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REVIEW OF LITERATURE

NEED/IMPORTANCE OF THE STUDY

STATEMENT OF THE PROBLEM

OBJECTIVES

HYPOTHESES

RESEARCH METHODOLOGY

RESULTS & DISCUSSION

FINDINGS

RECOMMENDATIONS/SUGGESTIONS

CONCLUSIONS

SCOPE FOR FURTHER RESEARCH

ACKNOWLEDGMENTS

REFERENCES

APPENDIX/ANNEXURE

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BOOKS

- Bowersox, Donald J., Closs, David J., (1996), "Logistical Management." Tata McGraw, Hill, New Delhi.
- Hunker, H.L. and A.J. Wright (1963), "Factors of Industrial Location in Ohio" Ohio State University, Nigeria.

CONTRIBUTIONS TO BOOKS

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

JOURNAL AND OTHER ARTICLES

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

CONFERENCE PAPERS

- Garg, Sambhav (2011): "Business Ethics" Paper presented at the Annual International Conference for the All India Management Association, New Delhi, India, 19–22 June.

UNPUBLISHED DISSERTATIONS AND THESES

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

ONLINE RESOURCES

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

WEBSITES

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

I T INFRASTRUCTURE IN CREATING POTENTIAL MARKETING OPPORTUNITIES IN INDUSTRIES: AN EMPIRICAL STUDY OF SELECT INDUSTRIES IN KARNATAKA

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ABSTRACT

Indian Industries is driven by rapid initiations and expansion taken by the Government of India to pace up with the global economic growth. Organizations today are adopting such systems to manage optimal IT infrastructure, so as to foster to dynamic needs of the Industry and the Markets. Karnataka today is among the Top five Industrialized States in the country. The achievements in promoting hi-tech industries while adopting IT infrastructure management in key sectors like Electronics, Telecommunication, Information Technology, Precision Engineering, Automobiles, Readymade garments, Bio Technology and Food Processing industries. The State has also witnessed considerable foreign direct investment (FDI) not only in Bangalore as well in other parts of KarnatakaTop line growth, reduced operational cost, increased demand to deliver customer value are all calling for effective use of information for competitive differentiation. This has been the top priority for the CEOs today. It is thus no surprise that the CIO's focus is surely shifting from techno-centric IT to Business or value-centric IT. To facilitate this journey, it brings together key IT services that address aspects of reducing cost, increasing agility, enabling transformation and creating the marketing opportunities for their business. This paper provides an empirical evaluation of the survey results, conducted in the different organization in Karnataka, providing an insight on the role of IT infrastructure in moderating industrialgrowth, and to provide an insight into the hindrances faced by them and steps that are initiated to improve the usage of I T service in the different industries in Karnataka.

KEYWORDS

IT infrastructure, dynamics, differentiation, techno-centric IT and value-centric IT.

INTRODUCTION

The word technology or technical know-how in today parlance has to do with all such methods the industries are adopting to bring about better efficiency in transforming the very way the people (customers or public) lead their life. Technologies significantly affect human as well as other animal species' ability to control and adapt to their natural environments. The human species' use of technology began with the conversion of natural resources into simple tools. Recent technological developments, including the printing press, the telephone, and the Internet, have lessened physical barriers to communication and allowed humans to interact freely on a global scale. Technology has affected society and its surroundings in a number of ways. In many societies, technology has helped develop more advanced economies (including today's global economy).

In information technology and on the Internet, infrastructure is the physical hardware used to interconnect computers and users. Infrastructure includes the transmission media, including telephone lines, cable television lines, and satellites and antennas, and also the routers, aggregators, repeaters, and other devices that control transmission paths. Infrastructure also includes the software used to send, receive, and manage the signals that are transmitted.

In some usages, infrastructure refers to interconnecting hardware and software and not to computers and other devices that are interconnected. However, to some information technology users, infrastructure is viewed as everything that supports the flow and processing of information. Infrastructure companies play a significant part in evolving the Internet, both in terms of where the interconnections are placed and made accessible and in terms of how much information can be carried how quickly.

