peacock Brand Basmati Rice Mug \$18.50 \$12.99 Add to Cart See this design on other items ></p>	 <p>Basmati Rice Mug \$15 \$10.99 Add to Cart See this design on other items ></p>	 <p>Basmati Rice Lover Mug \$15 \$10.99 Add to Cart See this design on other items ></p>	 <p>Will Work For Basmati Rice Coffee Mug \$15 \$10.99 Add to Cart See this design on other items ></p>
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RETAILING

Retailing can be defined as a conclusive set of activities or steps used to sell a product or service to consumers for their personal or family use. It is responsible for matching individual demands of the consumer with supplies of all manufacturers. The word retail" is derived from the French word retailer, meaning „to cut a piece off" or „to break bulk".

A retailer is a person, agent, agency, company, or organization which is instrumental in making the goods, merchandise, or services to reach the ultimate consumer. Retailer performs specific activities such as anticipating customer wants, developing assortments of products, acquiring market information, and financing. A common assumption is that retailing involves only the sale of products in stores. However, it also includes the sale of services like those offered at a restaurant, or by car rental agencies. The selling need not necessarily take place through store. Retailing encompasses selling through the mail, the internet, door-to door visits, any channel that could be used to approach the consumer, When a manufacturer like Dell Computers sells directly to the consumer, they also perform the retailing function.

QUALITY OF RETAILING

1. There is direct end user interaction in retailing.
2. It is the only point in the value chain to provide a platform for promotions.
3. Sales at retail level are generally in smaller unit sizes.
4. Location is a critical factor in retail business.
5. In most retail business, services are as important as core products.
6. There are a larger number of retail units compared to other members of the value chain.

PLANNING MERCHANDISING

Merchandise managers formulate the policies for the areas for which they are responsible. Forecasting the sales for the forthcoming budget period is required. This involves the estimating of the consumer demand and the impact of the changes occurring in retail environment. The sales forecasts are then translated into budgets, to help the buyers within the financial guidelines.

Basic Stock = Average stock for the season – average monthly sales for the season where

Average monthly sales for the season = $\frac{\text{Total planned sales for the season}}{\text{Number of months in the season}}$

Average stock for the season = $\frac{\text{Total planned sales for the season}}{\text{Estimated Inventory Turnover Rate for the season}}$

Beginning of Month (BOM) stock = Planned Monthly Sales + Basic Stock

ARMED FORCES RENDERED BY THE RETAILERS

Source: Compiled by Author's

THE RETAIL GROWTH IN INDIA

The Indian economy is likely to continue its steady growth with enhanced share in global trade and steady agricultural outputs. Booming employment opportunities, rising urban disposable income and credit card ownerships, changing lifestyles and demographic profiles all are showing a favourable skew towards a rising consumerism culture. Consumer spending is clearly set to accelerate its pace.

Demographics continued to show a positive skew to spur retailing growth. Consumers groups aged between 20-45 years are emerging as the fastest growing consumer group and the mean age of Indians is now pegged at 27, a mean age that reinforces spending across all the retailing channels of grocery, non-grocery and non-store.

3. REVIEW OF LITERATURE

1. "Rice in the Global Economy: strategic research and policy issues of food security (IRRI-2010)" in this study identified the sustainably improving rice systems and enhancing overall performance of the global rice economy to reduce poverty and hunger. Priorities will clearly differ greatly among countries and even within countries. They will also necessarily embrace a wide range of technological, policy, and institutional options. Yet, several broad priorities emerging the Global problems need global solutions, but they must be flexible enough to meet local needs.
2. "POST HARVEST PROFILE OF PADDY/RICE" in this study identified the In world paddy production, Asia's share is more than 90 percent. Paddy is a primary foodgrain crop of India and occupies about 37 percent of the area under foodgrains and contributed more than 40 percent of foodgrains production in the country during 2000-01. More than 50 percent of country's population depends fully or partially on rice as it constitutes the main cereal food crop of the diet. During 1999-2000, in the states like Andhra Pradesh, Assam, Kerala, Orissa, Tamil Nadu and West Bengal, rice consumption accounted for more than 80 percent share in total cereal intake. Rice is primarily a high energy calorie food. The major part of rice consists of carbohydrate in the form of starch, which is about 72-75 percent of the total grain composition. The protein content of rice is around 7 percent. The protein of rice contains glutelin, which is also known as oryzenin. The nutritive value of rice protein (biological value = 80) is much higher than that of wheat (biological value = 60) and maize (biological value = 50) or other cereals. Rice contains most of the minerals mainly located in the pericarp and germ and about 4 percent phosphorus. Rice also contains some enzymes
3. "Dr.K.K.Tripathi: BIOLOGY OF ORYZA SATIVA L. (RICE)" in this identified the Rice (*Oryza sativa* L.) is a plant belonging to the family of grasses, Gramineae (Poaceae). It is one of the three major food crops of the world and forms the staple diet of about half of the world's population. The global production of rice has been estimated to be at the level of 650 million tones and the area under rice cultivation is estimated at 156 million hectares (FAOSTAT, 2008). Asia is the leader in rice production accounting for about 90% of the world's production. Over 75% of the world supply is consumed by people in Asian countries and thus rice is of immense importance to food security of Asia. The demand for rice is expected to increase further in view of expected increase in the population. India has a long history of rice cultivation. Globally, it stands first in rice area and second in rice production, after China. It contributes 21.5 percent of global rice production. Within the country, rice occupies onequarter of the total cropped area, contributes about 40 to 43 percent of total food grain production and continues to play a vital role in the national food and livelihood security system. India is one of the leading exporter of rice, particularly basmati rice.

4. "Amira Foods (India) Ltd: SUCCESSFUL MARKETING STRATEGIES AND BUSINESS MODELS" in this study identified the **Organic food business in India** has emerged as one of the largest markets in the world for organic food. The organic foods or products are healthy, contain no chemicals or preservatives, are totally natural and are much better than any form of non organic foods in terms of the various benefits that they provide to one and all. Organic foods are produced naturally without anything foreign included but traditional foods are constantly sprayed with pesticides, herbicides, hormones and many other chemical. Hence these become an obvious choice of health conscious people in India Also referred to as fresh food or natural food, you can now find it in common retail stores or food outlets inside malls. •Organic food can easily be found in India since India is a predominantly agricultural country and the food production of the country is very high hence there is enough organic food which is available in the country and hence there is no need to import the organic foods as well.
5. "Sangita Ghosh (FEBRUARY 2009): Against the grain" in his study Rice, which has long held the reputation of being the food of the masses, is witnessing a silent transformation in India. Things have come a long way from the "touch and feel" approach to purchasing rice by the weight to the modern era in which the busy urban Indian consumer is beginning to place his or her trust in branded and packaged rice.
6. "Dilip Kumar Jha / Mumbai July 6, 2012, 0:08 IST The Hindu: Rice shares up on removal of minimum export price" in his study identified Rice stocks surged by up to 16 per cent on Thursday on the back of the government's decision to allow basmati exports without the barrier of minimum export price (MEP). Fixed by the government, MEP is the benchmark price below which an exporter cannot sign a contract with foreign buyers. The Directorate General of Foreign Trade (DGFT), through a notification that the removal of MEP, which was received by exporters positively. While the share price of Kohinoor Foods Ltd jumped 14.41 per cent to close at Rs 32.15 that of LT Food Ltd shot up 9.64 per cent to Rs 43.80. Also, KRBL Ltd stock price jumped 7.75 per cent to close at Rs 22.25 on the BSE. Non-basmati rice exporters saw similar jump in stock prices.
7. "QRC RICE INSPECTION CELL KARACHI, LAHORE, QUETTA & TCP (BROWN RICE) COUNTRY WISE POSITION OF EXPORT OF BASMATI RICE (JULY, 2011 TO MAY, 2012)"
8. "SBI: Sindh Board of Investment (Govt.of.Sindh)" in this identified the Rice is the most widely consumed staple food at the global level and is an excellent source of compound carbohydrates. Pakistan is the 11th largest producer and 4th largest rice exporter. Pakistan produces 6.22 million tons of rice over an area of around 5 million acres. Rice exports remained the second largest foreign exchange earner for the country after cotton. Sindh province produces about 1.461 million tons from an area of 0.544 million hectares with an average yield of 2.686 tonnes rice per hectare. The main varieties of rice grown in Sindh are Basmati, irri6 and irri9. The fine type variety has different names in Sindh such as Roosi, GM Basmati, Kernel, Supper, Dubai or Basmati-2000. D-98 Basmati Rice from Sindh is also known to the world as 'Sindhi Basmati'. Major rice growing areas in Sindh are Larkana, Shikarpur, Dadu, Qambar – Shahdadkot, Badin, Thatta and Jacobabad.
9. "CDFD: Annual Report(April 2009 to March 2010)" in this identified the APEDA-CDFD Centre for Basmati DNA Analysis tested around 350 basmati samples for purity. Testing of purity of Basmati samples received from Export Inspection Council (EIC), Ministry of Commerce, Govt. of India, Basmati rice exporters from India and other countries.
10. "Global Agricultural Information Network: Required Report - public distribution (2/17/2010)GAIN Report Number: IN1011" India's basmati rice production is reportedly growing with the introduction of the PUSA 1121 variety, an evolved high yielding variety of basmati rice, grown mostly in Punjab and Haryana. Although no official statistics are available, trade sources peg production of all types of basmati (traditional, Pusa, and Pusa 1121) in MY 2009/10 at around 3.4 million tons from 1.5 million hectares.
11. " **Miscellaneous and Processed Products:** Regulating the Importation of Miscellaneous and Processed Products Regulated by Plant Protection and Quarantine" in this identified Special Procedures—Inspecting Basmati Rice (Polished), Milled products include basmati rice, husked rice, polished rice, rice flour, rice powder, and rice starch.
12. "G. Raghuram & V. N. Asopa (W.P. No. 2008-07-03 , July 2008): INDIAN INSTITUTE OF MANAGEMENT, Issues in Infrastructure for Export of Rice from India" in his study identified Rice is exported in two varieties, basmati (aromatic) and non-basmati. The basmati rice exports are in three categories: white, brown and parboiled. India earned Rs 18.4 billion in 2001-02 from exports of basmati rice and non-basmati rice contributed Rs 13.3 billion for the same period.
13. "Ir. Corné van Dooren (November 2005), Rice Value Chain Analysis": in his study identified the price is € 0.114 for rain-fed rice from Thailand, € 0.095 for irrigated farming (because there are two crops per year and higher yields) and € 0.243 per kg for traditional Basmati rice from India. Most traders pay more than the minimum price up to 0.25 per kilo.

4. NEED FOR THE STUDY

The main motive of the study is to look at the Evolving role of Retail Format merchandising on the different brands of basmati rice and it attempt to explore the various brands of basmati rice.

5. BROAD OBJECTIVE OF THE STUDY

Study of Retail merchandising and brand building of Basmati Brands

SPECIFIC OBJECTIVES

1. To study the Role of Merchandising on the different brands of basmati rice.
2. To study the Various Brands of basmati rice
3. To study the impact of in store promotion on various brands of basmati rice.
4. To study the various pack sizes of basmati brands available in different retail formats.
5. To study the various promotional offers of various basmati brands in retail formats.

6. RESEARCH HYPOTHESIS

The imbalance between the Retail brands of promotion and Merchandising of its different brands of basmati rice.

7. RESEARCH METHODOLOGY

7.1 RESEARCH DESIGN

On the basis of objectives of the study, a descriptive research design will be chosen. As this involves a compilation of various inputs, this qualifies to be Descriptive study. The hypothesis will be tested empirically.

7.2 DATA SOURCES

Primary data would be collected from

- 1) Retailers with the help of Questionnaires
- 2) Agents with direct interviews

Secondary data from journals, case studies, department of agricultural, Govt of AP as well as Govt of India, ministry of agricultural and directorate of economics and statistics..Etc.

8. MAJOR BASMATI BRANDS IN INDIA

- Amira
- Neesa

- Dunar
- Himalayan Crown
- India Salaam
- Indian Star
- Saffola Arise
- Tirupati
- Jagat

8.1 POWER OF THE BRAND

The imprint of a brand is getting bolder in today's consumer world. It is sign of the changing times. Along with increasing consumer awareness and changing preferences, the rice industry is witnessing change. No more is the friendly neighbourhood grocer's word all there is to go by. In a country that produces thousands of varieties of rice, branding has come to play a role in domestic as well as export markets. The brand is the new mantra for success and basmati, also known as the 'king of rice', is in the midst of the action. Rice producers have picked up the market trend towards preference for branded basmati and have jumped on to the bandwagon so that there are more than 100 regional brands of rice in India. Some famous brands available in India, are as follows

The wide range of packaged rice brands is dominated by the Basmati rice but includes many other processed rice variants as well. Here's what India's major rice manufacturers and marketers are offering at retail:

8.1.1 Kohinoor Foods Ltd.

Satnam Overseas' Kohinoor Foods Ltd. offers a wide range of packet brands of Basmati, non-Basmati, instant and ready-to-eat rice products. The brands are found in almost all the major retail and wholesale chains including Metro Cash n Carry, Reliance Fresh, Food Bazaar, Spencer's, Vishal, Subhiksha, HyperCity, More and Nilgiri's. The most coveted Basmati rice variants are Kohinoor Supreme, Kohinoor Brown & Kohinoor Organic. Kohinoor Supreme is the pure traditional Basmati rice present in the organised trade for two years. Kohinoor Brown is the healthier choice for Basmati rice. It is an un-milled rice, a kind of a whole grain and carries a mild nutty flavour. Kohinoor Organic is a natural Basmati rice grown under an organic farming pattern. It comes with IMO and Indian Organic certifications.

8.1.2 KRBL Ltd. (India Gate)

KRBL Ltd.'s rice variants are retailed under the 'India Gate' brand. Besides leading the domestic market in India, KRBL is also one of the largest Basmati rice exporters and suppliers to the Middle-east, Europe, USA, Canada and Africa. Besides India Gate, the company's flagship brand, KRBL also offers other rice brands such as Doon, Nurjahan, Aarthi, Royal, Zafrani, Sonale, Sostha, Train, Rice King, Joy, Football, Taj Mahal, Indian Farm, Sun Flower, Lion, Unity, People's Princess, Sarina, Queen of Hearts and Bemisal.

8.1.3 Lal Qilla

Lal Qilla Basmati rice, a renowned and traditional packet rice brand in India, claims about 28 percent share in the total sales of branded, packaged rice in India. Lal Qilla Basmati rice is the flagship brand and is a pure, traditional Basmati retailed in 1 kg poly packs at Rs 130, 2 kg at Rs 255, 5 kg at Rs 640 and 20 kg poly packs at Rs 2,600. Other brands are Golden Qilla, a premium quality traditional Basmati, and Qilla Excel – a Pusa 1121 Basmati. This product is available in 1 kg poly pack at Rs 125 and 5 kg at Rs 650. Qilla and President are the Dehraduni Pusa Basmati rice variants. The products are sold at Rs 85, Rs 170, Rs 425 and Rs 1,600 packed in 1 kg, 2 kg and 5 kg poly packs, and 20 kg jute bags, respectively. Shahjahan is a super quality Basmati available at Rs 95, Rs 190, Rs 465 and Rs 1,800 in 1 kg, 2 kg and 5kg poly packs, and 20 kg fabric bags, respectively. Golden Chhap Aged Basmati is the second-range aged traditional Basmati retailed in 1 kg and 5 kg poly packs at Rs 90 and Rs 470 respectively and in 20 kg jute bags for Rs 1,700, while Golden Chhap Daily Meal Basmati Rice is the third range aged traditional Basmati rice. The products are available in 1 kg and 5 kg poly packs priced at Rs 80 and Rs 400 respectively, and in 20 kg jute bags at Rs 1,500. Lal Qilla also offers No 517 Long grain Rice, a long grain non-Basmati Parmal rice variant priced at Rs 700 for 25-kg in a jute bag, and 507 Biryani Rice – a rice variant also known as Sharbati. It is available in 1 kg poly packs and 25 kg jute bags priced at Rs 55 and Rs 1,150 respectively. Apart from these, the Lal Qilla portfolio also includes Dobar, Tibar and Mungra rice qualities under the brand 'Golden'.

8.1.4 Shri LalMahal

Shri LalMahal provides a wide range of fine Basmati and non-Basmati rice. The main brands are Shri LalMahal (the flagship label), Pargol, Heena, Shanker Bhog and Mughlai. Shri LalMahal is premium quality Basmati rice sold in consumer packs of 1 kg, 2 kgs, 5 kgs, 10 kgs, 20 kgs and 30 kgs.

8.1.5 Tilda Riceland

Tilda Rice comes from the Tilda Riceland Limited. Tilda is currently retailed in all metros and major towns at chain stores including Big Bazaar, Spencer's, HyperCity, Reliance Fresh and More. The types are found in Basmati, Long Grain and Regional rice portfolio. There are eight sub-brands that Tilda currently offers, including Tilda Pure Basmati, a traditional Basmati priced at Rs 165 per kg; Tilda Resham, another pure variants of Basmati priced at Rs 150 per kg; Tilda Wandaful Pusa Basmati, whose rice grains are Pusa variety of the milled Basmati rice and are perfect for Biryani and Pulaos, available at Rs 140 per kg; Tilda Chamak Chhota Basmati, a Basmati that lends an ideal texture to creamy milk puddings, desserts and sweet dishes and is sold at Rs 55 per kg; and Tilda Brown Basmati, the popular, brown Basmati priced at Rs 150 per kg. In the Long Grain category, the company offers Tilda Khush – long grain rice with very elongated and slender grains, an extremely pure non-Basmati variety and priced at Rs 90 per kg; and Tilda Parmal, also a long grain, flavoured non-Basmati milled Parmal variety available at Rs 55 per kg. Tilda also offers a unique, regional variant called Tilda Sona Masoori, which is a non-Basmati Sona Masoori Tilda offers 'everyday' variants along with premium Basmati ranges. variety popular in South India and a staple diet for the region. This is the perfect rice for making tamarind & tomato rice for the south India pockets and is economically priced at Rs 32 per kg.

8.1.6 Jagat Agro (Jagat)

The 'Jagat' brand was launched in 1992 by Jagat Agro Commodities Pvt. Ltd. Besides being one of the major Basmati rice manufacturers in India, Jagat is now planning to enter the exports market. The manufacturer retails premium Basmati under the flagship brand 'Jagat' and offers a wide range of raw Basmati and parboiled rice. In non-Basmati, Jagat Pearl Rice is retailed in the packaged form. The Jagat brand can be found on the shelves at Reliance Fresh, Big Bazaar, More, Rice World, and Rice Haat (the exclusive company showrooms).

8.1.7 REI Agro

REI Agro, one of the leading players in the Basmati rice category, offers a wide range of brands such as Kasturi, Real Magic, Mr. Miller, Hungama, Hansraj and Al-Tahaan in the segment. The brands are segregated into Premium, Midrange and Economy ranges. Premium range labels include Kasauti and Real Magic; Midrange brands are Mr. Miller and Ikon, while the Economy range includes Hansraj and RainDrop.

8.1.8 Safal Rice

The Safal brand from Mother Dairy offers a range of Basmati packaged rice that is milled, processed, sorted cleaned and packed. Safal Gold Basmati Rice is the finest traditional long grain Indian Basmati rice. Safal Silver Basmati Rice is Indian long grain Basmati Rice, while Safal Premium Parmal Rice is a long grain Indian Parmal rice. (Safal is regarded as one of the first retailers to sell parmal rice in packaged format.)