Companies need to adapt and evolve their IT systems in response to the constantly changing business environment in order to strengthen their competitive advantage. Every aspect of e-business should be it the user interface, back-end system, technology or process, and must be designed and built for maximum flexibility which allows the organizations to quickly adapt to changes experienced in dynamic business environment reducetime-to-market. Every technologistcomprising of project managers, software architects, engineers, and user-interface specialists, should always be aware of the latest technological developments and processes, and continually seek innovative ways to leverage and deploy technological solutions to support in accomplishments of business goals. The business organizations should open up and try to be flexible in creating such technical architectures that would be geared to meet the business and technology needs of functional and operational management who would then drive the business towards goal accomplishments also providing for utmost delivery of quality and value to its stake holders.

UTILITIES OF TECHNOLOGICAL INFRASTRUCTURE

1) This provides for Market Integration through technological integration. Computer-based information systems can be employed, aiding in a better processing and storage of data. Marketing researchers can use such systems to devise better methods of converting data into information, and for the creation of enhanced data gathering methods. Information technology can aid in improving an KIS (Knowledge Information systems) software providing for improvement in company's marketing decision-making process.
2) Progression and developments in Information technology at a faster rate has leads to marketing managers being cognizant of the latest technological developments. Moreover, the launch of smart phones into the cell phone market is commonly derived from a demand among consumers for more technologically advanced products. A firm can lose out to competitors, should it refrain from noting the latest technological occurrences in its industry.
3) Technological advancements are facilitating to reduce the barriers existing between Countries and Regions these Geographical Integrations has made the entire world Virtually One Market. Via World Wide Web, firms are no able to quickly retrieve as well dispatch information from one country to another, without much restriction/hindrances. Prior to the mass usage of the Internet, such transfers of information would have taken longer time, especially if via snail mail, telex, etc.

Now there has been some debate as to whether IT infrastructure are very much relevant to developing industries as well as Countries focusing on rapid economic growth, the realized reality is that, the question is not whether, but how IT infrastructure can be made beneficial. IT infrastructure has high potential value across all sectors, in both public and private enterprises, and at multiple levels, from software businesses in urban areas, for example, to health delivery in

rural villages. However, the application of IT infrastructure may not always been successful, but challenges remains to tackle these difficulties and to resolve them. A further challenge with respect to IT infrastructure is how industrial people could have access to the updated information technologies for running their business and deliver economic benefits by using these IT infrastructures more efficiently and effectively.

I T INFRASTRUCTURAL MANAGEMENT

The IT infrastructure managements began with small-scale IT outsourcing from Bombay (now Mumbai) based IT companies whose information technology ventures included just supplying trained IT Professionals and Info-tech Solutions to Global Info-tech Enterprises. Even the import tariffs on the IT Hardware and Software were unreasonably high and software technology was not designated the status of an industry thus making them ineligible for Banking Finance.The information technology infrastructure in India has since then progressed even though it has witnessed a set- back in the late Eighties when the Government turned hostile towards the IT Firms in India and the Global Info-tech Conglomerates were forced to move out of India. Today the Indian software industry is a Multi-Billion Dollar Industry with record number of Employment and Recruitment Opportunities. The Info-tech Business Systems have solved the Job problem of many Indian Professionals. The Info-tech careers are among Top Recruitments in the Jobs Sectors in India.

INFRASTRUCTURAL REQUIREMENTS OF THE IT COMPANIES IN INDIA

The gradual booming of India's IT Sector in the last decade has been propelled by a Phenomenal Growth of the IT infrastructure in India. Indian IT industryis growing at a tremendous pace.IT companies of India require the **Exclusive Infrastructures**like Server,Router,Latest software's that should be updated from time to time, Skilled Professionals with suitable training aids, Skilled and Dynamic Manpower, Sound Network and Security Policies. Further, Major IT Companies of India are now investing in Internet Infrastructure to enhance their Revenues and Operational Efficiencies. The core area of focus of the major IT Firms has been Wireless Internet Access that aims towards introduction and development of e-commerce through mobile technology.

THE BUSINESS PERSPECTIVE

IT gives the name "The Business Perspective" to the collection of best practicesthat is suggested to address some of the issues often encountered in understanding and improving IT service provision, as a part of the entire business requirement for high in **Quality Management**. These issues are:

- Business Continuity Management describes the responsibilities and opportunities available to the business manager to improve what is, in most organizations one of the key contributing services to business efficiency and effectiveness.
- Surviving Change. IT infrastructure changes can impact the manner in which business is conducted or the continuity of business operations. It is important that business managers take notice of these changes and ensure that steps are taken to safeguard the business from adverse side effects.
- Transformation of business practice through radical change helps to control IT and to integrate it with the business.
- Partnerships and Outsourcing.