9. PROMOTION OF BASMATI BRANDS AT VARIOUS RETAIL OUTLETS




The various brands of basmati rice being sold through the numerous retail formats are also aggressively promoting several brands with various promotional offers like price discounts, quantity discounts, introductory offers , combo offers etc


INDIA'S BASMATI RICE BRANDS						
Brand	Pack sizes		MRP (in Rs)			
Aeroplane Raw La-Taste	1 kg	5kg	117	585		
AeroplaneRaw Super Basmati	1 kg	5kg	111	555		
Bemisal Basmati	1 kg	5kg	99	495		
Charminar	1 kg	5 kg	93	455		
Daawat Brown Rice	½ kg	48				
Daawat Brown Rice	1 kg.	93				
Daawat Select Basmati	1kg	5kg	152	752		
Daawat Gold Biryani	1 kg	5kg	136	672		
Daawat Super Basmati	½kg	1kg	5kg	67	133	656
DaawatRozana Basmati	1 kg	5kg	78	384		
DaawatRozana90Super Basmati	1 kg	5kg	62	304		
DaawatDevaaya Basmati	1kg	5kg	101	496		
Golden Chhap Aged Basmati	1 kg	5kg	105	520		
Heritage Basmati	1 kg	5kg	109	536		
India Gate Classic Basmati	1 kg	5kg	142	705		
India Gate Doon Premium	1 kg	5kg	139	690		
India Gate Super Basmati	1 kg	5kg	124	615		
India Gate Basmati Tibar	1 kg	5kg	102	505		
India Gate Basmati Dubar	1 kg	5kg	81	400		
India Gate Mongra	10 kg	416				
Indian Star	1 kg	5kg	155	775		
Noorjahan Basmati	1 kg	5kg	94	465		
Neesa Regular	1 kg	5kg	99	495		
Palm Tree Raw Basmati	1 kg	5kg	90	450		
Qilla Excel	1 kg	5kg	125	620		
Super Kohinoor Organic rice	1kg box		145			
Super Kohinoor Brown Rice	1 kg jute bag		140			
Super Silky Kohinoor	1 kg pack		140			
Super Kohinoor	1 kg	5 kg	138	680		
Trophy Royale	1 kg	5 kg	111	545		
Trophy Gold	1 kg	5 kg	95	465		
Tilda Resham	1 kg	5kg	140	700		
Tilda Wandaful	1 kg	5kg	130	650		
Tilda Khush	1 kg	5kg	80	400		
World Cup Raw Basmati	1 kg	5kg	103	515		

Source: Compiled by Author's

10. BRAND PRESENCE-FAMILIAL MODERN RETAIL FORMATS BRANDS ON HAND AT DIFFERENT RETAIL OUTLETS

		
Lal Qilla	Lal Haveli Basmati	Lal Qilla
Double Diamond Brand Basmati Rice	Adora Basmati	Double Diamond Brand Basmati Rice
Hanuman Brand Basmati Rice	Dawat Basmati	Hanuman Brand Basmati Rice
RST Brand Basmati Rice	Kohinoor Basmati	Kohinoor Basmati
Resham brand	Pari Basmati Rice	Pari Basmati Rice
Kohinoor Basmati	Doon Basmati	Doon Basmati
Tilda Basmati rice	Blue Label Basmati	Blue Label Basmati
Dawat Basmati	Hanuman Brand Basmati Rice	Hanuman Brand Basmati Rice

		
Lal Qilla	Lal Haveli Basmati	Lal Qilla
Double Diamond Brand Basmati Rice	Adora Basmati	Double Diamond Brand Basmati Rice
Hanuman Brand Basmati Rice	Dawat Basmati	Hanuman Brand Basmati Rice
RST Brand Basmati Rice	Kohinoor Basmati	Kohinoor Basmati
Resham brand	Pari Basmati Rice	Pari Basmati Rice

		
Lal Qilla		
Double Diamond Brand Basmati Rice		
Hanuman Brand Basmati Rice		
RST Brand Basmati Rice		
Resham brand		
Tilda Basmati rice		
Pari Basmati Rice		
Adora Basmati		
Dawat Basmati		
Kohinoor Basmati		
Blue Label Basmati		
Lal Haveli Basmati		
Doon Basmati		
Kohinoor Basmati	Doon Basmati	Doon Basmati
Tilda Basmati rice	Blue Label Basmati	Blue Label Basmati
Dawat Basmati	Hanuman Brand Basmati Rice	Hanuman Brand Basmati Rice

CONCLUSION

Branding has made mark in the commodity space where a commodity like long grain rice has been distinctly branded. Merchandising is any practice which contributes to the sale of products to a retail consumer. The first important step in retail merchandising is establishing working relationships with manufacturers who will provide the goods or services that are ultimately sold by the retailer. Basmati rice brands in India are growing by the day and there is intense competition among the domestic brands with the ongoing boom in organised retail formats making way for "Touch \$ Feel" purchases there is an upsurge in various basmati rice brands being sold by the retailers. Each retailer has on an average five different brands of basmati rice in their outlets. Because of which access and sale of the same have increased leaps and bounds so also the promotional offers on the same. The Indian Food and retail story has lots of future and everything points in its favourable growth

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DATA MINING OF THE ASSOCIATION RULES BASED ON THE CLOUD COMPUTING

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ABSTRACT

Data Mining is the process of analyzing data from different perspectives and summarizing it into useful information. Association rules are dependency rules which predict occurrence of an item based on occurrences of other items. Cloud computing has demonstrated that processing very large datasets over commodity clusters can be done by giving the right programming model. There are numerous data in the cloud database and among these data, much potential and valuable knowledge are implicit. The key point is to discover and pick up the useful knowledge automatically

KEYWORDS

data mining, cloud computing.

INTRODUCTION

Cloud computing is developed on the basis of distributed processing, parallel processing and grid computing, and it is a new method based on the shared architecture [1]. It distributed all the computing tasks on the resource pool that is made from many computers, making sure all the application systems can acquire desired computing power, memory space and software service according to its demand. All computing will be provided to the terminal user by the form of service; all the application software will be shared on the shared cloud as shared resources. In this sense, all the terminal users can get their desirable service as they want and needn't to pay for the software. It is predicated that as it develops overtime, more and more companies and people will save their own data in all the storage cloud, which will make the data mining based on the cloud computing become one of the trends in the future data mining systems.

There are mass data in the cloud database, and among these many of them are potential valuable knowledge. How to pick up and discover such useful knowledge is the key point in database research. The data mining is the process of picking up the hiding and unknown knowledge and regulations, which possess potential values for the decision making from the big amount of the databases [2]. It mainly has several steps: data pre-processing, data alternating, data mining operation, rule expression and evaluation. A data mining system includes: control unit, used to control all the parts in a harmonious way; database interface, used to generate and process database according to the given inquiry requirement; database, used to store and manage relevant knowledge; focus, which refers to the data extent that needs to be inquired; model extracting, which refers to the various data mining algorithms; knowledge evaluation, used to evaluate the extracted conclusion.

The association rule is one of the main model in data mining research; it is used to focus on the relationship among different areas while defining the data, and find the connection that can meet the given threshold value of both degree of confidence and degree of support [3]. The target of the association rules is transaction database. It can be used in many areas, such as sales, analysis of the transaction data, giving valuable information to the purchasing behavior, improving the retail industry, etc. It also can be used in the medical diagnosis, by analyzing various medical diagnosis cases, the symptom and reaction of the disease can be known. Besides, it can be used in the information processing in criminal cases, by analyzing the relationship between criminal means and cases to get more valuable clues and information [4].

II. DATA MINING TECHNIQUES

Various algorithms and data mining techniques like Classification, Clustering, and Association Rules etc are used for knowledge discovery [5] [6]. We have described the following data mining techniques.

A. Association rules

Association rule mining tries to find frequent item set among large data sets [7]. It aims to extract interesting correlations, frequent patterns, associations or casual structures among sets of items in the transaction databases or other data repositories and describes association relationship among different attributes. Such finding helps businesses to make certain decisions like customer's behaviour analysis. However the number of possible Association Rules for a given dataset is generally very large and most of them are usually of less value. Association mining is an important research area in data mining.

B. Clustering

Clustering is one of the well-known data mining techniques and can be defined as the identification of similar classes of objects [8]. It is a common descriptive task in which one seeks to identify a finite set of categories or clusters. By using clustering techniques we can discover the overall distribution pattern and correlations among data attributes. Classification approach can also be used for effective means of distinguishing groups or classes.

C. Classification

Classification is the most commonly applied data mining technique, which employs a set of pre-classified examples to develop a model that can classify the population of records at large [9]. It is the discovery of a predictive learning function that classifies a data item into one of the several predefined classes. Fraud detection and credit risk applications are particularly well suited to this type of analysis. The data classification process involves learning and classification. In Learning the training data are analysed by classification algorithm.

III. ADAVATAGES OF USING DATA MINING WITH CLOUD COMPUTING

Cloud computing combined with data mining can provide powerful capacities of storage and computing and an excellent resource management [7]. Due to the explosive data growth and amount of computation involved in data mining, an efficient and high-performance computing is very necessary for a successful data mining application. Data mining in the cloud computing environment can be considered as the future of data mining because of the advantages of cloud computing paradigm. Cloud computing provides greater capabilities in data mining and data analytics [21]. The major concern about data mining is that the space required by the operations and item sets is very large. But if we combine the data mining with cloud computing we can save a considerable amount of space [20]. This can benefit us to a great extent.

IV. DISADAVATAGES OF USING DATA MINING WITH CLOUD COMPUTING

There are certain issues associated with data mining in the cloud computing. The major issue of data mining with cloud computing is security as the cloud provider has complete control on the underlying computing infrastructure [20]. Special care has to be taken so as to ensure the security of data under cloud computing environment.

V. ASSOCIATION RULES

One of the well techniques of data mining is association rules which are used to find out the relationship or association between various items. The problem of finding relation between items is often termed as market basket analysis. In this problem the presence of items within baskets is identified so that the customers buying habits can be analysed. The technique is used in inventory management, sales promotion etc [19].

The discovery of association rules is primarily dependent on finding the frequent sets. This can require multiple passes through the database. The algorithms aims at reducing number of passes by generating a candidate set which should turn out to be frequent sets. Many different algorithms are designed to find out the association rules. The algorithm differs on the basis of how they handle candidate sets and how they reduce number of scans on the database. Some of the recent algorithms of association rule mining do not create candidate set. Practically the frequent sets generated are very large in number and this can be constrained by selecting only those items in which the user is interested.

Let us consider a set of items and a transaction database which is again a set of transactions. The association rule takes the following form for a transaction database: $X \Rightarrow Y$, where X and Y are the sets of items called item sets.

Now there are two important terms related to association rules: support and confidence. The support of an item or the set of items is the percentage of transactions in which that item occurs. The confidence measures the strength of the rule and is defined as the ratio of the number of transactions that contain X or Y to the number of transactions that contain X [22].

The two thresholds namely minimal support and minimal confidence is set to find out reasonable support and confidence.

VI. METHODS TO DISCOVER ASSOCIATION RULES

The association rule mining is the method that finds out the association rules which satisfy the predefined minimum support and minimum confidence. The association rule mining is usually carried out in 2 steps. In the first step those items from the database are found out which exceed the predefined threshold. Such items are stated as frequent items or big items. In the second step the association rules are generated out of frequent items found in first step.

Various algorithms like Apriori algorithm, partition algorithm, pincer search algorithm, dynamic item set counting algorithm, FP tree growth algorithm, Éclat and dÉclat etc have been developed to find out the frequent items from the transaction database [5].

The Apriori algorithm is the most general and widely used association rule mining algorithm [7]. It uses an iterative method called layer search to generate (k+1) item sets from k item sets. The concept of Apriori and Apriori Tid was given by 1994 Agrawal et al. Other algorithms like SETM and AIS were also used for association rule mining but the performance of Apriori and Apriori Tid was better than these algorithms. This is because SETM and AIS generated too many candidate sets which were later found out to be infrequent among data sets. With large amount of data and with the advent of parallel computing technology various association mining algorithms like count distribution algorithm, data distribution algorithm, candidate distribution algorithm and improved Apriori algorithms have been proposed [9] [13]. These algorithms can be used under cloud computing environment.

Reducing time for generating frequent item sets can boost the performance of an association rule mining algorithm. Keeping this in mind various other algorithms were developed later. The concept of hashing can be used for pruning (removing infrequent item sets) which reduces time to generate frequent item sets. The process of association rule mining can be fastened by removing the infrequent item sets as quickly as possible though pruning can be problematic sometimes. The frequent patterns algorithm without candidate generation eliminates the costly candidate generation. It also avoids scanning the database again and again. So, we can use Frequent Pattern (FP) Growth ARM algorithm that is more efficient structure to mine patterns when database grows. FP tree growth algorithm is also used for mining and it does not create the candidate set. It rather creates a tree like structure to find the frequent sets [24].

VII. ASSOCIATION RULES IN DISTRIBUTED SYSTEMS

The association rule mining is one of the most important data mining techniques due to its wide application. However most of the ARM algorithms are made for centralized systems where there are no external communications [25]. With the increase in the size of data, the computation time and the memory requirements increase to a great extent [12]. These difficulties have lead to the parallel and distributed algorithms [11]. To accomplish this concept the concept of dividing the database and then distributing it to different nodes is used.

The association rules mining from the cloud can be done using sector/sphere framework [10]. Due to the development of network and distributed paradigm the implementation of association rule algorithm have been possible in cloud computing. The famous IT corporations such as Google, Amazon and IBM have their different cloud computing architectures [18]. Google has its Google App Engine which is composed of Google File System (GFS), BigTable and MapReduce [15]. Amazon provides its cloud services by Amazon Web Service (AWS), which contains Simple Storage Service (S3), Simple DB and Elastic Computing Service (EC2)[16]. A cloud-based infrastructure to support data mining applications was developed by Grossman et al which consists of a storage cloud called Sector and a compute cloud called Sphere [17].

An improved Apriori algorithm has been developed on map reduce which can handle vast amount of data [23]. Here large numbers of nodes are used based on the Hadoop platform. The various parallel algorithms for association rule mining faces the problem of large inter site communication cost. This is due to large number of space which is required to maintain local count when the candidate set is large. To overcome this problem in distributed association rule mining algorithms a de-clustering approach is used to eliminate the inter cost communication between sites [14]. An another interesting distributed association rule mining algorithm known as FDM (fast distributed mining of association rules) generates a small number of candidate sets and reduces the number of messages to be passed at mining association rules. It has been observed that FDM has better performance than sequential algorithm [26].

VIII. CONCLUSION

Cloud computing is an architecture which is known for its powerful capability of computation and storage and resource sharing. These features make cloud computing favorable to data mining service in network environment. We have discussed association rule mining in cloud environment and various parallel and distributed mining algorithms. The implementation of association rule in the distributed systems can be efficiently done on Hadoop. Further, the data transfer among the nodes and the situations like node failure etc are taken care of by Hadoop. This adds robustness and scalability to the system. Various parameters affect the performance of algorithms such as time taken to generate frequent item sets, inter site communication cost, number of scans through the database etc. The integration of association rule mining and cloud computing in this paper is at the initial stage of our research on data mining service in cloud environment and requires further improvement.

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SKEW DETECTION AND CORRECTION OF INDIAN SCRIPT DOCUMENTS

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ABSTRACT

An optical character recognition (OCR) is the process of converting scanned images of machine printed documents into computer readable codes. Recognition of characters of Devnagari and Gurumukhi scripts have been an area of research for many peoples and large number of research papers and reports have been published in this area. The generalized way for developing OCR system of any script involves preprocessing, segmentation, feature extraction & classification and Post processing. To develop OCR for any language, the input document to be scanned may have some skew ness and needs to be tackled properly. This paper discuss in detail about skew angle detection and correction which is the main operation performed during Preprocessing phase of an OCR system. A fast and robust method for detecting and correcting skew angle is described which is based on head line which is inherent properties of Indian languages like Hindi and Punjabi. For estimation of skew angle, the proper headline of the digitized image is detected and its skew angle is estimated with horizontal direction. The proposed skew detection and correction method has accuracy about 89%.

KEYWORDS

Devnagari script, Preprocessing, Segmentation, Feature extraction, Classification, Post processing, skeletonizing, skew ness, Horizontal projection, Vertical projection.

INTRODUCTION

OCR is the acronym for Optical Character Recognition. A human eye can read the characters of any language written correctly by person or when it is printed. Making the computer do the same is called the problem of character recognition. OCR (optical character recognition) is the process of converting scanned images of machine printed or handwritten text or hand printed text into computer readable codes. Character recognition systems can contribute tremendously to the advancement of the automation process and can improve the interaction between man and machine in many applications including post offices, defense organizations, office automation, cheque verification and a large variety of banking, business, data entry applications and commercial data processing applications [1]. The main goal of OCR is to imitate the human ability to read in a very fast rate.

The process of recognizing characters of any script is usually performed through several phases which are as follows:

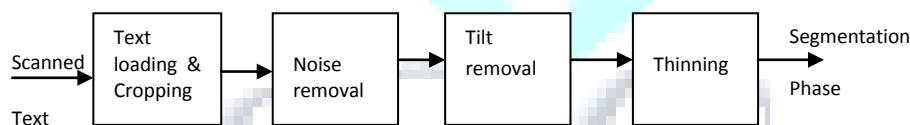
1. Pre-processing
2. Segmentation
3. Feature Extraction
4. Classification
5. Post processing

PREPROCESSING OF MACHINE PRINTED SCRIPT

In a typical OCR system, input document is read and digitized by an optical scanner. The Preprocessing phase of OCR takes digitized image as input, reduce noise and distortion, remove skew ness perform skeletonizing or thinning of the image and hence simplify the processing of remaining stages. The main advantage of preprocessing a text is to organize the information so as to make the task of character recognition simpler. Skew detection and correction of Indian script documents is a crucial part of preprocessing phase of OCR as it affects the subsequent understanding of the document.

The preprocessing starts with data acquisition in which documents to be processed are first scanned and digitized, and ends up with output to segmentation phase of character recognition system as shown in fig. 1. In this Figure, the various processes involved in preprocessing stage of OCR are shown. First the digitized text is loaded and cropped. Then the noise if any in the digitized text is removed. After this, skewness of the digitized text is corrected and then thinning is performed.

FIG. 1: FLOW DIAGRAM OF PRE-PROCESSING PHASE OF OCR



SKEW DETECTION AND CORRECTION

Skew ness in the digitized image is unavoidable because of casual use of scanner by human operator. Whenever a document is fed in to a scanner because of hand placement or automatic document feeder mechanisms, a few degree of skew (tilt) is always there. The skew angle is the angle that the text lines of the digitized image make with the horizontal direction. Hand placement or automatic document feeder mechanisms normally create 1 - 3° of skew, due to the document's incorrect placement, or to a slight variation in roller speed. In some cases, the skew can reach as much as 10°. When the skew angle is 2 - 3°, the accuracy of document analysis and OCR is reduced; when it is more than 5, however, the result becomes unreliable. As a result, the skew estimation of document images to be carried out before segmentation and Feature extraction and classification phase of OCR [2, 3, 4].

Skew detection and correction are important for a successful OCR. Skew detection and correction can be achieved in two steps

- (a) Estimation of skew angle
- (b) Rotation of the image by skew angle in opposite direction.

Image of Gurumukhi document with some skew ness is shown in figure 2 and figure 3 shows the same document after correcting skew ness from it.

FIG. 2-SKEW NESS IN THE DOCUMENT

ਸਤਿਕਾਰ ਯੋਗ ਸੰਪਾਦਕ ਜੀ,
 ਆਪਦੇ ਨਵੇਂ ਪਰਚੇ ਦਾ ਪਲੇਨਾ ਐਕ ਮੈਨੂੰ ਪਿਛਲੇ ਹਫਤੇ ਮਿਰੀ
 ਆਪ ਜੀ ਦਾ ਪਰਚਾ ਝਾਕੀ ਦੀਆਂ ਅਨੇਕ ਅਖਬਾਰਾਂ ਵਾਂਗ ਹੀ ਸਮਝ
 ਦਿਤਾ ਸੀ। ਪਰ ਇਸ ਉਤਸੁਕਤਾ ਨਾਲ ਕਿ ਇਹ ਕਿੱਸੇ ਵਲੋਂ ਕੀਤ
 ਉਪਰਾਲਾ ਹੈ, ਚਲੇ ਦੇਖੀਏ ਤਾਂ ਸਹੀ ਇਨ੍ਹਾਂ ਦੀ ਕਿਸ ਤਰਾਂ ਦੀ ਕੋਸ਼ਿਸ ਹੈ

FIG. 3-SCRIPT WITHOUT SKEW NESS

ਸਤਿਕਾਰ ਯੋਗ ਸੰਪਾਦਕ ਜੀ,
 ਆਪਦੇ ਨਵੇਂ ਪਰਚੇ ਦਾ ਪਲੇਨਾ ਐਕ ਮੈਨੂੰ ਪਿਛਲੇ ਹਫਤੇ ਮਿਰੀ
 ਆਪ ਜੀ ਦਾ ਪਰਚਾ ਝਾਕੀ ਦੀਆਂ ਅਨੇਕ ਅਖਬਾਰਾਂ ਵਾਂਗ ਹੀ ਸਮਝ
 ਦਿਤਾ ਸੀ। ਪਰ ਇਸ ਉਤਸੁਕਤਾ ਨਾਲ ਕਿ ਇਹ ਕਿੱਸੇ ਵਲੋਂ ਕੀਤ
 ਉਪਰਾਲਾ ਹੈ, ਚਲੇ ਦੇਖੀਏ ਤਾਂ ਸਹੀ ਇਨ੍ਹਾਂ ਦੀ ਕਿਸ ਤਰਾਂ ਦੀ ਕੋਸ਼ਿਸ ਹੈ

REVIEW OF LITERATURE

In the past years many techniques have been applied to skew detection. One of the techniques is based on the projection profile of documents [5, 6]. For a document with horizontal text lines, the horizontal projection profile will have peaks at text line positions and troughs at positions in between successive text lines. To determine the skew of a document, the projection profile is computed at a number of angles and for each angle, a measure of difference of peak and trough height is made. The maximum difference corresponds to the best alignment with the text line direction which in turn, determines the skew angle. A nearest neighbor clustering based approach to estimate skew angle of the document is described by hashizume, yeh, Rasenfield [7]. In their methodology, all the connected components in the document were extracted and for each component, the direction angle of its nearest neighbor is estimated. A histogram of the direction angle is computed and the peak of which indicates the document skew angle. A heuristic approach has been applied by Lehal and Singh to detect and correct skewness in Gurumukhi script [8].