IT ISSUES

The issues aroundapplication and adoption of IT are inter-connected and has to work together to develop greater efficiencies and effectiveness in the delivery of IT services. Each issue mentioned enlisted below warrants a closer look at specific initiatives and projections toward its achievement.

- ***Collaboration & Leveraging of Resources****:* Part of effective resources management between IT service providers across the Industry and with the Organization is the clear demarcation between services and consistent handoffs for seamless and positive end-user experience. The result centrally will be increased focus to reduce burnout and more concentrated training.
- ***Funding IT****:* Funding constraints help manage internal expectations and raise priority of developing revenue generating services, especially from revenue sources outside the organization.
- ***Governance, Organization & Leadership****:* Strengthening and maturing of IT leadership and Governance levels at unique network management need to move toward more conscious IT spending, the seeking of synergies and increase responsibilities for the success of the institution, beyond the success of "silo" interests.
- ***Customer Service and Relationships****:* A consistent, accessible customer face of services is as important in building customer trust via the availability and reliability of what underlies the services. The same responsiveness and consistency of service delivery needs to be guaranteed across the user's spectrum.
- ***IT Quality Process, Standers & Controls****:* How services are delivered, how changes are prioritized, how releases to services are executed, tested and implemented, and how incidents are handled need disciplined process internally to achieve the quality that IT desires and that users would be like.
- ***Business Continuity & IT security****:* Security is not only an IT issue. Rising business continuity issues to institutional awareness is essential for IT success. Business continuity is only one part of a needed broad program of security best practice awareness.
- ***IT infrastructure****:* How the infrastructure of hundreds of servers and the voice, data and the video network or refreshed and kept current is essential to unique network management systems success, as well as strategies for creatively and cost effectively accommodating ever increasing demand.
- ***Identity & Access Management****:* Clear, unique, unambiguous credentials and authorizing of those using unique network managements systems is essential to state, local and organizational objectives.
- ***Scalable Architecture Components****:* IT expenditures can be best leveraged if, regardless of the department acquiring the technology, it is understood that all new technologies need to be able to be deployed organizations- wide. This extends to reducing customization in package applications to reduce maintenance and upgrade costs.

I T INFRASTRUCTURE AND INTEGRATIONSERVICES

Present day business operations are integral with the information technology that supports them in accomplishment of stated objectives. The business infrastructure for this has to provide a secure, resilient and flexible environment that enables execution of processes, applications and enterprise with systematic technological innovations. IT Infrastructure Integration services as such aims at **"Enabling Business Operations with High Performance Infrastructure Solutions"** through a comprehensive set of services to support the design, development, installation and operations of complex networks. Then IT Infrastructure services through a continuous life cycle of "Analyze, Design, Implement, Stage and Manage". Successful implementationof Turnkey IT Infrastructure projects in the various Industrial Segments such as Education and Corporate has brought this into reality.

INDUSTRY'S ROLE IN BUILDING MARKET LINKAGES (RURAL MARKET INTEGRATION)

To make an Effective Market Linkage, Industries have to act as an Engine of Market, which can generate a **Brand Image of the Rural Products**. This initiative of industries will strengthen the **Backward and Forward Linkages of the rural market**, besides, accelerating the innovations of the rural products. This strategy would definitelyprovide for a remarkable dividend to the industries &transform themselves as Sustainable Profit Making Enterprises.

Another very vital rolethese market linkages would provide is, for Agro-Based Rural Products, can become the 'dynamic contract farming'. Moreover, in the current era of Information Technology, Industry and Private Companies can also creatively use ICT (Information and Communication Technology) for building **Sustainable Marketing Linkages.** This approach creatively leverages Information Technology (IT) to set up a Meta-Market in favor of Small and Poor Producers/Rural Entrepreneurs, who would otherwise continue to operate and transact in 'un-evolved' markets where the rent-seeking vested interests exploit their disadvantaged position. ITC's**e-Chou-pal** is the best example in this context. Through creative use of Information Technology, **ITC's e-Chou-pal** has been

creating sustainable stakeholder value by re-organizing both Industries and Agriculture-Commodity Supply Chains Simultaneously improving the competitiveness of industries, then small farmer agriculture and **enhancing rural prosperity**.