PROPOSED METHOD FOR SKEW DETECTION AND CORRECTION

To detect and correct skew angle, a fast and robust method is based on head line which is inherent properties of Indian languages like Hindi and Punjabi. For estimation of skew angle, the proper headline of the digitized image is detected and its skew angle is estimated with horizontal direction. The detection of head line is necessary for script zone and character and word segmentation which will be used in later stages of OCR. So headline based skew detection and correction helps in saving computation during zone detection and character and word segmentation, which is main benefit of this approach. Head line is very useful for character segmentation from words and to divide a text line in different zones for the OCR of script like Devnagari and Bangla [9].

This method of detecting and correcting skew angle follows the following steps.

- a) Check whether digitized document has skewness or not
- b) If yes then skew angle is detected with horizontal direction
- c) Correct skewness

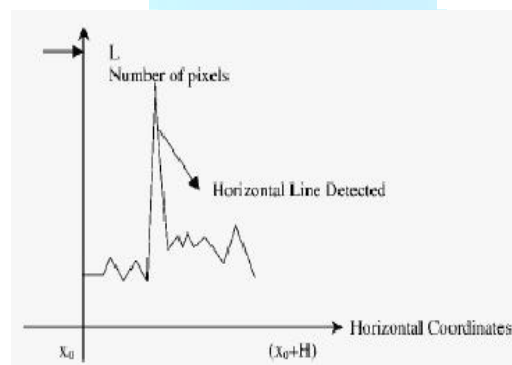
a) DETECTING DOCUMENT WITHOUT SKEW

Scan the whole image horizontally and count the number of pixels in each row. Prepare a table with two columns of row number and number of pixels. We find out from the table whether some consecutive lines fulfill the constraint mentioned below. Based on this, we define a feature which once extracted will prove that the character image has a tilt or not. That feature has been named as 'line' which means that a feature 'line' has been detected when scanned row gives the number of information pixels that are at least 90% of the total number of pixels possible horizontally in an image frame as shown in figure 4.

$$H_{\text{LINE}} \geq 0.9 * L \text{ (number of pixels)}$$

where H_{LINE} is the number of pixels in a row while scanning horizontally.

FIG. 4: HORIZONTAL PROJECTION

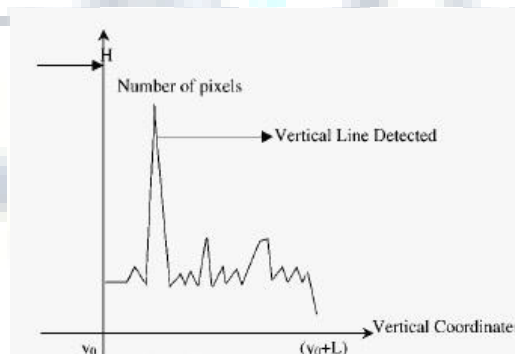


The X-axis in the graph shows the row number and the Y-axis shows the number of pixels. The graph showing the peak meeting of the constraint mentioned above will be termed as 'line detection' and once detected has to be confirmed through vertical scanning. Even if the line has been detected after horizontal scanning, it still has to be confirmed through vertical scan and no further processing is needed if the same result is obtained. Vertical projection and finding the line feature will also require the same effort as in the horizontal process. The same has been demonstrated in Figure 5.

$$V_{\text{LINE}} \geq 0.9 * H \text{ (number of pixels)}$$

where V_{LINE} is the number of pixels in a row while scanning vertically.

FIG. 5: VERTICAL PROJECTION



Once the 'line' has been detected, there is no further need to process the image to find the tilt. This means that the image is either exactly horizontally straight, i.e. at 0° , 180° or it is exactly vertical at 90° or 270° . The distinction between the 0° and 180° images will depend on the direction of the scan (top-left or top-right) and the detection of the line feature. Similar process is applied to have distinction between 90° and 270° . If the 'line' is not confirmed during the vertical scan then that means the image is tilted and we need to find the tilt angle and remove it.

b) SKEW ANGLE DETECTION

Characters in Hindi or Punjabi languages are formed in a structured manner. Whereas most of the language scripts are written with reference to the central axis, the Gurumukhi script is written w.r.t. the central axis along with an axis parallel to the central axis. This is the inherent property of writing Gurumukhi script. Once the angle of the axis w.r.t. the reference axis has been detected, thereafter the word can be rotated perfectly horizontally. This dominating feature of Indian script has been used for detecting the tilt angle. This can be better explained with an example (Fig. 6). Scannable area is nothing but the cover of the word

when it is viewed from four directions. But the informative scan area is the projected view ON1 from left side of the character image and ON2 is the projected view from topside of the image. If the word image is enclosed in a rectangular frame then, we easily get the length and the height of the image, which has been represented by L and H, respectively. Tilt angle has been represented by γ . Figure 6 shows the skewed document being used to demonstrate the skew detection process.

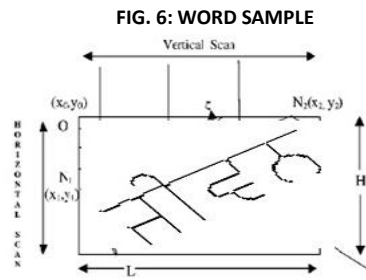


FIG. 6: WORD SAMPLE

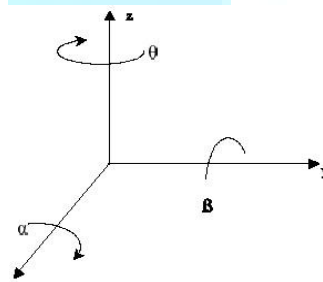
c) SKEW REMOVAL PROCESS AFTER SKEW DETECTION

Once skew angle has been detected and finalized then a simple transformation technique works perfectly fine to straighten the tilted word of Devnagari or Gurumukhi script.

The transformation technique [4] mentioned below is applicable for rotating a point about the coordinate axes. To rotate a point about another arbitrary point in space requires three transformations. The first translates the arbitrary point to the origin, the second performs the rotation and the third translates the point back to its original position.

Referring to fig. 7, the rotation of a point about the z coordinate axis by an angle θ is achieved by using the transformation.

FIG. 7: TILT ANGLES



$$R_{\theta} = \begin{bmatrix} \cos \theta & \sin \theta & 0 & 0 \\ -\sin \theta & \cos \theta & 0 & 0 \\ 1 & 0 & 1 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}$$

$$R_{\alpha} = \begin{bmatrix} 0 & \cos \alpha & \sin \alpha & 0 \\ 0 & -\sin \alpha & \cos \alpha & 0 \\ 0 & 0 & 0 & 1 \\ 0 & 0 & 0 & 1 \end{bmatrix}$$

where $\alpha = \gamma$

$$R_{\beta} = \begin{bmatrix} \cos \beta & 0 & -\sin \beta & 0 \\ 0 & 1 & 0 & 0 \\ \sin \beta & 0 & \cos \beta & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}$$

where $\beta = \gamma$

CONCLUSION AND LIMITATION

A fast and robust method for detecting and correcting skew ness is described in this paper which is the main operation performed during preprocessing phase of character recognition. The method is based on head line which is inherent properties of Indian languages like Hindi and Punjabi. So headline based skew detection and correction helps in saving computation during zone detection and character and word segmentation, which is main benefit of this method. The proposed skew detection and correction method has accuracy about 89%. The limitation of this skew detection and correction method is that it will not work

well if the skew angle is very large. However, it has been observed that such skew angles are relatively uncommon. Another limitation is that this method of skew detection and correction does not provide desired results if the document is multi-skewed.

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CONSUMER BEHAVIOR TOWARDS GOLD PURCHASE

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ABSTRACT

Gold is a mark of royalty or power and richness and became a privilege of the high and the powerful to be owned. Gold has always been considered to be incorruptible without flaw. Indians are charismatically attracted to gold - either to be bought as ornaments or investments. Their fascination with gold jewellery has roots in the culture, tradition and also the economic realities at the rural and grass root levels of the society. Gold jewellery forms around 80% of the Indian jewellery market, with the balance comprising fabricated studded jewellery that includes diamond and gemstone studded jewellery. A predominant portion of the gold jewellery manufactured in India is consumed in the domestic market. Hence this paper attempts to identify the factors affecting women to purchase gold despite constant increase in prices.

KEYWORDS

Gold, Consumer Behaviour, Women, Jewellery.

INTRODUCTION

Gold is a dense, soft, shiny and flexible pure metal known. Pure gold has a bright yellow color and luster traditionally considered attractive, which it maintains without oxidizing in air or water. Gold is one of the coinage metals and has served as a symbol of wealth and a store of value throughout history. Gold standards have provided a basis for monetary policies. Gold, like no other metal, has a fascinating history and a special place in the world. Gold's many unique properties have secured it a central role in history and human development. Gold is a remarkable, rare metal, with an unparalleled combination of chemical and physical properties. It is the only yellow metal and bears its name from the Old English word for yellow, 'geolu'. Gold's special properties mean that it has a greater variety of uses than almost any metal.

Like her counterparts across the globe, India also held gold high for its precious characters and rarity and considers it as a standard for assessing purity and quality. Today India is the most lavish gold consumer in the world. The annual consumption of gold which was estimated at 65 tonnes in 1982, has increased to over 500 tonnes presently about 80% is for jewellery fabrication (mainly over 22 carat purity) for domestic demand, 15% for investor demand and barely 5% for industrial use. India holds the largest stock of gold in the world – 18,000 tons are held by households. The remarkable feature is the way investment in jewellery has come to dominate the market which is evident from table and graph below.

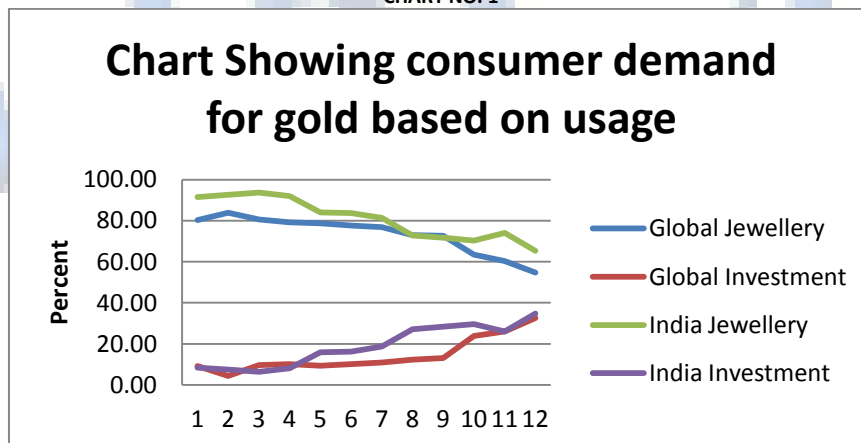
Table No:1 and Chart No:1 indicates that the domestic demand of gold among consumers is more than for investor demand. Global and Indian market indicate the same trend. The percent change in India is higher than the change at the global level. When the percentage increase for domestic demand in 2010 at the global level was 54.76 percent Indian market showed an increase of 65.33 percent which supports that India is the largest market for gold jewellery in the world. Hardly 5% of the demand for gold for fabrication in jewellery in India is for exports. The balance 95% is for domestic sale of gold jewellery.

TABLE NO. 1: TABLE SHOWING CONSUMER DEMAND FOR GOLD BASED ON USAGE

Year	Global		India	
	Jewellery	Investment	Jewellery	Investment
1999	80.28	9.18	91.60	8.40
2000	83.85	4.34	92.56	7.44
2001	80.69	9.58	93.68	6.32
2002	79.24	10.13	91.94	8.06
2003	78.67	9.26	84.07	15.93
2004	77.71	10.05	83.78	16.22
2005	76.84	10.93	81.36	18.64
2006	73.04	12.31	72.89	27.11
2007	72.70	13.02	71.72	28.28
2008	63.42	23.89	70.39	29.61
2009	60.40	25.94	74.00	26.00
2010	54.76	32.58	65.33	34.67

Source: World Gold Council

CHART NO. 1



Kerala called God’s Own Country for its abundant natural beauty and tourism potential, can now be called as Gold’s Own Country as the State has achieved its top position being the biggest gold consumer in the country. The State is estimated to account for one-third of the 800-odd tonne annual consumption of gold in the country. The State tops in gold consumption as it’s in the forefront in many other fields too. There are various factors influencing the consumers of Kerala to purchase gold ornaments. Gold is a formidable part of showcasing the customs and traditions in Kerala. The culture celebrates many religious festivals and occasions such as weddings when gold is worn as part of the colourful and lavish outfits. Giving gold as gifts is also very common. There is an inseparable relationship between women and gold ornaments. Hence this paper attempts to analyse despite the continuous increase in price of gold ornaments what factors influence women and how they purchase gold .

OBJECTIVE OF THE STUDY

To identify the factors that influence women to purchase gold ornaments.

RESEARCH METHODOLOGY

The study is based on primary and secondary data. Primary data is collected through a structured questionnaire and secondary data relating to demand for gold and gold prices from websites of World Gold Council and Kerala Gold. The purposive sampling is adopted to collect information from 100 women from different age groups and income brackets of Thrissur. Percentage analysis and ranking is used for data analysis.

FINDINGS

Table No:2 below provides the demographic profile of respondents where 25 percent respondents belong to the age group of 25-35, 31 percent belong to 35-45 age group, 23 percent belonged to the age group of 45-55, 21 percent belonged to the age group of 55 & above. So it can be inferred that irrespective of age group women buy gold ornaments.

The table also explains the monthly income of respondents. It can be inferred that 44 percent of respondents belonged to the monthly income bracket of Rs. 30000-40000, 25 percent of respondents have a monthly income of Rs.20000-30000.12 percent have a monthly income between Rs.40000-50000, and 10 percent belonged to the income group of less than Rs 20000.

Table explains the occupation of respondents. 22 percent women are housewives, 24 percent professionals, 30 percent salaried, 15 percent entrepreneurs.

TABLE NO. 2: DEMOGRAPHIC PROFILE OF RESPONDENTS

Variables		
Age	25- 35	25
	35-45	31
	45-55	23
	55 & above	21
Monthly Income	Less than 15000	20
	15000-30000	25
	30000-45000	29
	45000 & above	26
Occupation	Housewives	22
	Professionals	24
	Salaried	30
	Entrepreneurs	15
	Others	9

Source: Survey Data

From the study it can be inferred that 65 percent respondents strongly disagree with the statement that they buy gold for special occasions. 25 percent agree and 10 percent strongly agree that they buy gold for special occasions like weddings or festivals etc. So it can be inferred that to purchase gold it is not necessary to have an occasion.

From Table No: 3 it can be inferred that 44 percent buy gold with investment purposes in mind. They typically buy gold biscuits and gold coins when the purchase is financially motivated. Interestingly, the women who do not have daughters tend not to consider gold as an investment instrument. 57 percent buy for their personal use which include for their own use, for daughters, as a gift to friends and relatives and for religious purposes.

TABLE NO. 3: PURPOSE OF PURCHASE OF GOLD

Purpose	Percent
Investment	44
Personal	56

In response to the statement about the impact of price on purchase 75 percent strongly agree that price does not influence their purchase decision. They keep track of market price through word of mouth from their friends and following the prices published in the daily newspapers but it never affects their decision to purchase gold.

In response to the question regarding time taken for purchase decision 56 percent responded that time depends on their attraction to particular jewelry. 35 percent respondents said that purchasing for themselves takes less time than purchasing for others. They explained that when buying for relatives or friends, the decision process is prolonged because they take other factors into account such as the other person’s choice and taste etc.

FACTORS INFLUENCING PURCHASE DECISION

From Ranking it is evident that design is the most important factor followed by influence of family or friends. Purity of gold, shop from which it is purchased, behavior of salesman and tradition are other factors that influence the purchase decision.

TABLE NO. 4

Factors	Rank
Purity	3
Salesman	5
Family/Friends	2
Design	1
Place of purchase	4
Tradition	6

CONCLUSION

Women are a distinct consumer segment. The product is gold, primarily in the form of jewelry. However, to some extent the women view gold as an investment vehicle which provides some measure of financial security for themselves and/or their daughters. There are a few commodities in Kerala that will always be in high demand. Gold is one among them. The desire to acquire and hoard it seems to be hard-wired. In Kerala, gold – like Gordon Gekko's greed – is good.

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MERGERS AND ACQUISITIONS IN BANKING SECTOR

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ABSTRACT

Merger and acquisition encourage banks to gain global reach and better synergy and allow large banks to acquire the stressed assets of weaker banks. Merger in India between weak banks should grow faster so that they could rehabilitate providing continuity of employment with the working force, utilization of assets blocked up in the weak banks and adding constructively to the prosperity of nation through increased flow of funds. The small and medium size banks are working under threat from the economic environment which is full of problems for them, viz, inadequacy of resources, outdated technology, on-systemized management pattern, faltering marketing efforts, weak financial structure, technique obsolescence and lack of product innovations. Their reorganization through merger could offer re-establishment of those in viable banks of optimum size with global presence. Merger and acquisition in Indian banking so far has been to provide the safeguard and hedging weak bank against their failure. The merger cult in India has yet to catch fire with merchant bankers and financial consultants acquiring skills in grinding the banks to absorb unviable banks and put them again on successful operations. The selected acquiring banks such as HDFC, Indian Overseas Bank, IDBI and Oriental Bank of Commerce was working successfully. The study has brought into sharp focus on the reasons and impact of merger and evaluating the performance of the selected banks during pre-merger and post-merger period. The overall performance of these banks was increasing during post-merger period. Modern financial parameters such as EVA, MVA, IGR, OCF, RONW, ROCE, WACC and Ratio analysis have been used to evaluate the performance of the selected acquiring banks. Based upon the evaluation made, the researcher has given the summary of findings. The findings of this paper will be useful to the banks to take certain policy decision in future.

KEYWORDS

merger, acquisition, banking.

INTRODUCTION

Banks as financial intermediaries play a significant role in economic growth, provide funds for investments, and keep the cost of capital low. During the last few decades, structure of banking sector has turned from a controlled system into liberalized one. The efficiency of banks, which reflects the ability of banks in transforming its resources to output by making its best allocation, is essential for the growth of an economy. However, due to the major role played by banks in the development of economy, the banking sector has been one of the major sectors that have received renewed interest from researchers and economists.

Globally mergers and acquisitions have become a major way of corporate restructuring and the financial services industry has also experienced merger waves leading to the emergence of very large banks and financial institutions. Merger of two weaker banks or merger of one healthy bank with one weak bank can be treated as the faster and less costly way to improve profitability than spurring internal growth. One of the major motives behind the mergers and acquisition in the banking industry is to achieve economies of scale and scope. This is because as the size increases the efficiency of the system also increases. Mergers also help in the diversifications of the products, which help to reduce the risk as well.

STATEMENT OF PROBLEM

Merger helps to increase the market share, which reduces competition. Thus reduction in competition can be damaging to the public interest, but help the firm to gain more profits. Merger also tends to dilute competition in the market. It generally contributes directly to the concentration of economic power and is likely to lead the merger entities to a dominant position of market power. It may also result in lesser substitutes in the market, which would affect consumer's welfare.