MODERN MARKETING

At all points, the Modern Marketing System people have formed Associations and eliminated various middlemen in order to achieve more efficient marketing. Manufacturers often maintain their own wholesale departments and deal directly with retailers. Recent years have seen the development of wholesale clubs, which sell retail items to consumers who purchase memberships that give them the privilege of shopping at wholesale prices. Commodity exchanges, such as those of grain and cotton, enable businesses to buy and sell commodities for both immediate and future delivery. The number of customers, especially for durable goods, has been greatly increased by the practice of extending credit, particularly in the form of installment buying and selling. Customers also buy through mail-order catalogs (much expanded from the original catalog sales business of the late 1800s), by placing orders to specialized "home-shopping" television channels, and through on-line transactions ("e-commerce") on the Internet.

CUSTOMER ORIENTATION

In the Consumer-Driven Approach, consumer wants are the drivers of all Strategic Marketing Decisions. No strategy is pursued until it passes the test of Consumer Research. Every aspect of a markets offering's, including the nature of the product itself, is driven by the *Needs of Potential Consumers*. The starting point is always the consumer. The rationale for this approach is that there is no point spending R&D funds for developing products that people will not buy. History attests to many products that were *Commercial Failures* in spite of being **Technological Breakthroughs.**

A formal approach to this Customer-Focused Marketing is known as **SIVA (Solution, Information, Value, and Access).** This system is basically the four Ps renamed and reworded to provide a customer focus. The SIVA Model provides a demand/customer centric version alternative to the well-known 4Ps supply side model (Product, Price, Placement, and Promotion) of marketing management. Product→ Solution, Promotion→ Information, Price→ Value, Placement→ Access. If any of the 4Ps had a problem or were not there in the marketing factor of the business, the business could be in trouble and so other companies may appear in the surroundings of the company, so the consumer demand on its products will become less.

APPLICATION MANAGEMENT

I T Application Managementset encompass a set of best practices proposed to improve the overall quality of IT software development and support through the life-cycle of software development projects, with particular attention for gathering and defining requirements that meet business objectives.

SOFTWARE ASSET MANAGEMENT

Software Asset Management **(SAM)** is the practice of **integrating people, processes and technology** to allow software licenses and usage to be systematically tracked, evaluated and managed. The goal of SAM is to reduce IT expenditures, human resource overhead and risks inherent in owning and managing software assets. SAM practices include Maintaining Software License Compliance, then Maintaining Standard Policies and Procedures Surrounding Definition, Deployment, Configuration, Use, Retirement of Software Assets and the Definitive Software Library.

REMOTE INFRASTRUCTURE MANAGEMENT A TOOL FOR COST EFFECTIVE IT

Remote Infrastructure Management commonly has known as **RIM** insimple terms means managing Customers IT Infrastructure from low cost remote locations in adherence to various norms, specific guidelines to data security, meeting the service levels with high uptime for the customer's mission Critical IT infrastructure, quality service delivery and round the clock support. This further the adoption by all service level organizations as well as organizations that are carrying out their business at the Small Scale to adopt for reaping all the benefits with the help of shared services provided by the RIM service providers at the most economical price and help them to integrate their business with national and international markets.

NEW INDUSTRIAL POLICY – 2001(MISSION, OBJECTIVES &STRATEGY), GOVERNMENT OF KARNATAKA

Karnataka's Mission is to achieve an economic growth rate of 8% to 9% over the next decade by promoting the rapid growth of a market driven, knowledge based, efficient and competitive industrial sector. This will be done by providing industry access to **High Quality Infrastructure, Extending Institutional Support for Technology Up-Gradation**. The proposed Industrial Policy has therefore aimed to achieve an average industrial growth rate of 10% to 12% per year. The main objectives of this policy say's about Enhanced value addition in products and processes through rapid technology up gradation and provide Industry access to high quality infrastructure.In order to achieve the objectives the following strategy will be adopted.