This article analyze whether the banks involved in merger have profitable one or not. It is also necessary to study the impact of merger regarding the wealth of the shareholders in Indian banking industry. These necessities make the researcher to conduct the study on the merger and acquisition in Indian banking sector.

OBJECTIVES

The following are the main objectives of the present study

- To know the five forces of wealth creation
- To analyze the post-merger and pre-merger performance of select banks in India.
- To offer conclusion.

COLLECTION OF DATA

The present study is mainly focus on Secondary data. The required secondary data were collected from Internet Sources, Business Magazines, Finance books and the like

SAMPLING DESIGN

In order to analyze the pre-merger and post-merger performance of Indian banking industry, the researcher has covers the study period from 2000-2010. Among 13 banks which were merged in that period of 10 years, 4 well-known banks such as HDFC bank with Centurion Bank of Punjab, Indian Overseas Bank with Bharat Overseas Bank, IDBI bank with United Western Bank and Oriental Bank of Commerce with Global Trust Bank were taken for analysis

MERGER

Merger is defined as combination of two or more companies into a single company where one survives and the others lose their corporate existence. The survivor acquires all the assets as well as liabilities of the merged company or companies. Generally, the surviving company is the buyer, which retains its identity, and the extinguished company is the seller.

Merger is also defined as amalgamation. Merger is the fusion of two or more existing companies. All assets, liabilities and the stock of one company stand transferred to Transferee Company in consideration of payment in the form of:

- Equity shares in the transferee company,
- Debentures in the transferee company,
- Cash, or

- A mix of the above modes.

ACQUISITION

Acquisition in general sense is acquiring the ownership in the property. In the context of business combinations, an acquisition is the purchase by one company of a controlling interest in the share capital of another existing company.

METHODS OF ACQUISITION

An acquisition may be affected by

- Agreement with the persons holding majority interest in the company management like members of the board or major shareholders commanding majority of voting power;
- Purchase of shares in open market;
- To make takeover offer to the general body of shareholders;
- Purchase of new shares by private treaty;
- Acquisition of share capital through the following forms of considerations viz. Means of cash, issuance of loan capital, or insurance of share capital.

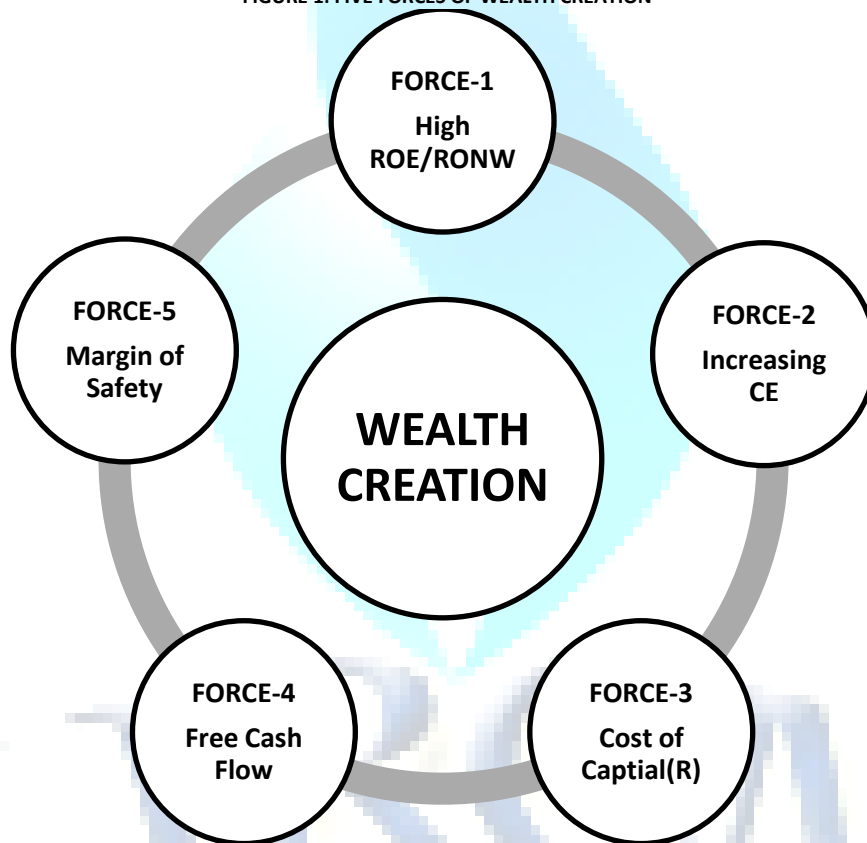
TAKEOVER

A 'takeover' is acquisition and both the terms are used interchangeably. Takeover differs from merger in approach to business combinations i.e. the process of takeover, transaction involved in takeover, determination of share exchange or cash price and the fulfillment of goals of combination all are different in takeovers than in mergers. For example, process of takeover is unilateral and the offeror company decides about the maximum price. Time taken in completion of transaction is less in takeover than in mergers, top management of the offeree company being more co-operative.

FIVE FORCES OF WEALTH CREATION

As the owners of the company are the shareholders, the primary financial objective of the corporate finance is usually stated to be maximization of the wealth of the shareholders. The following figure explains the five forces of wealth creation.

FIGURE 1: FIVE FORCES OF WEALTH CREATION



INCREASING CAPITAL EMPLOYED WITH HIGH ROE

Wealth creating companies tend to employ more capital, but the real deadly combination is one where a high ROE is combined with an increasing capital employed. Not all increases in capital employed will create additional wealth, to do that the profitability of incremental capital employed has to be more than the cost of capital larger the margin over cost, the greater the wealth created by creating capital employed.

I. DU PONT ANALYSIS OF ROE/RONW

Du Pont analysis is a methodology by which the ROE of a company can be broken down into its constituent parts. We use Du Pont analysis in two ways:

- To undertake a comparison analysis of the individual banks to ascertain the drivers of ROE and the relative quality of earnings.
- To perform a trend analysis of the ROE drivers such that we can see how the banks have performed relative to each other and why. We undertake this analysis using quarterly data since the beginning of 2006 to encapsulate the impact of the financial crisis on the banks.

ROE is a measure of how successfully the management of a company has deployed the equity to generate a return for its shareholders. However, ROE incorporates leverage in its calculation. For two banks with the same amount of assets and generating the same return on those assets, the bank with the smaller amount of equity (and hence the higher equity leverage) will generate the higher ROE.

ROE can thus be expressed as follows. Note that average balance sheet numbers are used in all the Du Pont equations. Equity is as stated by the company and therefore includes intangibles. The following is the formula for calculating ROE.

$$\text{ROE} = \frac{\text{Net Profit}}{\text{Equity}} = \frac{\text{Net Profit}}{\text{Assets}} * \frac{\text{Assets}}{\text{Equity}}$$

= ROA x Equity Multiplier

II. RETURN ON CAPITAL EMPLOYED (ROCE/ROI)

This ratio is also called as Return on Investment (ROI). The strategic aim of a business enterprise is to earn a return on capital. If any particular case, the return in the long-run is not satisfactory, then the deficiency should be corrected or the activity be abandoned for a more favourable one. The rate of return on instrument is determined by dividing net profit by capital employed or investment made to achieve that profit. ROI consists of two components viz,

- Net Profit Margin
- Investment turn-over, as shown below

$$\text{ROCE} = \frac{\text{EBIT (1-T)}}{\text{Capital Employed}}$$

The numerator of this ratio (ie) EBIT (1-T) is otherwise called as Net Operating Profit After Tax (NOPAT). Its merit is defined in such a way that it can be compared directly with the post tax weighted average cost of capital of the firm.

GROWTH

If a high ROE starts the wealth creation process and increasing capital employed gives it size, it is the growth in free cash flows that hastens the wealth creation process. Faster the growth in free cash flows, faster the wealth creation.

i. Operating Cash Flow (OCF)

This refers to the cash flow generated by the day to day activities of manufacturing and selling. Financing expenses like interest charges and dividend payment are excluded as they are not operating expenses. Cash Flow can be defined as,

$$\text{OCF} = \text{EBIT (1-T)} + \text{Depreciation}$$

ii. Cost of Capital (R)

Unlike the first three forces of wealth creation, the cost of capital or internal rates is external. It should be created normally and wealth related to the level of interest rates in the economy. The lower interest rates, higher the present value of cash flows. This in turn will result in higher share prices given certain level of expected cash flows. The Weighted Average Cost of Capital can be calculated as follows:

$$\text{WACC} = [K_e * (S/V)] + [K_d * (B/V)]$$

Where, K_e = Cost of Equity K_d = Cost of Debt S = Equity Capital V = Value of the Firm B = Debt

iii. Margin of Safety

The fifth force of wealth creation is margin of safety. It becomes external to the company because it involves investor's risk perception. Motilal Oswal defines the margin of safety or the pay back ratio as the market capitalization of a company dividend by the sum of expected profits for future period. Lower the payback period, higher the margin of safety for investors.

PRE-MERGER AND POST-MERGER OF WEALTH CREATION

HDFC BANK

In the month of May 2008, Centurion Bank of Punjab was acquired by HDFC bank. Hence, 2007-2008 was considered as pre-merger period and 2009-2010 was considered as post-merger period. Evaluation is done on various parameters.

TABLE 1: CALCULATION OF OCF, RONW, ROCE AND WACC

S.No	Parameters	Terms of Amount	Pre-merger (2007-2008)	Post-merger (2009-2010)
1.	EBIT	Crs	7,167.75	12,075.43
2.	PAT	Crs	1,590.18	2,948.69
3.	1-Tax Rate	-	0.70	0.69
4.	Depreciation	Crs	271.72	394.39
5.	NOPAT (1*3)	Crs	5017.43	8332.05
6.	OCF (4+5)	Crs	5289.15	8726.44
7.	Equity	Crs	354.43	457.74
8.	Debt	Crs	4,478.86	12,915.69
9.	Reserves & surplus	Crs	11,142.80	21,064.75
10.	Miscellaneous Expenses	Crs	3,295.22	3,169.12
11.	Net Worth (7+9-10)	Crs	8202.01	18353.37
12.	RONW (2/11)	%	19.39	16.07
13.	CE (7+8+9)	Crs	15976.09	34438.18
14.	ROCE [(1/13)*3]	%	31.04	24.19
15.	WACC	%	4.66	7.36

Source: Compiled from Annual Report of HDFC bank.

Table 1 shows that the Return On Net Worth in pre-merger period (19.39%) is higher than the post-merger period (16.07%). It indicates that the pre-merger RONW is 1.2 times more than the post-merger performance. During the post-merger period the Return On Capital Employed (24.19) is lower than the pre-merger period (31.41). It reveals that the ROCE is decreased nearby seven percentage in post-merger period. So the effort of the merger is more profitable to HDFC bank with the regard to wealth.

INDIAN OVERSEAS BANK

In the year 2007, Bharat Overseas Bank was acquired by HDFC bank. Hence, 2006-2007 was considered as pre-merger period and 2008-2009 was considered as post-merger period. Evaluation is done on various parameters.

TABLE 2: CALCULATION OF OCF, RONW, ROCE AND WACC

S.No	Parameters	Terms of Amount	Pre-merger (2006-2007)	Post-merger (2008-2009)
1.	EBIT	Crs	3,324.73	6,943.73
2.	PAT	Crs	783.34	1,202.34
3.	1-Tax Rate	-	0.80	0.73
4.	Depreciation	Crs	55.34	75.1
5.	NOPAT (1*3)	Crs	2659.78	5068.92
6.	OCF (4+5)	Crs	2715.12	5144.02
7.	Equity	Crs	544.80	544.80
8.	Debt	Crs	736.63	6,353.65
9.	Reserves & surplus	Crs	2,510.17	4,197.90
10.	Miscellaneous Expenses	Crs	1,108.46	672.52
11.	Net Worth (7+9-10)	Crs	1946.51	4070.18
12.	RONW (2/11)	%	40.24	29.54
13.	CE (7+8+9)	Crs	3791.60	11096.35
14.	ROCE [(1/13)*3]	%	70.15	45.68
15.	WACC	%	4.55	5.81

Source: Compiled from Annual Report of Indian Overseas Bank.

Table 2 shows that the Return on Net Worth in pre-merger period (40.24%) is higher than the post-merger period (29.54%). It indicates that the pre-merger RONW is 1.36 times more than the post-merger performance. During the post-merger period the Return on Capital Employed (45.68) is lower than the pre-merger period (70.15) and WACC has been increased slightly in post merger period. This analysis indicates that an increase in OCF gives a positive impact on merger and the decrease in RONW and the ROCE shows the negative impact on the merger.

IDBI BANK

On October 2006, Industrial Development Bank of India was merged with United Western Bank. Hence 2005-2006 was considered as pre-merger period and 2007-2008 was considered as a post-merger period and evaluation is done under various parameters.

Table 3 shows the OCF, RONW, ROCE and WACC of the IDBI bank during pre-merger and post-merger period.

TABLE 3: CALCULATION OF OCF, RONW, ROCE AND WACC

S.No	Parameters	Terms of Amount	Pre-merger (2005-2006)	Post-merger (2007-2008)
1.	EBIT	Crs	2,756.35	6,370.11
2.	PAT	Crs	307.26	630.31
3.	1-Tax Rate	-	1.07	0.92
4.	Depreciation	Crs	84.01	122
5.	NOPAT (1*3)	Crs	2949.30	5860.50
6.	OCF (4+5)	Crs	3033.31	5982.50
7.	Equity	Crs	652.88	724.35
8.	Debt	Crs	50,005.54	42,404.38
9.	Reserves & surplus	Crs	5,206.63	5,511.60
10.	Miscellaneous Expenses	Crs	129.19	265.05
11.	Net Worth (7+9-10)	Crs	5730.32	5970.90
12.	RONW (2/11)	%	5.36	10.56
13.	CE (7+8+9)	Crs	55,865.05	48,640.33
14.	ROCE [(1/13)*3]	%	5.28	12.05
15.	WACC	%	3.76	6.59

Source: Compiled from Annual Report of IDBI bank.

The above table shows that the entire factor such as Operating Cash Flow, Return on Net Worth, Return on Capital Employed and Weighted Average Cost of Capital were increased in post-merger period.

OCF was increased by 49.3 percent, RONW was increased nearby 50 percent, ROCE was increased more than fifty percent and WACC was increased by 42.94 percent. Finally it was interpreted among four forces, three forces like OCF, RONW and ROCE shows the positive impact on merger and WACC shows the negative impact in merger.

ORIENTAL BANK OF COMMERCE

On August 2004, Oriental Bank of Commerce was merged with Global Trust Bank. Hence 2003-2004 was considered as pre-merger period and 2005-2006 was considered as a post-merger period and evaluation is done under various parameters.

Table 4 shows the OCF, RONW, ROCE and WACC of the IDBI bank during pre-merger and post-merger period.

TABLE 4: CALCULATION OF OCF, RONW, ROCE AND WACC

S.No	Parameters	Terms of Amount	Pre-merger (2003-2004)	Post-merger (2005-2006)
1.	EBIT	Crs	2,990.34	3,478.75
2.	PAT	Crs	226.54	641.42
3.	1-Tax Rate	-	0.60	0.83
4.	Depreciation	Crs	50.42	75.52
5.	NOPAT (1*3)	Crs	1794.20	2887.36
6.	OCF (4+5)	Crs	1844.62	2962.88
7.	Equity	Crs	192.54	250.54
8.	Debt	Crs	36,374.00	51,073.89
9.	Reserves & surplus	Crs	2,484.26	4,920.24
10.	Miscellaneous Expenses	Crs	608.86	539.57
11.	Net Worth (7+9-10)	Crs	3285.64	5710.35
12.	RONW (2/11)	%	6.89	11.23
13.	CE (7+8+9)	Crs	39050.80	56244.67
14.	ROCE [(1/13)*3]	%	4.6	5.13
15.	WACC	%	5.07	4.92

Source: Compiled from Annual Report of Oriental Bank of Commerce.

Above table presents that during post-merger period, the RONW is more (11.23%) than the pre-merger period (i.e.) 6.89%. It indicates that the RONW increased nearby five percentage. Compared with the pre-merger period, the ROCE was increasing by 11 percent in post-merger period. While comparing the cash flow in pre-merger and post-merger period, it has been increased as Rs.1118.26 crs. WACC was decreased in post-merger period. It shows the positive impact on merger in Oriental Bank of Commerce.

EVA AND MVA EVALUATION

ECONOMIC VALUE ADDED (EVA)

Economic Value Added is a tool to define the amount, a business generation through the measurement of the rate of return over the cost of invested capital. EVA is the registered trademark of Stern Steward & Co is one of the highly discussed topics in today's financial world. It is a financial performance that helps to reduce cost of capital and improve profits, which in turn increase the shareholders value. EVA is a simple measure that provides information about shareholders real wealth creation. It provides a more refined barometer of value addition after defraying the cost of owed and owned fund.

EVA can be calculated by using the two formulas given below,

Formula: 1 $EVA = (r - c) * \text{Capital employed}$

Where,

r = economic rate of return on capital employed (referred to as ROCE)

c = cost of capital

Formula: 2 $EVA = \text{NOPAT} - (\text{WACC} * \text{Economic Capital})$

Where,

$\text{NOPAT} = \text{EBIT} * (1 - T)$

$\text{WACC} = (\text{KeWe} + \text{KdWd})$

Economic Capital = Total Assets (Adjusted for Intangibles)

Thus the EVA can be influenced by profit, amount of capital necessary to finance the assets and cost of capital

MARKET VALUE ADDED (MVA)

The *market value added* measurement shows the net difference between a company's market value and the cost of its invested capital. A negative amount indicates that management has done a poor job of creating value with the base of equity available to it, since investors have reduced the company's value below the amount of equity invested. The formula for MVA as follows,

MVA = Market Capitalization – Book value of Net worth

PRE-MERGER AND POST-MERGER EVA AND MVA EVALUATION

EVA & MVA EVALUATION FOR HDFC BANK

TABLE 5: EVA & MVA EVALUATION FOR HDFC

S.No	Parameters	Terms of Amount	Pre-merger (2007-2008)	Post-merger (2009-2010)
1.	EBIT	Rs. Crs	7,167.75	12,075.43
2.	PBT	Rs. Crs	2,280.63	4,289.13
3.	PAT	Rs. Crs	1,590.18	2,948.69
4.	Interest	Rs. Crs	4,887.12	7,786.30
5.	Tax	--	0.70	0.69
6.	1-Tax rate (1-(5))	--	0.30	0.31
7.	NOPAT (1*3)	Rs. Crs	5017.43	8332.05
8.	Total Assets	Rs. Crs	1,33,176.60	2,22,458.56
9.	ROI (1/8)	Ratio	0.0538	0.054
10.	DPS	Rs.	8.5	12
11.	EPS	Rs.	44.87	64.42
12.	MPS	Rs.	201.33	414.99
13.	Payout Ratio (10/11)	Ratio	0.189	0.186
14.	Retention Ratio (1-(13))	Ratio	0.811	0.814
15.	Growth Rate (9*14)	Ratio	0.066	0.044
16.	Cost of Equity (10+15)	Ratio	8.566	12.044
17.	Equity	Rs. Crs	354.43	457.74
18.	Debt	Rs. Crs	4,478.86	12,915.69
19.	Reserves & Surplus	Rs. Crs	11,142.80	21,064.75
20.	Misc. Expenses	Rs. Crs	3,295.22	3,169.12
21.	Value of the firm (17+18)	Rs. Crs	4833.29	13373.43
22.	We (17/21)	Ratio	0.073	0.034
23.	Cost of Debt (4/18)	Ratio	1.09	0.603
24.	Wd (18/21)	Ratio	0.927	0.965
25.	Cost of Capital (16+23)	Ratio	9.656	12.647
26.	CE (17+18+19)	Rs. Crs	15976.09	34438.18
27.	ROCE (7/26)	Ratio	31.04	24.19
28.	EVA (27-25/100)* 26	Rs. Crs	3416.33	3974.16
29.	Market Capitalization	Rs. Crs	713.59	1899.61
30.	Book Value of Networth	Rs. Crs	35.44	45.77
31.	MVA (29-30)	Rs. Crs	678.15	1853.84

Source: Compiled from Annual Report of HDFC bank.

Table 5 shows that post-merger EVA was higher than the pre-merger period. It was increasing by Rs. 557.83 crs. It shows positive impact after merger. Likewise the market value of HDFC bank also increasing in post-merger period when comparing to the pre-merger period.

EVA & MVA EVALUATION FOR INDIAN OVERSEAS BANK

TABLE 6: EVA & MVA EVALUATION FOR INDIAN OVERSEAS BANK

S.No	Parameters	Terms of Amount	Pre-merger (2006-2007)	Post-merger (2008-2009)
1.	EBIT	Rs. Crs	3,324.73	6,943.73
2.	PBT	Rs. Crs	985.63	1654.94
3.	PAT	Rs. Crs	783.34	1,202.34
4.	Interest	Rs. Crs	2,339.10	5,288.79
5.	Tax	--	0.20	0.27
6.	1-Tax rate (1-(5))	--	0.80	0.73
7.	NOPAT (1*3)	Rs. Crs	2659.78	5068.92
8.	Total Assets	Rs. Crs	59,357.80	1,01,859.73
9.	ROI (1/8)	Ratio	0.056	0.068
10.	DPS	Rs.	3.5	2.6
11.	EPS	Rs.	14.38	22.07
12.	MPS	Rs.	20.68	48.71
13.	Payout Ratio (10/11)	Ratio	0.243	0.118
14.	Retention Ratio (1-(13))	Ratio	0.757	0.882
15.	Growth Rate (9*14)	Ratio	0.042	0.06
16.	Cost of Equity (10+15)	--	3.542	2.66
17.	Equity	Rs. Crs	544.80	544.80
18.	Debt	Rs. Crs	736.63	6,353.65
19.	Reserves & Surplus	Rs. Crs	2,510.17	4,197.90
20.	Misc. Expenses	Rs. Crs	1,108.46	672.52
21.	Value of the firm (17+18)	Rs. Crs	1281.43	6898.45
22.	We (17/21)	Ratio	0.425	0.079
23.	Cost of Debt (4/18)	Ratio	3.175	0.832
24.	Wd (18/21)	Ratio	0.575	0.921
25.	Cost of Capital (16+23)	Ratio	6.717	3.492
26.	CE (17+18+19)	Rs. Crs	3791.6	11096.35
27.	ROCE (7/26)	Ratio	70.15	45.68
28.	EVA (27-25/100)* 26	Rs. Crs	2405.13	4681.33
29.	Market Capitalization	Rs. Crs	112.66	265.36
30.	Book Value of Networth	Rs. Crs	54.48	54.48
31.	MVA (29-30)	Rs. Crs	58.18	210.88

Source: Compiled from Annual Report of Indian Overseas Bank.

Table 6 shows that during post-merger period, the EVA is more than pre-merger period performance. It depicts the wealth created to its shareholders by increasing 48.62 percent when compared to the pre-merger performance.

With the regard to the MVA, during pre-merger period it was declining when compare to the post-merger period. In post-merger period, the MVA was increased more than 3 times when compare to the pre-merger period. It indicates that positive impact on merger and the shareholders are highly satisfied with the wealth creation in post-merger period.

EVA & MVA EVALUATION FOR IDBI BANK

TABLE 7: EVA & MVA EVALUATION FOR IDBI BANK

S.No	Parameters	Terms of Amount	Pre-merger (2005-2006)	Post-merger (2007-2008)
1.	EBIT	Rs. Crs	2,756.35	6,370.11
2.	PBT	Rs. Crs	288.48	682.62
3.	PAT	Rs. Crs	307.26	630.31
4.	Interest	Rs. Crs	2,467.87	5,687.49
5.	Tax	--	-0.07	0.08
6.	1-Tax rate (1-(5))	--	1.07	0.92
7.	NOPAT (1*3)	Rs. Crs	2949.30	5860.50
8.	Total Assets	Rs. Crs	81,360.25	1,03,839.32
9.	ROI (1/8)	Ratio	0.034	0.061
10.	DPS	Rs.	0.75	1.5
11.	EPS	Rs.	6.36	8.7
12.	MPS	Rs.		
13.	Payout Ratio (10/11)	Ratio	0.118	0.172
14.	Retention Ratio (1-(13))	Ratio	0.882	0.828
15.	Growth Rate (9*14)	Ratio	0.03	0.051
16.	Cost of Equity (10+15)	--	0.78	1.551
17.	Equity	Rs. Crs	652.88	724.35
18.	Debt	Rs. Crs	50,005.54	42,404.38
19.	Reserves & Surplus	Rs. Crs	5,206.63	5,511.60
20.	Misc. Expenses	Rs. Crs	129.19	265.05
21.	Value of the firm (17+18)	Rs. Crs	50658.42	43128.73
22.	We (17/21)	Ratio	0.013	0.017
23.	Cost of Debt (4/18)	Ratio	0.049	0.134
24.	Wd (18/21)	Ratio	0.987	0.983
25.	Cost of Capital (16+23)	Ratio	0.829	1.685
26.	CE (17+18+19)	Rs. Crs	55864.95	48640.33
27.	ROCE (7/26)	Ratio	5.28	12.05
28.	EVA (27-25/100)* 26	Rs. Crs	2486.55	5041.57
29.	Market Capitalization	Rs. Crs	510.81	741.72
30.	Book Value of Networth	Rs. Crs	65.29	72.48
31.	MVA (29-30)	Rs. Crs	445.52	669.24

Source: Compiled from Annual Report of IDBI bank.

The above table reveals that the pre-merger EVA is less than the post-merger performance. EVA shows the positive result and it creates satisfaction among the shareholders.

MVA of IDBI bank was increased from Rs. 445.52 crs to Rs. 669.24 crs in post-merger period. This is due increase of market capitalization in post-merger period. It shows the positive impact on its shareholders.

EVA & MVA EVALUATION FOR ORIENTAL BANK OF COMMERCE

TABLE 8: EVA &MVA EVALUATION FOR ORIENTAL BANK OF COMMERCE

S.No	Parameters	Terms of Amount	Pre-merger (2003-2004)	Post-merger (2005-2006)
1.	EBIT	Rs. Crs	2,990.34	3,478.75
2.	PBT	Rs. Crs	1,145.60	964.90
3.	PAT	Rs. Crs	226.54	641.42
4.	Interest	Rs. Crs	1,844.74	2,513.85
5.	Tax	--	0.40	0.17
6.	1-Tax rate (1-(5))	--	0.60	0.83
7.	NOPAT (1*3)	Rs. Crs	1794.20	2887.36
8.	Total Assets	Rs. Crs	41,006.57	58,937.37
9.	ROI (1/8)	Ratio	0.073	0.059
10.	DPS	Rs.	5	4.5
11.	EPS	Rs.	35.63	32.06
12.	MPS	Rs.	126.95	102.78
13.	Payout Ratio (10/11)	Ratio	0.14	0.14
14.	Retention Ratio (1-(13))	Ratio	0.86	0.86
15.	Growth Rate (9*14)	Ratio	0.063	0.051
16.	Cost of Equity (10+15)	--	5.063	4.551
17.	Equity	Rs. Crs	192.54	250.54
18.	Debt	Rs. Crs	36,374.00	51,073.89
19.	Reserves & Surplus	Rs. Crs	2,484.26	4,920.24
20.	Misc. Expenses	Rs. Crs	608.86	539.57
21.	Value of the firm (17+18)	Rs. Crs	36566.54	51324.43
22.	We (17/21)	Ratio	0.0053	0.0049
23.	Cost of Debt (4/18)	Ratio	0.051	0.049
24.	Wd (18/21)	Ratio	0.994	0.995
25.	Cost of Capital (16+23)	Ratio	5.11	4.6
26.	CE (17+18+19)	Rs. Crs	39050.8	56244.67
27.	ROCE (7/26)	Ratio	4.6	5.13
28.	EVA (27-25/100)* 26	Rs. Crs	(19915.91)	29809.68
29.	Market Capitalization	Rs. Crs	244.43	257.52
30.	Book Value of Networth	Rs. Crs	19.25	25.05
31.	MVA (29-30)	Rs. Crs	225.18	232.47

Source: Compiled from Annual Report of Oriental Bank of Commerce.

Table 8 shows that EVA in pre-merger period has negative value when compared to the post-merger performance. Like that the MVA of post-merger period also increasing.

From this analysis, it interprets that both EVA and MVA shows the positive impact for their shareholders because of this merger.

INTERNAL GROWTH RATE

Internal Growth Rate (IGR) is the maximum amount of growth a company can sustain without needing to borrow money, make a new issue of stocks, or otherwise obtain a new source of financing.

$$IGR = \frac{ROA * B}{1-(ROA*b)}$$

Where,

Return of Investment (ROI) = PAT/ Total Assets

B = Retention Ratio (1- Dividend Payout Ratio)

PRE-MERGER AND POST-MERGER IGR

HDFC BANK

Table 9 presents the IGR of the HDFC bank under the pre-merger and the post-merger period.

TABLE 9: CALCULATION OF IGR FOR HDFC BANK

S.No	Parameters	Terms of Amount	Pre-merger (2007-2008)	Post-merger (2009-2010)
1.	PAT	Crs	1,590.18	2,948.69
2.	Total Assets	Crs	1,33,176.60	2,22,458.56
3.	ROI (1/2)	Ratio	0.0119	0.0133
4.	Retention Ratio	Ratio	0.81	0.81
5.	Column 3 * Column 4	--	0.0097	0.0108
6.	1- column 5	--	0.9903	0.9892
7.	IGR (5/6)	Ratio	0.0098	0.0109

Source: Compiled from Annual Report of HDFC bank.

The above table shows that the internal growth rate in pre-merger period is less than the post-merger period (i.e. 0.0098 < 0.0109). It reveals that, it was increased by 11 present due to an increase in ROA during the post merger period.

INDIAN OVERSEAS BANK

Table 10 presents the IGR of the HDFC bank under the pre-merger and the post-merger period.

TABLE 10: CALCULATION OF IGR FOR IOB

S.No	Parameters	Terms of Amount	Pre-merger (2006-2007)	Post-merger (2008-2009)
1.	PAT	Crs	783.34	1202.34
2.	Total Assets	Crs	59,357.80	1,01,859.73
3.	ROI (1/2)	Ratio	0.0132	0.0118
4.	Retention Ration	Ratio	0.7566	0.8822
5.	Column 3 * Column 4	--	0.01	0.012
6.	1- column 5	--	0.991	0.98
7.	IGR (5/6)	Ratio	0.0101	0.0105

Source: Compiled from Annual Report of Indian Overseas Bank.

The above table reveals that during the post-merger period the internal growth rate (0.0105) is increasing than the pre-merger period (0.0101). The IGR has increased by more than a percent. It implies that the bank use the retained earnings in post-merger period effectively.

IDBI BANK**TABLE 11: CALCULATION OF IGR FOR IDBI BANK**

S.No	Parameters	Terms of Amount	Pre-merger (2005-2006)	Post-merger (2007-2008)
1.	PAT	Crs	307.26	630.31
2.	Total Assets	Crs	81,360.25	1,03,839.32
3.	ROI (1/2)	Ratio	0.0038	0.0061
4.	Retention Ration	Ratio	0.88	0.83
5.	Column 3 * Column 4	--	0.0033	0.005
6.	1- column 5	--	0.9967	0.995
7.	IGR (5/6)	Ratio	0.0033	0.005

Source: Compiled from Annual Report of IDBI bank.

The above table shows that the IGR in pre-merger period (0.0033) is less than the post-merger period(0.005). Compared pre-merger period the IGR was increased by 34 percent in post-merger period. It indicates that the bank used their retained earnings in effective manner.

ORIENTAL BANK OF COMMERCE**TABLE 12: CALCULATION OF IGR FOR ORIENTAL BANK OF COMMERCE**

S.No	Parameters	Terms of Amount	Pre-merger (2003-2004)	Post-merger (2005-2006)
1.	PAT	Crs	226.54	641.42
2.	Total Assets	Crs	41,006.57	58,937.37
3.	ROI (1/2)	Ratio	0.0055	0.0109
4.	Retention Ration	Ratio	0.86	0.86
5.	Column 3 * Column 4	--	0.0048	0.0094
6.	1- column 5	--	0.9952	0.9906
7.	IGR (5/6)	Ratio	0.0047	0.0094

Source: Compiled from Annual Report of Oriental Bank of Commerce.

Above table shows that the internal growth rate in pre-merger period is lower than the post-merger period. Compared with pre-merger period, the IGR was increased accurately by fifty percent.

This analysis reveals that the ROI is increased by 50 percent during the post merger period. It indicates that the IGR is increased due to increasing proportion of ROI in post-merger period. From this analysis, we interpreted that the Oriental Bank of Commerce used its retained earnings in efficiently in post-merger period.

CONCLUSION

Merger and acquisition encourage banks to gain global reach and better synergy and allow large banks to acquire the stressed assets of weaker banks. Merger in India between weak banks should grow faster so that they could rehabilitate providing continuity of employment with the working force, utilization of assets blocked up in the weak banks and adding constructively to the prosperity of nation through increased flow of funds. The small and medium size banks are working under threat from the economic environment which is full of problems for them, viz, inadequacy of resources, outdated technology, on-systemized management pattern, faltering marketing efforts, weak financial structure, technique obsolescence and lack of product innovations. Their reorganization through merger could offer re-establishment of those in viable banks of optimum size with global presence. Merger and acquisition in Indian banking so far has been to provide the safeguard and hedging weak bank against their failure. The merger cult in India has yet to catch fire with merchant bankers and financial consultants acquiring skills in grinding the banks to absorb unviable banks and put them again on successful operations.

The selected acquiring banks such as HDFC, Indian Overseas Bank, IDBI and Oriental Bank of Commerce was working successfully. The study has brought into sharp focus on the reasons and impact of merger and evaluating the performance of the selected banks during pre-merger and post-merger period. The overall performance of these banks was increasing during post-merger period. Modern financial parameters such as EVA, MVA, IGR, OCF, RONW, ROCE, WACC and Ratio analysis have been used to evaluate the performance of the selected acquiring banks. Based upon the evaluation made, the researcher has given the summary of findings. The findings of this paper will be useful to the banks to take certain policy decision in future.

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DISSATISFACTION OF EMPLOYEES DUE TO MOTIVATION AND LEADERSHIP: A CASE STUDY

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ABSTRACT

This paper is conceptual and base on exploratory findings. The basic idea is to show-case implementation of leader's strategy in the organization. In that X organization in one department HOD was discipline and hardworking but He was availing all facilities him-self, like computers, Internet and others. He had kept photo state machine, printer in his department cabin only. His faculties were also looking for these facilities and amenities but he did not care. Gradually, tussle was growing between HOD and faculties. In spite of the fact, faculties requested to HOD but no faculty has been getting these facilities. It hindered the research and day-to-day work of faculty members. Now, all faculty members have decided to write an application to the Principle, Head of the Institution. He has listened them and told them that necessary action will be taken soon. Now, this paper has emphasized on the motivation and leadership of HOD of that particular department.

KEYWORDS

Motivation, leadership

INTRODUCTION

The present case study is pertaining to the dissatisfaction of employees due to motivation and leadership.

PROBLEM IN THE CASE STUDY

- (1) Grievances of employee's dissatisfaction?
- (2) HOD leadership style in the case?
- (2) Needed leadership style by HOD towards employees?

RESEARCH METHODOLOGY

- secondary Research
- Conceptual study and Exploratory Research.

ANALYZATION OF PROBLEMS BASED ON THEORIES

(1) Employees were not satisfied because they were not getting sufficient facilities in the department. Like computer, internet, Printer etc. In spite of their complain he was not ready to provide the amenities.

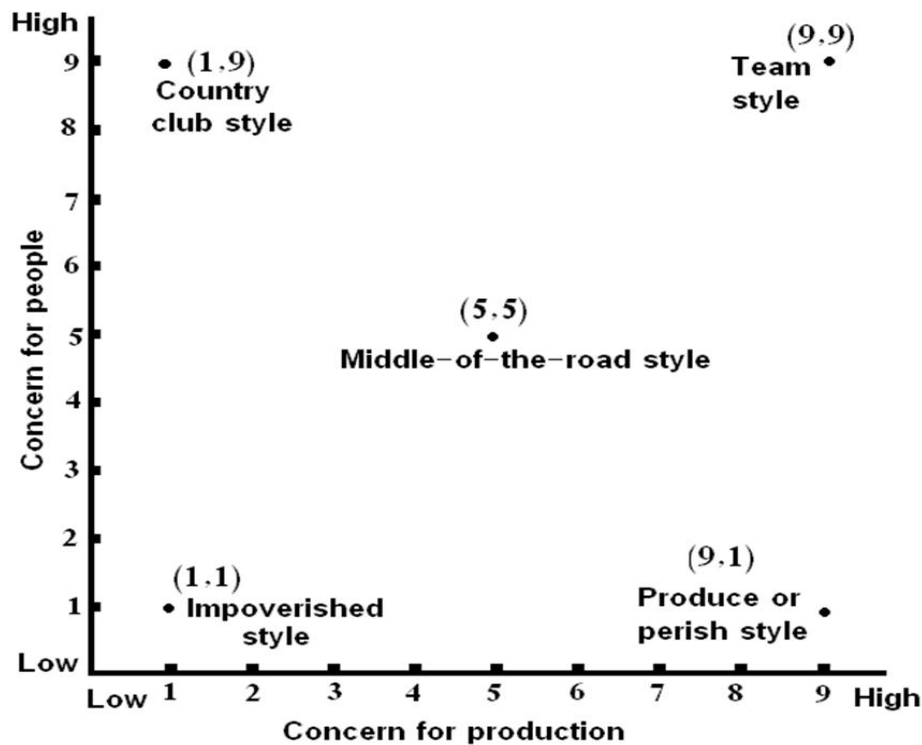
The two-factor theory (also known as Herzberg's motivation-hygiene theory and dual-factor theory) states that there are certain factors in the workplace that cause job satisfaction, while a separate set of factors cause dissatisfaction. It was developed by psychologist Frederick Herzberg, who theorized that job satisfaction and job dissatisfaction act independently of each other.

Two-factor theory fundamentals: Attitudes and their connection with industrial mental health are related to Abraham Maslow's theory of motivation. His findings have had a considerable theoretical, as well as a practical, influence on attitudes toward administration. According to Herzberg, individuals are not content with the satisfaction of lower-order needs at work; for example, those needs associated with minimum salary levels or safe and pleasant working conditions. Rather, individuals look for the gratification of higher-level psychological needs having to do with achievement, recognition, responsibility, advancement, and the nature of the work itself. This appears to parallel Maslow's theory of a need hierarchy. However, Herzberg added a new dimension to this theory by proposing a two-factor model of motivation, based on the notion that the presence of one set of job characteristics or incentives leads to worker *satisfaction* at work, while another and separate set of job characteristics leads to *dissatisfaction* at work. Thus, satisfaction and dissatisfaction are not on a continuum with one increasing as the other diminishes, but are independent phenomena. This theory suggests that to improve job attitudes and productivity, administrators must recognize and attend to both sets of characteristics and not assume that an increase in satisfaction leads to decrease in unpleasurable dissatisfaction.

- **Motivators** (e.g. challenging work, recognition, responsibility) that give positive satisfaction, arising from intrinsic conditions of the job itself, such as recognition, achievement, or personal growth, *and*
- **Hygiene factors** (e.g. status, job security, salary, fringe benefits, work conditions) that do not give positive satisfaction, though dissatisfaction results from their absence. These are extrinsic to the work itself, and include aspects such as company policies, supervisory practices, or wages/salary.

Essentially, hygiene factors are needed to ensure an employee is not dissatisfied. Motivation factors are needed to motivate an employee to higher performance. Herzberg also further classified our actions and how and why we do them, for example, if you perform a work related action because you *have* to then that is classed as "movement", but if you perform a work related action because you *want* to then that is classed as "motivation". (2) & (3) HOD Leadership styles and needed style with subordinates:-

FIG. 1



UNDERSTANDING THE MODEL

The Managerial Grid is based on two behavioral dimensions:

- **Concern for People** – This is the degree to which a leader considers the needs of team members, their interests, and areas of personal development when deciding how best to accomplish a task.
- **Concern for Production** – This is the degree to which a leader emphasizes concrete objectives, organizational efficiency and high productivity when deciding how best to accomplish a task.
- **Impoverished Leadership – Low Production/Low People**

This leader is mostly ineffective. He/she has neither a high regard for creating systems for getting the job done, nor for creating a work environment that is satisfying and motivating. The result is disorganization, dissatisfaction and disharmony.