- Providing for EnhancedPublic and Private Expenditure to build efficient and competitive Industrial IT infrastructure.
- Give impetus to technology up gradation by forging symbiotic and mutually beneficial institutional arrangements between Government Academic - R&D Institutions and Industry.

OBJECTIVES OF THE STUDY

1. To study the level of application of Information Technology in select business units around the study area.
2. Study the level of utilization of IT infrastructure within and one shared.
3. To evaluate the factors that determines the selection of level of IT infrastructure for the organizations.
4. To evaluate the problems faced by the existing IT infrastructure and the risk faced by adoption of the same
5. To appreciate the role played by the IT infrastructure for business transformation.
6. To draw necessary inferences from the study that would help in building requisite solutions for these organizations in utilizing the IT and its tools to optimize the business performance

SCOPE OF THE STUDY

This study focuses on assessing the determinant factors that influences the scope and nature of IT and ITES tools adopted by the selected organizations (both Manufacturing and Services) and administers to evaluate the performance of various IT and ITES tools that act as an integral part of their day to day activities and tries to highlight those factors that act as crucial determinants for assessing the scope of application of these tools in the industries.

SAMPLING TECHNIQUES INCORPORATED

For the purpose of this study Stratified Random Sampling is been incorporated to draw the responses using Questionnaire's and personal discussion with the Organizations where permitted.

STATISTICAL TOOLS USED

Simple Mean, and %ages, are used to study the nature and characteristics of the responses and to test hypothesis t test and paired sample t test are used (as x^2 can not be utilized as there are no equal distribution of responses) and spearman's correlations are used.

HYPOTHESIS TESTED

H_{a0} = Application of IT is independent of Need for its application
H_{a1} = Need for Application of IT drives the company towards application of IT and ITES in their process
H_{b0} = IT doesn't play any role in Business transformation
H_{b1} = IT plays a very important role in Business transformation

LIMITATIONS OF THE STUDY

The Study limits to a sample size of 46 respondent units only and the inferences drawn limits only to the samples surveyed and hence cannot be generalized

ANALYSIS OF DATA

The sample selected for the survey has representation of both Service sector and Manufacturing sectors, and Stratified Random Sampling technique is administered.

TABLE 1 - NATURE OF ORGANIZATION TO ITS LIFE

Nature of Organization	Life of the Organization			
	Less than 5 Years	5 to 10 Years	10 to 20 Years	Total
Manufacturing	8	6	4	18
Services	12	4	6	22
Consultancy		2		2
Others		4		4
Total	20	16	10	46

TABLE 2 - NATURE OF ORGANIZATION TO SCALE OF OPERATIONS

Nature of Organization	Scale of Operations		
	Large Scale	Medium Scale	Small Scale
Manufacturing	8	10	
Services	14	6	2
Consultancy			2
Others	2	2	
Total	24	18	4

TABLE 3 - NATURE OF ORGANIZATION TO LEVEL OF KNOWLEDGE OF IT

Nature of Organization	Level of Knowledge IT					
	Very Good	Good	Fair	Favorable	Not So Good	Total
Manufacturing	6	6	4	2		18
Services	8	6	8			22
Consultancy		2				2
Others				2	2	4
Total	14	14	12	4	2	46

TABLE 4 - LEVEL OF APPLICATION OF IT IN VARIOUS ORGANIZATIONS

Nature of Organization	Application of IT			Total
	Very High	High	Favorable	
Manufacturing	4	6	8	18
Services	6	10	6	22
Consultancy		2		2
Others	4			4
Total	14	18	14	46

From Table 3 and 4 it can be inferred that in case of Service Sectors the need and application of IT and ITES is very sound and further manufacturing sector surveyed opined that even though they have favorable attitude and knowledge on IT and ITES the application of these tools would be to an extent that would facilitate them in smooth functioning of the enterprise and doesn't undertake application at higher end due to its cost and feasibility for complete automation being very low, whereas the services which might include even the Consultancy and Others (allied businesses) where there functional efficiency purely depends on application of sound IT solutions that can help them in optimal delivery of quicker and quality services.