- **Country Club Leadership – High People/Low Production**

This style of leader is most concerned about the needs and feelings of members of his/her team. These people operate under the assumption that as long as team members are happy and secure then they will work hard. What tends to result is a work environment that is very relaxed and fun but where production suffers due to lack of direction and control.

- **Produce or Perish Leadership – High Production/Low People**

Also known as Authoritarian or Compliance Leaders, people in this category believe that employees are simply a means to an end. Employee needs are always secondary to the need for efficient and productive workplaces. This type of leader is very autocratic, has strict work rules, policies, and procedures, and views punishment as the most effective means to motivate employees.

- **Middle-of-the-Road Leadership – Medium Production/Medium People**

This style seems to be a balance of the two competing concerns, and it may at first appear to be an ideal compromise. Therein lies the problem, though: When you compromise, you necessarily give away a bit of each concern, so that neither production nor people needs are fully met. Leaders who use this style settle for average performance and often believe that this is the most anyone can expect.

- **Team Leadership – High Production/High People**

According to the Blake Mouton model, this is the best managerial style. These leaders stress production needs and the needs of the people equally highly.

The premise here is that employees understand the organization's purpose and are involved in determining production needs. When employees are committed to, and have a stake in the organization's success, their needs and production needs coincide. This creates a team environment based on trust and respect, which leads to high satisfaction and motivation and, as a result, high production.

CONCLUSION

Hence, In this particular case HOD was task-oriented rather than people-oriented. According to the Leadership-Grid Produce or Perish Leadership – High Production/Low People. Also known as Authoritarian or Compliance Leaders, people in this category believe that employees are simply a means to an end. Employee needs are always secondary to the need for efficient and productive workplaces. This type of leader is very autocratic, has strict work rules, policies, and procedures, and views punishment as the most effective means to motivate employees.

Now, If HOD want to make a cordial Relationship with Employees, HOD must be flexible and follow the following leadership style:-

Middle-of-the-Road Leadership – Medium Production/Medium People

This style seems to be a balance of the two competing concerns, and it may at first appear to be an ideal compromise. Therein lies the problem, though: When you compromise, you necessarily give away a bit of each concern, so that neither production nor people needs are fully met. Leaders who use this style settle for average performance and often believe that this is the most anyone can expect.

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CONTRIBUTION OF WOMEN IN THE COMMON PROPERTY RESOURCE BASED ACTIVITIES IN TAWANG DISTRICT OF ARUNACHAL PRADESH, INDIA

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ABSTRACT

Common Property Resources were very much important and crucial for the economies of the tribal people specifically for the women. Unfortunately development agencies gave little bit interest for the needs and interest of the tribal women in the implementation of any programme and policy. Apart from the day to day household work, varied farm activities and other domestic responsibilities, women particularly in this tribal society spare a substantial time for Common Property Resources (CPRs) based activities. Keeping this fact in mind, the present study is a modest attempt to analyze the importance of common property resources on the life of the tribal women. The study also envisages constructing a household model of women participation on common property resource based activity using evidence from rural study area. In the study area, it is seen that employment of male would reduce dependency on CPRs at a large but employment of female would reduce dependency on CPRs a very little.

KEYWORDS

Tribal women, Household economy, Domestic responsibilities, Common Property Resource, Employment.

INTRODUCTION

Women are an integral part in tribal society. The nature and type of economic and non-economic role played by women have undergone continued transformation in accordance with the changes in socio-economic factors, education levels and technological developments and with the changing concepts regarding the extent to which women's contribution is desirable and necessary. Although women's role is crucial in the family and household economy, women have not been given equal rights in social, political as well as economic fields. The necessity of improvement of status of women has been recognized all over the world as an important aspect of national progress and development. Poverty alleviation of the poor people cannot be possible without providing opportunities of productive employment to women. Employment to women gives necessary economic base and thereby improves the social status of the family in the society.

It is observed that the average land holding size of the poor people is very low. So in the poor families there are always surpluses of labour. But due to underdeveloped factor market these surplus labour could not find suitable place to be absorbed. Consequently they are forced to dependent upon natural common property resources (CPRs) activities to a greater extent. Generally the male engage in the collection of timber, bamboo (for the collection of their houses) hunting, collection of honey etc. The works like the collection of fuel wood, fodder, edible fruits, vegetables etc. are done by the female and child only. Apart from the day to day household work, varied farm activities and other domestic responsibilities, women particularly in this tribal society spare a substantial time for Common Property Resource (CPR) based activities. They collect various minor as well as major forest products for their day to day requirement. Carrying of heavy loads of fuel wood (one of the most important CPR product) either on head or with traditional basket by women is a long practice in the tribal society. In the traditional tribal society the strength of a good mother and wife is judged by the amount of wood/fish they can carry/catch. However, the incursion of macroeconomic forces like emergence of property right, development of marketing network, commercialization of various CPR products, urbanization, etc. gradually deprived the tribal women from their age-old access to these resources. It results in numbers of illegal activities like encroachment, felling of valuable trees in the purpose of fuel wood, commercial extraction of CPR products, etc. for which the rural poor specifically the women have to suffer a lot. Very few studies are conducted so far on common property resources and its implementation to rural poor in the state. Keeping this fact in mind, the present study is a modest attempt to analyze the importance of common property resources on the life of the tribal women. The study also envisages constructing a household model of women participation on common property resource based activity using evidence from rural study area (Mandal and Ete, 2008).

CPRs are those resources, which are accessible to the whole community to which no individual has exclusive property rights. The resources of CPRs in India are protected forests, community forests, village pastures, waste lands, waste dumping places, watershed drainages, grazing land (gauchar), village ponds, canals, tanks, wells, streams, rivulets, and river beds. However, CPRs are regarded as an important resource base for the rural economy in many of the developing and underdeveloped countries till today because of their significant economic contributions to the sustenance of rural livelihood (Jodha, 1986). The commoners' right over the resources has gradually declined over the years. The relatively poor households are depending on community forest for firewood, bamboo and other minor forest products like leaves, medicinal herbs and seeds, vegetables and roots but the relatively rich households exploits the community forest more for timber consumption and other forest products which can be marketed (Singh, 2010).

Today poverty and household food security are much debated issues especially in development literature. Women's contributions to the family and thereby to the society for food and economic security have received attention for the last 15 years only. Collection of natural resources from CPRs is usually performed entirely by women in developing countries, particularly in fragile and rugged mountain areas. The value of women's contributions may be calculated by 2 methods: **opportunity costs and output method**. The results will show that women are at the forefront of food and economic security (Agarwal, 2004).

Women spend considerable time in collection of fuel wood and household energy from forests and elsewhere, directly along with their children spending considerable time by walking for long distances in the developing world. For example, in Nepal, women and girls collect 84 percent of the fuel and the average hours spent by them per day are between 1 and 5 hours per adult with one or two children. In some other developing countries, the pictures are more or less same, the average hours spent per day in gathering fuel are as follows: in Bangladesh, 3 to 5 hours; in Tanzania, 8 hours; in Kenya, 3.5 hours; and in Peru 2.5 hours. The women also walk for a long distance for such work (Sheila, 1989).

MATERIALS AND METHODS

Universe of the Study: Arunachal Pradesh is fortunate to have immensely rich biodiversity and natural resources with a forest cover exceeding 80% of its area. This state is situated near the tropic of cancer, lying between latitudes 26° 28' N and 29° 30' N and longitude between 91° 30' E and 97° 30' E in the North-East extremity of India. The land and topography of the state is hilly beginning from foothills to snow-clad zones of alpine region. The elevation of the hills ranges from 150 m to over 7,300 m. The State has 83,743 km² areas covering around 2.5% of the total geographical area of the country and bearing only 0.11% of its population with population density 17 km⁻² as per 2011 census (Mandal, 2012). The principal inhabitant of the study area is Monpa tribe. The study is confined in the Monpa tribal society.

Sample Study Area: Tawang is one of 17 districts of Arunachal Pradesh. The district has 9 circles under 3 blocks. Out of 9 circles, 3 circles (administrative units) viz. Mukto, Lumla and Zemithang along the international boundaries of Tawang district with China (Tibet) and Bhutan were considered as geographical area to study. These 3 administrative units along the international boundaries were considered because the livelihood pattern of the people of these three units was

primitive type and depended more on common property resources. Globalization and modern live style were not seen in this coldest area of the state. The three basic needs of life: food, cloth and shelter were managed by their own production on the basis of community cooperation.

Data Base: The study based completely on primary data collected from village survey through face to face interaction with the respondents with the help of pre-tested and pre-structured questionnaire. Three villages of each circle, which contains more population, was selected for survey and 50 households from the three villages were selected through random sampling technique without replacement to fill up the pre-designed and pre-tested questionnaire through direct interaction with respondents, i.e., 50 households from each circle. Total respondents of 3 circles were 150 (50 × 3 = 150). Out of 50 households from each village, 25 males and 25 females from the age group (20-50) years were selected as respondents to fill up the questionnaires, as this age group is particularly more responsible to earn the livelihood for their family. The village survey was taken in the month of August, 2009.

Tools: Simple numerical calculations, graphical representations, different statistical tools are used to analyze the data.

RESULTS AND DISCUSSION

In the surveyed area the various sources of household energy were fuel wood, kerosene, LPG and electric power. Almost all the households were using fuel wood for cooking purpose and getting room temperate as there was extreme cold due to frequent snow falling. In the study area, collection of fuel wood from common property resources was a main source of domestic energy. It dealt mainly with the women’s labour allocation to fuel wood collection along with other products from CPRs. Local CPRs were very much important in the economy of rural people in general and women in particular. Women and children were the sole or significant collector of various items from CPRs. Women by virtue of their gender role and domestic responsibilities had been pushed in their efforts to meet daily household needs from CPRs. Here only adult males and females are considered. Gender dimension i.e., number of males and females in the common property resource based activities on the basis of man-days is shown in Table-1 and Figures-1 and 2 below.

TABLE-1: GENDER DIMENSION IN CPR BASED ACTIVITIES

Circles	Respondents		Total Hours Spent in Collection of Different Items from CPRs Daily		No. of Man-days in Collection of Different Items from CPRs Daily		Percentage of Males and Females in respect of total Man- days	
	Male	Female	Male	Female	Male	Female	Male	Female
Zemithang	25	25	72	112	9	14	13.64	21.21
Lumla	25	25	80	104	10	13	15.15	19.70
Mukto	25	25	64	96	8	12	12.12	18.18
Total	75	75	232	312	27	39	40.91	59.09

Source: Field Survey, 2010-11; 1 man day = 8 hours spent in collection of items from the CPRs.

FIGURE-1

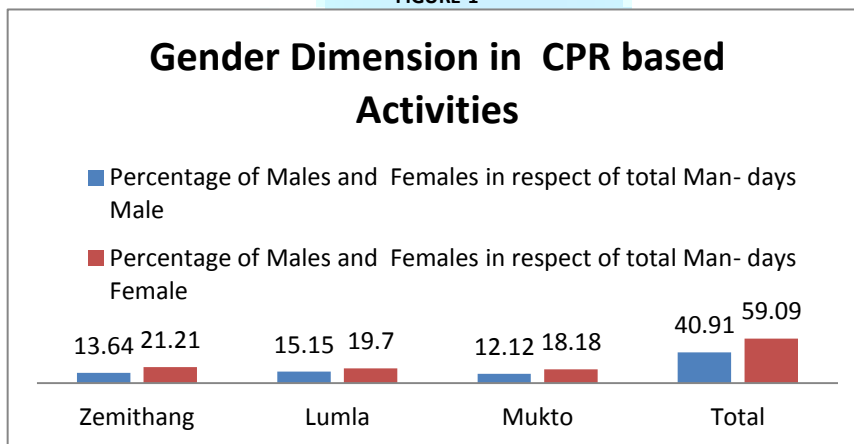
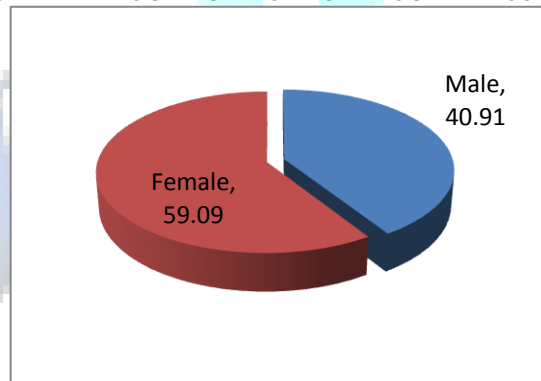


FIGURE-2: GENDER DIMENSION IN CPR BASED ACTIVITIES ON THE BASIS OF MAN-DAYS



Findings: With depletion of local forests women were forced to go to other forests for collection of fuel wood etc. where the forest protection committees of those forests were posing a major hindrance. Hence the women were facing great difficulty in procuring minor forest produce for their day-to-day household activities. Locally, an acute scarcity of fuel wood and fodder was expected in the near future. The women were expected to be severely affected in the process. The work performed by Monpa women and their contribution in terms of family affairs i.e., household works were unlimited. Forest/CPR based collection for daily household purposes completely depended on the females in the study area. Major part of agricultural work including shifting cultivation went on the shoulder of the women. But major works like cutting the trees for shifting cultivation or house construction were performed by the males.

The employment generated by CPRs is usually estimated by evaluating the working days spent by a household in the collection of CPR products and in CPR based activities (Singh, 1994 and Jodha, 1986). The female basically spend a number of hours for collection of firewood, leafy vegetables and other minor products. The male spend for extraction of timber, hunting of wild animals (Singh, 2010). In the Table-1 it was seen from the field study that 27 number of man-days for males and 39 number of man-days for females were observed out of 150 respondents (males=75 and females=75) for collecting the different items daily from CPRs for

maintaining their livelihood considering 1 man-day = 8 hours. Circle wise there were 9, 10 and 8 man-days for males in Zemithang, Lumla and Mukto respectively while there were 14, 13 and 12 man-days for females in Zemithang, Lumla and Mukto respectively. Again percentage wise the share in respect of total man-days of males were 13.64, 15.15 and 12.12 and that of females were 21.21, 19.70 and 19.70 in Zemithang, Lumla and Mukto respectively for the collection of items from CPRs. The share of females for collecting the different items daily from CPRs was always higher than that of males in all the three circles in regard of man-days. The percentage of gender-wise days spent in collection of forest products in the surveyed villages was 59.09 per cent for females and 40.91 per cent for males shown in Figure-9.2 and Figure-9.3. Therefore, women engaged averagely 4.16 hours daily where as males 3.09 hours daily on the CPR- based activities.

In case of decision making and exercising of authority women took decisions related to child care, children's education, type of feast to be prepared, purchase of utensils and clothes, house related activities, cooking, upgrading house, extension of house, maintenance and agricultural activities. Thus, decisions related to major issues were taken by husbands, while decisions on activities within the house were dominated by women. Men dominated in taking decisions on number of children to bear, arranging children's marriage, sale/purchase of animals and land, settlement of disputes, social visits and to some extent voting. Thus, controlling and decision making in important activities were decided by the husbands. In other words, where there was social prestige men dominated, while decisions associated with responsibility and duties of use value were left to women. But recently, there was a positive change among younger educated women to participate actively in making variety of decisions.

Critical Dependence on Forests for Subsistence: Women were dependent on forest for food, fibre, fodder, medicines, raw materials for producing small items like leaf plates, mats etc. for use at home or for selling them in markets and stones for construction house. Apart from their dependence on forest lands as gatherers of forest produce, the women were also employed by forest department and contractors to work as unskilled labour. Women were supposed to participate in community forestation programmes and were also involved as producers in farm forestry programmes. Hence, four roles which women played in forestry are gathering, wage employment, management and production. But here women faced three main problems; their rights of collection were not well recognized and publicized, many minor forest products had been nationalized by state in the interest of revenue and diminishing opportunities for self-employment through collection of forest products (Saxena, 1993).

Women's Priorities Not Reflected: Indigenous communities in many localities have embarked on social forestry programmes to improve their quality of life and regenerate surrounding environment by planting trees. The performance of such social forestry projects is a mixed experience, where some have sustained, while many others have not. From gender perspective, most of them have failed to incorporate women groups' perceptions, priorities and needs. Commercial species planted on grazing land at the behest of forest department have deprived local women of any benefit and encouraged local level institutions like panchayats to harvest such plantation for income. Women's priorities, in species selection are not of any consequence for social forestry projects here; such priorities and indigenous knowledge have been kept out of the projects by default (Saxena, 1993). The same picture was seen in the study area. Plantation programmes were also taken in several times in this area where women were main participants but their roles were not reflected.

Tedious Job of Collecting Water, Fuel and Fodder: The nature of their major functional responsibilities is highlighted below.

1. Collection of fuel and fodder were appeared to be quite time-consuming activity. The women spent more than 4 hours daily for such a task for at least 5 days a week.
2. Apart from their daily requirements of fuel and fodder they had to collect also additional quantities to take care of rainy season.
3. The women collected water from the river, spring but in some nearby market areas they collected drinking water from common tap made by PHE, Govt. of Arunachal Pradesh.
4. The women were required to walk around 5 kilometer for collecting fuel and fodder. Most of their time was spent in collecting water, fuel and fodder.
5. They spent about 5 hours or so in cooking and other household work. The women also spent about 3 hours for field work like weeding out roots and/or bamboo work.

Impact of Diversion, Employment and Unemployment on the Dependency of CPRs

Women to gatherer fuel, particularly in tribal belts and lower strata of the society, had to walk a long distance in a day to collect a load of fuel wood on their back to boil the pot of their family due to the massive deforestation. The employment generated by CPRs is usually estimated by evaluating the working days spent by a household for the collection of CPR products or CPR based activities. Eight working hours by an adult person or sixteen working hours by a child have been considered equivalent to one working day (Singh, 1994 ; Jodha, 1986). An attempt is made in this study to compare the contribution of community forest that accrues to poor and non-poor households as well as rural livelihood linkages. There are many studies which estimated the gross household income (Jodha, 1986; Pasha, 1992) but the income data suffered from a lot of errors, as respondents normally hesitated in reporting his/her real income and sources of income. The illiteracy of the respondents in the study area was another obstacle in it. Hence, in order to examine the relative importance of community forest in the household economy, the consumption from them in relation to total consumption was analysed. From the discussion with the villagers, it was known that the dependency on CPRs was gradually decreasing year by year. As a reason they said that the villagers were migrating from village to town for livelihood and education. This is due to the fact that higher level of schooling might have better exit options due to high opportunity cost and hence, forest extraction activities might be less attractive for those households. Besides, availability of government sector jobs might well divert people from dependency on forests.

Employment and Unemployment on the Dependency of CPRs

However, women to gatherer fuel, particularly in tribal belts and lower strata of the society, have to walk miles in a day to collect a head load of fuel wood to boil the pot of their family due to the massive deforestation. The employment generated by CPRs is usually estimated by evaluating the working days spent by a household in the collection of CPR products and in CPR based activities (Singh, 1994 and Jodha, 1986). Eight working hours by an adult person or sixteen working hours by a child have been considered equivalent to one working day (Singh, 1994 and Jodha, 1986). An attempt is made in this study to compare the contribution of community forest that accrues to poor and non-poor households as well as rural livelihood linkages. There are many studies which estimated the gross household income (Jodha, 1986; Pasha, 1992) but the income data suffered from a lot of errors, as respondents normally hesitated in reporting his/her real income and sources of income. The illiteracy of the respondents in the study area was another obstacle in it. Hence, in order to examine the relative importance of community forest in the household economics, the consumption from them in relation to total consumption was analysed.

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Value of Women's Contribution: The value of women's contributions may be computed by two methods: opportunity cost method and output method. Livelihood pattern in a predominantly rural, traditional tribal society from empirical standpoint might mean somewhat different from other part of India. Money income is important in urban areas, whereas access to food and land resources to produce food and other necessities are more important in the given traditional societies, which nevertheless are gradually getting monetized from non-money economies. The concepts of work and occupation, similarly needs redefinition. Work in modern societies is related to employment and monetary rewards. But in this indigenous community, it might connote different things. Sharing of labour through rotation basis, use of family labour as collective endeavours in subsistence agricultural practices throughout the year are without the involvement of money and wage. Thus, employment or unemployment are an unimportant questions—no one is unemployed and no one is employed (by someone else)—everyone works nevertheless; periods of no work are periods of relaxation and rejoice (Mandal, 2012).