TABLE 5 - NEED FOR IT * APPLICATION OF IT

		Application of IT			Total
		Very High	High	Favorable	
Need for IT	Very Essential	6	8	8	22
	Essential	8	10	6	24
Total		14	18	14	46

When we make a comparative evaluation between need and application of IT we could infer that even though IT requirements have been a very essential factor for integration among various stake holders for the enterprise less than 30% of the respondent units have application of IT at very high levels where as 60% of the respondent units have favorably high level of application at their organizational levels.

TABLE 6 - FACTORS DETERMINING THE LEVEL OF APPLICATION OF IT IN THE ORGANIZATION

	Scale of Operation	Organizational Objectives	Financial Soundness	Market Reach	Market Dynamics	Level of Knowledge	Policies of the Agencies	Others
	Frequency	Frequency	Frequency	Frequency	Frequency	Frequency	Frequency	Frequency
Yes	30	26	26	18	22	18	14	2
No	16	20	20	28	24	28	32	44
Total	46	46	46	46	46	46	46	46

The factors that determine the essence of IT are the level of business or the scope of their business operations, the financial soundness and the dynamic nature of the markets. Further the level of knowledge and policy measures initiated also plays a very important role.

TABLE 7 - SOURCES OF IT SOLUTIONS

Sources	Frequency	Percent
Own	16	34.8
Shared	18	39.1
Out Sourced	8	17.4
Own and outsourced	4	8.7
Total	46	100.0

This table reveals that most of the organization either have their own sources else utilize their shared sources either by the Governmental organization else from private participants who provide for customized IT Solutions for their clients. But at the same time they avoid outsourcing due to threat they would experience due to loss of strategic information to competitors that can help them to enhance the durability of Strategic advantage.

TABLE 8 - IMPACT OF AGENCY POLICIES ON APPLICATION OF IT

Response		
	Frequency	%
SA	12	26.1%
A	26	56.5%
Neither Agree nor Disagree	8	17.4%

At the same time the respondent units also opine that the agency policies (like government policies, taxation policies, Corporate Governance practices initiated by SEBI) also determines the level of application of IT in their organization (82.6% of the responses).

TABLE 9 - FACTORS DETERMINING FAVORABLENESS OF IT

	Protection of Critical Information		Assuring Credibility		Supply of true and fair information		Economic and Strategic benefit		IT for integrity among Stake holders only		Other factors	
	Frequency	%	Frequency	%	Frequency	%	Frequency	%	Frequency	%	Frequency	%
Yes	34	73.9%	24	52.2%	18	39.1%	22	47.8%	8	17.4%	2	4.3%
No	12	26.1%	22	47.8%	28	60.9%	24	52.2%	38	82.6%	44	95.7%

What factors determine the favorableness of application of IT and ITES is the ability of organization to protect the critical information and also assure the credibility of information which would provide for economic and strategic benefits to the organization which would propel its growth by integrating the organizational policies with its stake holders interest, and what delivers the future value is the ability to take instantaneous decisions in real time assuring economic benefits for its efforts.

TABLE 10 – FACTORS DETERMINING THE ROLE PLAYED BY IT AND ITES IN BUSINESS INTEGRATION AND TRANSFORMATION

	Organization Dynamics through IT integration		Government Responsibility to Provide Safety		ITES underutilized in Rural Sector		Reorganization through ITES in Rural Sector	
	Frequency	%	Frequency	%	Frequency	%	Frequency	%
SA	24	52.2%	4	8.7%	8	17.4%	16	34.8%
A	18	39.1%	38	82.6%	24	52.2%	20	43.5%
Neither Agree nor Disagree	2	4.3%	4	8.7%	8	17.4%	2	4.3%
DA	2	4.3%			6	13.0%	8	17.4%
SDA	0	0	0	0	0	0	0	0

From this table we can infer that IT and ITES provides for integration among the stake holders and government should also take up necessary steps in developing a mechanism that can provide for safety to the customers and the organization in terms of data security, credibility of information. And the globally realized truth is that the rural markets has the major potential as (in India more than 75% of the population stay in Rural Markets) which call for proper integration of Urban and Rural Markets that can help the organization in propelling growth by optimally utilized their opportunities in the Rural markets. Further the IT and ITES in Indian Market are favorably well developed but underutilized due to either Lack of Knowledge or due to huge cost factor.