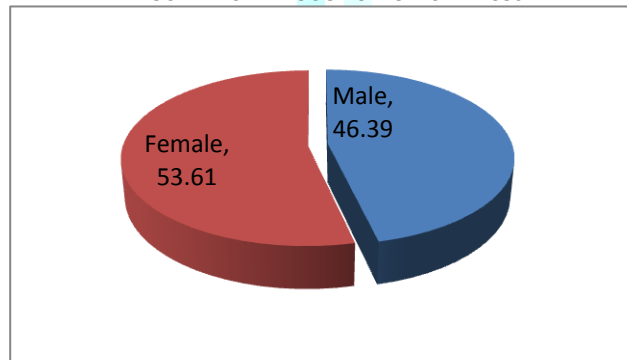
Opportunity Cost Method: In this method it can be found out the value of products of CPRs with the help of opportunity cost for males and females, i.e., the labour value may be found if the concerned male/female sales his/her labour in another action for the time for which he/she has already spent for the collection of products of CPRs. Organised labour market was absent in the study area. Labours are purchased especially for building and road construction. It was heard from the labourers about their labour value per day for male and for female. The contractor generally paid Rs. 250/- for male per day (8 hrs.) and 200/- for female. Accordingly it is found out the labour value as shown in Table-2.

TABLE-2: COMMON PROPERTY RESOURCE BASED ACTIVITIES OF MALES AND FEMALES IN TERMS OF LABOUR VALUE THROUGH OPPORTUNITY COST

Circles	Respondents		Total hours spent for collection of different items from CPRs daily for 25 males and 25 females		No. of man-days for collection of different items from CPRs daily for 25 males and 25 females		Total labour value of man-days @ Rs. 250/-per day per male and @ Rs.200/- per day per female for 25 males and 25 females		Average labour Value (Rs.) per male and per female	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Zemithang	25	25	72	112	9	14	2250	2800	90	112
Lumla	25	25	80	104	10	13	2500	2600	100	104
Mukto	25	25	64	96	8	12	2000	2400	80	96
Total	75	75	232	312	27	39	6750	7800	90	104

Source: Field Survey

FIGURE-3: PERCENTAGEWISE SHARE OF MALES AND FEMALES IN THE EARNING FROM COMMON PROPERTY RESOURCE BASED ACTIVITIES IN TERMS OF LABOUR VALUE THROUGH OPPORTUNITY COST



Findings: From the Table-2, it is seen that total hours spent for collection of different items from CPRs daily were 72, 80 and 64 hours for 25 males and 112, 104 and 96 hours for 25 females in Zemithang, Lumla and Mukto respectively. These hours can be converted in to man-days considering that one man-day equals to eight hours. Therefore, 25 males performed 9, 10 and 8 man-days while 25 females performed 14, 13 and 12 man-days in Zemithang, Lumla and Mukto respectively. Again on the basis of average labour value, it was observed that male earned Rs. 90/-, Rs. 100/- and Rs. 80/- while female earned Rs. 112/-, Rs. 104/- and Rs. 96/- per day from the collected items from CPRs in Zemithang, Lumla and Mukto respectively. In average, male earned Rs. 90/- and female earned Rs. 104/- per day in the study area. The earnings from CPRs of males and females differed because of engagement of time duration in collecting CPRs produces. Percentage-wise share of males and females in the earning from Common Property Resource based activities in terms of labour value through opportunity cost is shown in Figure-1 where males earned 46.39 per cent and female earned 53.61 per cent.

Output Method: In output method, it is found the value of the collected items from CPRs by selling them in the market. The collected items are easily sold at high prices in the market of urban areas while in the study area there was no such as local market to sell them, if they were sold but their prices were very low. Because, the villagers were very cooperative, their needs were fulfilled with the help of others without money transaction. Any household could get the collected items from CPRs from others at free of cost or at nominal prices. Therefore, it is difficult to get the value of collected items from CPRs through output method. But the researcher heard from the respondents that they could earn handsome money more than labour value from the selling of the collected items in the market of district town. Some herbs collected from the CPRs were sold outside of the state at very prices. The priest/lama in Monpa society is generally very wise to cure of all types of ailment by the local herbs. The people generally go first to local herb man/lama/priest for any type of their trouble. They are not so much accustomed to modern allopathic treatment. But actual value of collected items from CPRs is difficult through output method.

CONCLUDING REMARKS

Common Property Resources were very much important and crucial for the economies of the tribal people specifically for the women. Unfortunately development agencies gave little bit interest for the needs and interest of the tribal women in the implementation of any programme and policy. As a result achievement was unsatisfactory. Therefore attempt should be made to increase the women participation in the management of these resources where they are the actual users and make them partner of profit earned from CPRs as the employment of women are not so much effective to reduce their dependency on CPRs. Therefore, the authority has to think about this matter to maintain the quantum of CPRs through sustainable development and side by side try to regenerate the rare species in the CPRs.

A participatory approach to indigenous women would empower them to explain their priorities, present their indigenous knowledge systems, their problems and capabilities. On the basis of such information generated, they would be able to plan social forestry programmes along with men and improve their entitlement to forest resources so as to lead their lives with less of hardship and also become custodians of local natural resources as stakeholders in regeneration of forest.

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CUSTOMER SATISFACTION ON MOBILE-PHONE MONEY TRANSFER SERVICES' USAGE IN DODOMA URBAN, TANZANIA

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ABSTRACT

Money transfer through mobile-phones using SMS technology has become popular in East Africa. Kenya is considered as a pioneer in revolutionizing the Mobile-phone Money Transfer (MMT) which was started by Safaricom under its brand name M-PESA. Though the neighbouring East African countries like Tanzania and Uganda adopted this money transfer later, it has been widely adopted. This study was undertaken in Dodoma Urban, the capital of Tanzania to understand the customers' satisfaction of MMT services usage. It adopted a cross-sectional research design and both survey and interview methods were used to data collection from customers as well as wakalas (agents of MMT service providers) and the representatives of leading MMT service providing companies such as Vodacom, Tigo, Airtel and ZANTEL. The study found out that the level of customers' satisfaction is relatively high and the MMT services were considered useful on many aspects like time saving and avoiding bureaucratic procedures. Nevertheless, there are issues like potential fraud in its usage, shortage of electricity supply and limited availability of agents in the rural areas which were hindering the adoption of MMT services. It also has been recommended that the MMT service providing companies take appropriate efforts to provide more incentives to the customers and also ensure increased presence of rural areas which face the problem of financial exclusion.

KEYWORDS

mobile-money transfer, customer satisfaction, utility payments, Tanzania, *m-pesa*.

MOBILE-PHONE MONEY TRANSFER SERVICES

In April 2007, Safaricom, a leading mobile phone service provider in Kenya launched a new mobile phone-based payment and money transfer service, known as M-PESA. This service facilitated users to deposit money into an account stored on their mobile phones, to transfer money using SMS technology to other users (including sellers of goods and services), and to redeem deposits for regular money. Charges, deducted from users' accounts, were levied when money was transferred electronically to other users and also when cash was withdrawn physically at the premises of the *wakalas* (retail agents) of mobile phone service providers (Jack and Suri, 2010: 2).

The Mobile Money Transfer (MMT) services of Safaricom, *M-Pesa* in Kenya, have caught the attention of the users in Tanzania who were previously totally depending upon various formal and informal channels for transferring money from their workplace to their homes. The proliferation of such mobile money transfer services has been witnessed since the last few years in many developing countries, particularly in Africa. According to Cobert, Helms and Parker (2012:2), in the last five years the use of MMT in Sub Saharan Africa had grown exponentially.

Hope *et al* (2011:5) define that mobile money is an electronic payment system that enables money transfers to and from an electronic account that can be accessed via an ordinary mobile phone. Each customer's account is linked to their mobile phone number by means of an inbuilt SIM-card application. Physical cash withdrawals and deposits are facilitated by a network of retail agents. Tobbin (2011:60) felt that even though mobile money has not been well defined in literature, it can be said to include all the various initiatives (long-distance remittance, micro-payments, and informal air-time bartering schemes) aimed at bringing financial services to the unbanked using mobile technology. Therefore, he defined mobile money transfer (MMT) as an aspect of a broader concept emerging in the electronic payment and banking industry.

UNCTAD (2012:8) indicated that financial and insurance institutions have also begun to leverage mobile money as a vehicle for cost reduction and improved efficiency in providing their conventional services. For example, some micro-finance institutions (MFIs) were using mobile money to lower cost and as a safer way to disburse loans and collect payments. In addition, micro-insurance institutions were similarly beginning to use mobile money to collect premiums and pay reimbursements to their customers. Those financial institutions that received mobile money deposits could potentially generate more revenue through retention of such deposits.

MOBILE-PHONE MONEY SERVICES IN TANZANIA

In Tanzania, mobile phone companies have been providing various services including mobile-phone money transfer (MMT) services since 2008. Though only one service provider, Vodacom, started to offer the MMT services, *M-Pesa* initially, in the last few years, a number of service providers have started to provide the MMT. The Governor of Bank of Tanzania, Benno Ndulu is reported to have informed that 'in September 2010, the numbers of mobile money accounts were 20.4 million and by September 2012, the number of subscribers was 15 million or 63% of the adult population'. It was also further reported in www.mobilemoneyafrica.com that according to him, the monthly financial transactions mainly payments and transfers made through mobile money was Tshs 1.9 million in 2010. It was also reported that it skyrocketed to Tshs 48 million in September 2012. Nevertheless, there is a scant knowledge and information on how the MMT services fulfill customers' expectations particularly in Tanzania. The question that remains to be addressed is that to what extent customers' are satisfied with the MMT services. Addressing this question on customers' satisfaction is pertinent to increase the market penetration of these mobile services and achieve considerable financial inclusion.

RESEARCH OBJECTIVE AND RESEARCH QUESTIONS

The general objective of this study was to examine how MMT services met customer expectations resulting in customer satisfaction and retention. The main research question was how MMT services met customers' expectations and hence their satisfaction? The study had the following sub-questions. What were the uses of MMT services among customers? The study tried to identify the usage of MMT based on duration of usage by the customers, number of mobile phone companies used by customers to access the service, frequency of using a particular mobile phone company and its services, and purposes of visiting MMT service agents. Some of these questions were addressed in an earlier publication (Venkatakrishnan and Ngilangwa, 2013).

In addition, the study addressed the following questions. What were the benefits obtained from using MMT services among customers? How customers' satisfaction issues had been met by the use of MMT services? The study also attempted to bring out the levels of satisfaction through the use of MMT services among customers and compared it with many money transfer service providers. What were the challenges faced by customers using MMT service? The difficulty in adopting MMT, support, the levels of satisfaction with the support provided, and factors that led to difficulties, way to resolve the difficulties and suggestions on improving MMT services were considered.

EXPERIENCE OF MMT SERVICES FROM AFRICA

The study of MMT services in Uganda by Davidson and Leishman, (2012: 17) revealed that, 43% of mobile money users in Uganda were multi-SIMing. Much more mobile money users in Uganda showed that 12% Zain Zap users and 22% UTL *M-Sente* users had also used MTN Mobile Money. This implied that in Uganda customers of MMT used services of more than one mobile phone company. This study also revealed that for an average-size transfer, MTN Uganda charged \$1.44 for an off-net transfer and \$0.31 for a non-net transfer.

The study in Ghana by Tobbin (2011:66) revealed that there were large mobile phone money users (97%) with 49.3% belonging to more than one network provider. Similar to the situation in Uganda where 43% of mobile money users were multi-SIMing (Davidson and Leishman, 2012), in Ghana also there were results which indicated that, over 60% used a combination of MTN and one of the five network providers that were operating in Ghana. However, those who used MTN only accounted for 33% of the sample. Tobbin (2011) commented that, at the time of the study, MTN's mobile money and Airtel's ZAP were the only two mobile money transfer services available in Ghana.

According to the International Monetary Fund's October 2011 regional economic outlook for Sub-Saharan Africa, cited by Cobert et al (2012), it was found that "*M-Pesa* now processes more transactions domestically within Kenya than Western Union does globally" and "provides mobile-banking facilities to more than 70% of the country's adult population". It was also claimed that with more than 14 million customers and roughly 28,000 agents, the service had inspired over 108 telecom companies and banks to launch mobile-money deployments in emerging markets. The study conducted by Munyoki and Mutua (2011) on customer perception on *M-Pesa* services in Kenya found out that *M-Pesa* customers perceived the service as easily accessible, made bills payment easy, improved the living standards of people, had safe and secure transactions, were very fast in terms of transactions as compared to other forms of money transfer and were easily adaptable.

EXPERIENCE OF MMT SERVICES IN TANZANIA

Muwanguzi and Msambira (2011) stated that launch of the MMT services in Tanzania occurred in mid 2008 (as indicated by Bångens and Söderberg, 2011:8). The report released by International Finance Cooperation (IFC, 2011) showed how Vodacom has improved its strategies in MMT. Other mobile phone companies which offered this service were Tigo, as TIGO-PESA, Airtel as AIRTEL-MONEY and Zantel as IZY-PESA. In 2010, ZANTEL, started providing MMT under its trade name called *Z-Pesa* but now changed to *IZY PESA*. Millicom Tigo is another mobile phone company which offered MMT services under the trade name of Tigo *Pesa*. Although Tigo *Pesa* was new in the world of MMT, since its launch had offered cut throat competition to the old companies. Within two years of operation of Tigo *Pesa*, many people have adopted it and even its agents were found everywhere both in Urban and Rural Tanzania.

According to Elinaza (2012: 1-2), MMT has proved to be an easier and best mode of paying dividends, based on CRDB Bank experience. Records showed that 19.26m/- worth dividends were paid through mobile banking. The payments through mobile phone experienced a zero per cent of non-collected dividends compared to other means such as bank accounts and cheques. This was the easiest, safest and fastest means of paying dividends compared to the traditional means. It was documented that mobile phone transfers reached even the remotest shareholders without extra costs including travelling to receive and cash the cheques.

Rasmussen (2011: iv) claimed that, in Tanzania, like other developing countries, people have adopted the system of MMT automatically. This was found to be due to the fact that many Tanzanians living both in rural and urban were subscribed to mobile phone use. It was further indicated that MMT had become the fastest growing industry. Bångens and Söderberg (2011:7) and Porteus and Wishart (2006) mentioned that banks were also offering mobile services. But it was found in general that, they tended to offer mobile solutions as an additive channel, hence customers got "a new door" to the same services (or similar) as they would have received over the counter.

It was found out that 49% of Tanzanians used MMT. The increase in use of MMT was plausible due to its reliability and its procedures were not complicated as those found in other similar service providers. More statistics indicated by Bångens and Söderberg (2011:8) showed that, there were approximately 1.5 million users and 6,000 agents in Tanzania.

As per AudienceScapes (2010), there existed a scope for even higher penetration where it would reach 2.75 million MMT users in Tanzania by 2012. It was indicated that slightly more than 13% of customers said that they used mobile money services for sending money to other people, either in Tanzania or in another country. It was also found that, nearly 24% said they used MMTs for receiving money. In view of the above, it was revealed that in aggregate; nearly 30% of Tanzanians either sent or received money transfers, or did both. Based on how many times they sent money, 34% of money senders did so at least once a month and 56% at least once every three months. However, other uses of MMT were found to be "buying food". The same study indicated that other purpose mostly used in Tanzania was paying for school fees and supplies.

BENEFITS OF USING MMT SERVICES

It has been found that, one can get MMT service at the shop where other commodities were sold. Moreover, it had been claimed that many people subscribed to MMT because apart from serving rich and educated people, it also favored marginalized, especially the poor and less educated people, "technology laggards". Findings from various studies revealed that customers were satisfied because these services saved time, not demanding many documents, charges were low, had the ability of buying airtime, and balance inquiry. Moreover, people preferred MMT because when they went to the *wakala* (retail agent) for services there was no queue compared to banks that served customers at the counter. Apart from that, people preferred using MMT because the charges of the service (tariff) were very small compared to the bank that served customers at the counter. For example, the MMT tariff obtained from Airtel provided in Table 1 shows the tariff for this service.

TABLE 1: DIFFERENT MMT TRANSACTIONS AND CHARGES LEVIED BY AIRTEL TANZANIA, 2011

Details of transactions	Range (Tshs)		Fee (Tshs)
	Min	Max	
Deposit Money	1,000	500,000	FREE
Sending Money	1,000	500,000	200
Withdrawal by Registered Users	1,000	9,999	500
	10,000	19,999	800
	20,000	49,999	900
	50,000	99,999	1500
	100,000	199,999	2000
	200,000	299,999	3000
	300,000	399,999	4000
	400,000	500,000	4800
Send Money to Non-Registered Users(Off-net)	1,000	9,999	700
	10,000	19,999	1000
	20,000	49,999	1100
	50,000	99,999	1700
	100,000	199,999	2200
	200,000	299,999	3200
	300,000	399,999	4200
	400,000	500,000	5000
Withdrawal by Non Registered Customer	1,000	500,000	FREE

Source: Airtel Africa 2011

CHALLENGES ON THE USAGE OF MMT SERVICE

Elinaza (2012: 1-2) indicated that even though mobile money transfer service reached even remote areas, there were some challenges regarding paying dividends through mobile phones including limitation of the amount to be sent. Moreover, it was found that due to amount limitation and the bank regulations, shareholders from cooperative societies, corporate, institutions-such as pension funds, and SACCOS cannot be paid through mobile phone.

UNCTAD (2012:10-11) in the study on mobile money for business development in East African Community (EAC), documented that, it is always more expensive to send money to a non-registered user than to a registered one. It was held true across all mobile money platforms in EAC. However, for registered users, the total m-transfer fee was split into a sending and a withdrawal component and shared between the sender and the receiver, making it appear cheaper to both parties. But for m-transfers to non-registered users, the cost was borne entirely by the sender. Further UNCTAD (2012), indicated that, the pricing mechanism seemed to encourage registered users to make more transfers amongst themselves (and presumably find another reason to stay with the provider) as opposed to non-registered users. In some platforms, for example, M-PESA, more money can be sent in a single transaction to a registered than to non-registered users.

RESEARCH METHODOLOGY

The study employed mixed methodology approach. Both quantitative and qualitative methods of collecting and analysing data were used. The study adopted cross-sectional survey design. All the data related to the variables of the study were collected at a single point of time. The sample for this study comprised total of 88 customers and 12 *Wakalas* (agents of mobile money services provided by the mobile phone companies) from Dodoma Urban, Tanzania. These participants were randomly selected. Representatives of four mobile phone companies were selected purposively due to their in-depth knowledge on the subject. Thus the total sample size was 104 for this study. Survey and interview methods were used for collecting primary data needed for the study. Structured questionnaire was used as a tool for data collection from the customers and agents (*wakala*) of MMT. Interview guide as a tool was used for representatives of Tigo, Zantel, Vodacom and Airtel mobile operating companies. A pilot test was conducted to test the validity of instrument (questionnaire) by administering it to a few selected users of the mobile money service at the study area prior to collecting data from the customers. Primary data for this study were mostly collected during May-June 2012. However, secondary data that were available after that period were also included in this research paper for providing the recent information on the subject.

STUDY AREA PROFILE

Dodoma, one of the fastest growing towns in Tanzania and the fifth largest urban area was selected for undertaking the study. Dodoma town is centrally positioned in Tanzania and is bordered by six districts namely: Chemba and Kondoa in the North, Chamwino, Kongwa and Mpwapwa in the East, Bahi and part of Chamwino in the South and West. The town is located in the rift valley falling from parts of Bahi. According to National Census 2002, Dodoma town had a total population of 495,800 people.

The town has been observed to be rapidly growing due to different reasons particularly the newly established higher learning academic institutions. Dodoma is also the capital of Tanzania. The Dodoma town's business area comprises large number of business establishments that cater to residents from rural and sub-urban areas in and around Dodoma who visit it for different business purposes including seeking MMT services provided by various mobile phone companies. This made the choice of the study location to be Dodoma Town.

SAMPLING DESIGN

The sample unit for this study was the Madukani area in the Dodoma town where all the customers interviewed were identified. Further, the agents and mobile phone company representatives from Tigo, Vodacom, Airtel and Zantel located in the area were contacted for the study. The sample size of this study comprised total of 88 customers and 12 *Wakalas* (agents of mobile money services provided by the mobile phone companies) for withdrawing and depositing the money. These customers were randomly obtained at the time when they visited agents who were providing services of MMT. Agents represented four mobile phone companies found in the study area namely, Vodacom, Tigo, Airtel and Zantel and they were randomly selected. In addition, representatives of four mobile phone companies were selected purposively due to their in-depth knowledge on the subject. This made the total sample size to be 104 for this study.

DATA COLLECTION DESIGN

The different methods and approaches of gathering information included; survey, interview and documentary review. Structured questionnaire was used as a tool for data collection from the customers and agents (*wakala*) of MMT services and interview guide for representatives of Tigo, Zantel, Vodacom and Airtel mobile operating companies. Secondary data were gathered from the offices of marketing officers from each mobile phone company and also from records completed by agents and from various journals, articles and internet. The combination of these sources of data was adopted for their suitability and ensuring accuracy of the results.

Before data collection, a pilot test was conducted for the tools used for the study. This was conducted by administering the questionnaire to the selected users of the mobile money service at the study area prior to collecting data from the customers. It was done so as to test the validity of the instrument (questionnaire) before actual data collection from the study area. All missing necessary information in the questionnaire observed during the pilot was incorporated into the questionnaire for increasing its validity and reliability.

DATA ANALYSIS DESIGN

Majority of data collected by the use of structured questionnaire were quantitative in nature. Therefore, before entering data into computer program for analysis, questionnaires were organized by coding so that they can be taken for further analysis. Responses for each question in the questionnaire were clearly screened to ensure clarity of responses on each questionnaire. Then data were organized further for analysis. With regard to the quantitative data, after coding, they were entered into computer program known as Statistical Package for Social Scientists (SPSS Version 16, 2007) for analysis. Analyses were done by the use of descriptive statistics whereby tables and figures of different variables in frequencies and percentage were generated.

Data obtained from interview were qualitative in nature. These qualitative data were edited, condensed and recorded in the note book as well as stored in electronic form. Then these qualitative data were analyzed by the use of content analysis method. The qualitative information from the mobile phone company representatives was summarized and judgments were made out of these summaries.

STUDY FINDINGS

USAGE OF MMT SERVICE BY THE CUSTOMERS

Data from the field revealed that majority of the customers, i.e. 56 out of 88 (63.6%) have been using MMT services for more than two years, while 26.1% of customers have been using this service for about one year; only 10.2% of customers have been using MMT for less than one year. It was also found out that 67% of the customers had been using the service of MMT provided by a single mobile phone services company and the remaining 33% had been using more than one company to access the service of MMT. Among those who used one company to access this service, 34.1% customers used M-PESA of Vodacom Tanzania, 21.6% used TIGO-PESA and 11.4% used AIRTEL MONEY. Those who used services of more than one mobile phone company amounted to 33% customers as they used TIGO-PESA, M-PESA or AIRTEL MONEY.

The study went further to identify the mobile-phone money transfer services company whose services were more frequently used by the customers of MMT services. Findings revealed that 46.2% used M-PESA more frequently, closely followed by TIGO-PESA which has been used frequently by 43.2% of the responded customers. Only 10.2% of customers used AIRTEL MONEY frequently. Querying further on what led these customers to use more frequently a particular company's MMT services, the finding showed that majority of customers, 48.9%, claimed that their company provided services more efficiently, while 21.6% of customers pointed out that their mobile phone company services were easily accessible and were available anywhere and only 9.1% of customers responded that their mobile phone company had more customers through which their business operated effectively.

BALANCE AMOUNT IN MMT ACCOUNTS

From the data obtained from the field for this study from the MMT customers, it was revealed that the amount of money kept in their MMT accounts varied. The money kept in these mobile-phone money accounts ranged from a minimum amount of less than 1000 Tshs and to maximum of more than 100,000 Tshs. A majority, i.e. 46.6% of customers kept less than 1000 Tshs as minimum balance amount in their MMT accounts; and with regard to the maximum amount of money, 36.4% of the customer customers could keep amounts ranging from 20,000 to 30,000 Tshs in their MMT accounts.

TABLE 2: MAXIMUM AND MINIMUM BALANCE AMOUNT IN MMT ACCOUNTS AMONG CUSTOMERS

Maximum balance amount of money			Minimum balance amount of money		
Amount in Tshs	Frequency	%	Amount in Tshs	Frequency	%
Less than 10,000	8	9.1	Less than 1000	41	46.6
20,000 -30,000	32	36.4	6000-10,000	39	44.3
31,000-50,000	21	23.9	11,000-50,000	8	9.1
51,000-100,000	15	17	Total	88	100
More than 100,000	12	13.6			
Total	88	100			

Source: Data collected from the field 2012

FREQUENCY OF USING DIFFERENT SERVICES THROUGH MMT

The study further analyzed the frequency of using various services through the use of MMT. The findings revealed that, funds transfer to own accounts and sending money to family/friends were always used by a majority of customer customers with 84.1% of them using it. Bills alert information service was always used by only 1.1% of the customer customers. And 13.6% reported to use funds transfer to own account service occasionally while 2.3% had never used this service. Further, the findings from the field indicated a majority of customer customers, 77.3% had never used MMT services for paying bills, 78.4% of customer customers had never used MMT for customer care inquiries services and 84.1% of customer customers also indicated that they had never used MMT service for reporting on improper transactions.

MULTIPLE USES OF MMT AMONG CUSTOMERS

Findings from the field show that a majority, 73.9% of customers did not use MMT for buying commodities; only 26.1% of the total composition of customers used MMT to buy commodities. Further findings revealed that, most of the MMT customers, i.e. 97.7% of them did not use MMT for merely sending money only, but they were using this service in many other ways. Only a few of the customer customers, i.e. 10.2% indicated that they were using MMT for just one purpose of sending money only. Data obtained from the field revealed that customers were using MMT for sending money, receiving money, utility bills payments and for both sending and receiving money. From these findings, it is revealed that a majority, 60.2% of customers used MMT for both sending and receiving money, other 17% used MMT for utility payments, while 11.4% of them were using this service for only receiving money, while the multiple purposes of utility bill payments, sending and receiving money were used by 9.1% of customers, and a mere 2.3% used MMT service for sending money only as indicated in the Table 3.

TABLE 3: VARIOUS USAGES OF MMT SERVICES AMONG CUSTOMERS

Uses	Frequency	Percent (%)
Sending money only	2	2.3
Receiving money only	10	11.4
Both sending and receiving money	53	60.2
Utility bill payments	15	17.0
Utility bill payment, sending and receiving money	8	9.1
Total	88	100.0

Source: Data collected from the field, 2012

TYPES OF UTILITY PAYMENTS USING MMT AMONG CUSTOMERS

The customers used to pay both pre and post paid bills for various utilities by using their mobile phone. People who used DSTV and STAR TIMES DECODERS could buy their pre-paid account credit using MMT. Electricity service providers (TANESCO) also allowed people to buy LUKU using MMT. Findings of the study show that 59.1% customers were using MMT services for paying bills to TANESCO, 13.6% customers were using MMT for DSTV subscriptions, while 15.9% of

customers were using MMT for buying airtime (postpaid) for services provided by the mobile phone companies and 11.4% were using MMT regarding higher education loan application. Table 4 provides the details.

TABLE 4: TYPES OF UTILITY PAYMENTS THROUGH MMT SERVICES

Utility payments	Frequency	Percent (%)
TANESCO – Luku purchases	52	59.1
DSTV registration	12	13.6
Higher education loan board	10	11.4
Prepaid transactions for airtime, STAR TIMES and DSTV services	14	15.9
Total	88	100.0

Source: Data collected from the field, 2012

ADVANTAGES OF USING MOBILE PHONE MONEY TRANSFER BY CUSTOMERS

By accessing, adopting and using an innovation, anyone might expect to gain something. An innovation can provide different services and customers are expected to evaluate and re-evaluate the services and finally can come out with some views towards the benefits obtained by using that innovation. According to the data obtained from the study area, many of the customers, 69.3% claimed that using mobile phone money transfer services saved time as not much time was spent during service delivery. Moreover, 10.2% of customers asserted that, it was possible to make transactions any time, and those who responded that transaction can be done anywhere, composed of 9.1% of total customers. Furthermore, it was found that 6.8% of customers indicated that MMT services increased transaction speed and only one respondent declared that it eliminates bureaucratic methods as the Table 5 indicates.

TABLE 5: ADVANTAGES OF USING MMT

Advantages	Frequency	Percent (%)
Increased transaction speed	6	6.8
Reduced transaction costs	3	3.4
Transaction can be done anywhere	8	9.1
Possible to make transaction anytime	9	10.2
Saves time	61	69.3
Eliminates bureaucratic methods	1	1.1
Total	88	100.0

Source: Data collected from the field, 2012

SATISFACTION ON TRANSACTION CHARGES LEVIED

With regard to the transaction charges levied for using the mobile money transfer services, the level of satisfaction of the customers when compared to the benefits received, most of the customers at 86.4% indicated that were satisfied with the charges levied for using mobile money transfer services. Only 13.6% customers indicated that they were not satisfied with the transaction charges levied. Their dissatisfaction was due to the reason that they claim that the charges levied were high.

OVERALL SATISFACTION ON USING MOBILE PHONE MONEY TRANSFER

The study went further to understand the overall satisfaction on using mobile phone money transfer services among customers. Information obtained from the field among the customers showed that most of the customers (92%) indicated that they were satisfied with the services. Among those who were satisfied, majority i.e. 60.2% of them indicated that they were satisfied, and 31.8% claimed that that they were highly satisfied with the services of MMT, while only 2.3% of customers where “neutral” as they had no opinion concerning the service of MMT. However, 5.7% of the customers indicated that they are dissatisfied as shown in the Table 6. Those who were highly satisfied or satisfied admitted that they would be able to recommend the service of mobile phone money transfer to others.

TABLE 6: CUSTOMERS’ OVERALL SATISFACTION ON USING MOBILE PHONE MONEY TRANSFER

Level of satisfaction	Frequency	Percent (%)
Highly satisfied	28	31.8
Satisfied	53	60.2
No opinion "neutral"	2	2.3
Dissatisfied	5	5.7
Highly dissatisfied	0	0
Total	88	100.0

Source: Data collected from the field, 2012

CHALLENGES FACED BY CUSTOMERS ON USING MOBILE PHONE MONEY TRANSFER

The study tried to understand the difficulties/challenges in adopting to mobile phone money transfer among customers, support needed, and different levels of satisfaction with the support provided, and factors leading to difficulties. They are presented below.

DIFFICULTY ON ADOPTING MOBILE MONEY TRANSFER

With regard to difficulty on adopting mobile money transfer among customers, the study revealed that 89.8% of the customers faced difficulties during switching to mobile phone money transfer. Only 10.2% did not face any challenge as shown in the Table 7.

TABLE 7: DIFFICULTY ON ADOPTING MOBILE MONEY TRANSFER

Difficulty in adopting MMT	Frequency	Percent (%)
Yes	79	89.8
No	9	10.2
Total	88	100.0

Source: Data collected from the field, 2012

For those who faced difficulty in switching to mobile money transfer, a majority of 55.7% customers indicated that they faced difficulty on how to make transactions, while 40.9% of respondents felt that when sending money, the receiver did not see any delivery report from the agents, and 3.4% did not know how to check balance from their mobile money transfer accounts. The Table 8 provides these details.

TABLE 8: REASONS FOR FACING DIFFICULTIES IN ADOPTING MMT

Reasons	Frequency	Percent (%)
Receiver of money did not see delivery report from agent	36	40.9
Problem on how to check balance	3	3.4
Not knowing how transactions are done	49	55.7
Total	88	100.0

Source: Data collected from the field, 2012

SUPPORT PROVIDED FROM MOBILE OPERATING COMPANY

As in any new innovation to the social system, a user of that innovation may encounter problems on adopting that innovation for the first time. Upon facing these problems, users might expect to get support from innovation / service provider. Therefore, this study tried to understand if the customers of mobile phone money transfer got support from mobile operating company when faced with difficulties in adopting mobile phone money transfer services. Findings from the field focusing on customers revealed that, a majority, at 71.6% of customers got support from mobile operating company/ representatives. But there was a question as to why 26.1% of them did not get support from mobile operating company or its agents.

TABLE 9: SUPPORT FROM COMPANY AND LEVEL OF SATISFACTION ON QUALITY OF SUPPORT

Did you get any support from mobile operating company			Level of satisfaction on the quality of the support		
Response	Frequency	Percent (%)	Response	Frequency	Percent (%)
Yes	63	71.6	Highly satisfied	12	13.6
No	23	26.1	Satisfied	35	39.8
Did not know where to get support	2	2.3	No opinion "neutral"	16	18.2
Total	88	100.0	Dissatisfied	17	19.3
			Highly dissatisfied	8	9.1
			Total	88	100.0

Source: Data collected from the field, 2012

Furthermore, there were 2.3% of respondents who did not know where to get support as indicated in the Table 9. As far as the level of satisfaction on the quality of the support, data obtained from the field showed that 39.8% of respondents were satisfied with the support provided by mobile phone operating company, while 13.6% of respondents were highly satisfied with the support, only 18.2% of respondents were "neutral" and had no opinion as displayed in the Table 9.

Some customers were not satisfied with the level of support. The reasons for their dissatisfaction stemmed from the unqualified staff that provided support and who were also non-cooperative. Of these reasons, 19.3% of respondents claimed that they were dissatisfied with the support provided by mobile phone company operators due to unqualified persons that provided support, while 9.1% of respondents asserted that they were not satisfied due to too much demand related to many documents.

INTERACTION BETWEEN RETAIL AGENTS AND CUSTOMERS

Customers of MMT visited MMT agent (*wakala*) for the first time for different purposes. Among the customers, 39.8% visited the agent for the first time to withdraw cash, 25% visited agent for the purpose of making deposit, while 18.2% visited agent for application of user's identity, and 14.8% of customers visited to check their balance in their phone (account balance inquiry). Only 2.3% of the total customers visited agent (*Wakala*) for the first time to seek advice on MMT. The number of visits by customers to agents ranged from one to more than three visits per month. Majority of customers, i.e. 45.5% visited the agents once per month, while 26.1% of customers used to visit agent twice per month and only 28.4% of customers visited them three or more than three times per month. The number of visits by the customers to the agents in general seemed to have increased. A majority, 55.7% of customers, agreed that their number of visits has changed and increased since they visited the agent for the first time. Only 26.1% of customers claimed that their number of visits has changed but decreased from the time they visited the agent of MMT for their first time. Only 18.2% of the total customers they had no opinion 'neutral'. For those who said that their number of visits has decreased, the findings revealed that several factors have been accompanied with such situation. Reduced capital (cash flow) was pointed out as the major reason by 13.6% of the customers for the visits decreased, unsatisfactory services provision by the agent was pointed out by 8% customers, and 6.8% of the customers indicated unreliable network connection.

With regard to information on whether the customers always used to go to the same agents on visits, findings from the field revealed that 51.1% of total customer customers claimed that they did not go to the same agent. The reasons indicated by these customers was that; there were many agents who provided services of MMT. With regard to 48.9% customers who claimed that they always used to go to the same agent, they mentioned that their agents were being accessible and having more customers through which money circulation and availability was more reliable as the reasons.

EXPERIENCE OF PROBLEMS IN USING MOBILE PHONE MONEY TRANSFER AMONG CUSTOMERS

While taking efforts to understand if customers have ever faced problems in using mobile money transfer, all customers declared that they had ever faced problems. In case of problems faced by customers on mobile phone money transfer, they informed that, they consulted others for help. Findings from the field revealed that, 45.5% of respondents consulted mobile operating company, while 38.6% declared that they consulted agents (*Wakala*). Only 15.9% of respondents consulted friends for help.

PERSISTENCE OF PROBLEMS IN USING MOBILE PHONE MONEY TRANSFER AMONG CUSTOMERS

The study also tried to understand if customers still faced problem in using mobile money transfer. Findings from the field revealed that 80.7% of the customers still faced problems in using mobile money transfer. Only 19.3% of them said that they were no longer facing problems in using mobile money transfer. The Table 10 provides the details.

TABLE 10: PERSISTENCE OF PROBLEMS IN USING MOBILE MONEY TRANSFER

Persistence of problems	Frequency	Percent (%)
Yes	71	80.7
No	17	19.3
Total	88	100.0

Source: Data collected from the field, 2012

For those who were still facing problems in using mobile phone money transfer, the study found out that, 21.59% of respondents each faced it due to type of mobile phone with complicated usage and living far away from agents (*Wakala*) premises. Problem of network failure was indicated by 17% of respondents, while 15.91% of respondents claimed that their problem was due to limited knowledge on the applications of mobile money, and 9% respondents were citing the technical barriers as the main problem. Further, 12.5% respondents felt that their problem was due to fear of potential for forgetting password. The remaining 2.27% respondents mentioned that their problems were due to poor knowledge on benefits of mobile phone money transfer. From customers, it was also found out that most of them (at 85.2% of customers) feared that there is a possibility of facing fraud in using mobile phone money transfer. Only 14.8% of the customers felt that there was no possibility of fraud.

SUGGESTIONS BASED ON MOBILE PHONE MONEY TRANSFER USAGE

Notwithstanding the above, the study went further to learn the suggestions on how to improve mobile phone money transfer services. Customers suggested the following to improve mobile phone money transfer services. Many of them, i.e. 35.5% suggested that more agents of mobile phone money transfer should be established, and those who suggested that there should be sustainable electricity supply constituted 23.9% of customers. However 21.3% of customers felt that it was the responsibility of the customers to maintain the confidentiality of their password. About 19.3% customers suggested that mobile phone money transfer should also reach rural people at their localities. The Table 11 provides these details.

TABLE 11: SUGGESTION FOR MOBILE PHONE MONEY TRANSFER SERVICES IMPROVEMENT

Suggestions	Frequency	Percent (%)
Sustainable electricity supply	21	23.9
People should safeguard their password	19	21.6
More agents of mobile phone money transfer should be established	31	35.2
Mobile phone money transfer should also reach rural people and localities	17	19.3
Total	88	100.0

Source: Data collected from the field, 2012

Further, the study revealed that most of customers who were using mobile phone money transfer services seemed to be satisfied and their expectations have been met. They suggested that mobile operating company should increase airtime promotion for customers as indicated by 35.2% of them. Payment of interests on the balance in their account to mobile money transfer customers was suggested by substantial customers, who constituted 45.5% of the customers. Finally, reduction of charges especially during cash withdrawal should be taken into consideration was pointed out by 19.3% of them as indicated in the Table 12.

TABLE 12: ADDITIONAL SUGGESTIONS TO IMPROVE MMT

Suggestions to improve MMT	Frequency	Percent (%)
Increase airtime promotion for customers	31	35.2
Provide interest to mobile money transfers customers on balance	40	45.5
Reduce charges especially during cash withdrawal	17	19.3
Total	88	100.0

Source: Data collected from the field, 2012

It was also found out that agents also face challenges when operating mobile phone money transfer services. These challenges included network failure, technical questions from customers which were beyond their capacity, low capital investment and low technical support from mobile phone operating companies.

Further, customers also faced difficulties on adopting mobile phone money transfer, and most of them have faced these difficulties. It has been found that customers got support from various persons who included friends, mobile phone operating companies and agent (*Wakala*). On the support provided, majority of customers were satisfied, and those who were not satisfied cited different reasons. The study revealed that, poor knowledge on benefits of mobile money transfer, limited knowledge on the applications of mobile money transfer, technical barriers, and problem of network was among them. A sizeable number of customers felt that there was a possibility of facing fraud in using mobile phone money transfer.

The customers recommended that sustainable electricity supply should be taken into consideration as this service needed regular electricity, more agents should be established especially in rural areas where there was limited banking access, and people should be careful with handling their passwords. Further, increase in airtime promotion, provision of interests to mobile phone money transfer customers for the balance in the accounts and reduction of charges especially during withdrawal should also be taken into account.

RECOMMENDATIONS

Based on this study, it is recommended that sustainable electricity supply should be provided as the mobile money service needs uninterrupted electricity availability. Appropriate and adequate technical support from mobile phone operating companies should be provided to agents (*Wakala*) for efficient and effective service delivery to the customers. More agents should be permitted to operate especially in rural areas where there is no banking access, and the customers should be trained to be more careful in handling their passwords. As an incentive for using mobile money transfer services, increase in airtime promotion, provision of interest to mobile phone money transfer customers on the balance available in their accounts and reduction of charges especially during withdrawal of money should also be taken into account by mobile phone operating companies.

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