TEST OF HYPOTHESIS

H_{a0} = Application of IT is independent of Need for its application

H_{a1} = Need for Application of IT drives the company towards application of IT and ITES in their process

PAIRED SAMPLES STATISTICS

	Mean	N	Std. Deviation	Std. Error Mean
Need for IT	1.52	46	.505	.074
Application of IT	2.00	46	.789	.116

PAIRED SAMPLES CORRELATIONS

Need for IT & Application of IT	N	Correlation	Sig.
	46	-.112	.460

PAIRED SAMPLES TEST

	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Need for IT - Application of IT	-.478	.983	.145	-.770	-.186	-3.300	45	.002

There lies a high degree of –ve correlation and as the calculated value of t is less than the t standard value at 5% level of significance we can infer and conclude that the application of IT is free or independent from this need. It becomes inevitable for every organization to adopt IT though the organization as it policy might not willing to adopt the same. This is because the environmental factors and their dynamism calls for every organization to adopt IT to pace up with the development of the industry.

ESSENTIAL OF IT FOR BUSINESS TRANSFORMATION

H_{b0} = IT doesn't play role any role in Business transformation

H_{b1} = IT plays a very important role in Business transformation

ONE-SAMPLE STATISTICS

	N	Mean	Std. Deviation	Std. Error Mean
Business transformation IT essential	46	1.70	.963	.142

ONE-SAMPLE TEST

	Test Value = 0					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Business transformation IT essential	11.941	45	.000	1.696	1.41	1.98

ONE-SAMPLE TEST

	Test Value = 0					
	T	df	Sig. (2-tailed)	Mean Difference	99% Confidence Interval of the Difference	
					Lower	Upper
Business transformation IT essential	11.941	45	.000	1.696	1.31	2.08

Both at 99% and 95% Confidence Level t_{cal} value is more than the standard value and hence we can say that IT plays a very significant role in business transformation as it provides for better evaluation of opportunity with the help of market integration and thereby propels its growth.

SUGGESTIONS

1. There is a major demand for economical IT and ITES service providers which calls for these organizations to take up initiatives for developing customized software solutions that can facilitate all the sections of the Industries to Capitalize on potential opportunities available in the markets.
2. IT and ITES facilities will have to directed to various selected market niches by educating and orienting the customers/clients regarding the application and their potential utilities
3. Though India is a major exporter of IT and ITES solutions abroad which no doubt has significantly contributed towards Economic Growth and Development and also has created Employment opportunities for its inhabitants, there lies a great potential in unexplored Indian markets where either due to huge cost or lack of skilled manpower requirements man Organizations have failed to adopt these solutions in their organizations. These service providers hence can utilize these opportunities by extending ITES solutions for such organizations which in turn would make them less exposed to International Economic risk and make them more self-sustainable.
4. No doubt the Government has taken up various steps in providing information security by introduction of Cyber Laws a proper surveillance mechanism has to be developed that can provide for continuous monitoring and provide utmost integrity and credibility for the data management process
5. Introduction of ITC's **e-Chou-pal** has created a major utility in the hands of the rural markets to integrate themselves with the urban market has facilitated in minimizing or removing the arbitrary opportunities in the rural markets assuring the delivery of optimum economic value in the hands of the farmers. Lots such tools will have to be developed by the IT organizations as a part of their Social Responsibility which could help in Rural Market Transformation.

CONCLUSION

With the help of information technology the business enterprises cut down their costs and maximize their benefits. Information technology plays a major role in reengineering of most of their business process. The speed, information processing capabilities, and connectivity of computers and internet technologies can substantially increase the efficiency of business processes, as well as communications and collaboration among the people responsible for their operation and management. IT has been used to assist in making competitive decisions to develop price to win strategies.

The growth in the IT sector is attributed to increased specialization, and an availability of a large pool of low cost, but highly skilled, educated and fluent English-speaking workers, on the supply side, matched on the demand side by an increased demand from foreign consumers interested in India's service exports, or those looking to outsource their operations. The CIO can use IT to evaluate Total Cost of Ownership Cost, schedule and effort of new IT projects in a systematic, logical fashion while capturing the corporate knowledge of its ongoing activities. It can help allocate scarce resources to the most critical requirements. In addition, it can help the organization to develop price to win strategies to seize new opportunities for new business and also realize economies of scale for hardware and software purchases for its own projects.

"There can be but one criterion for development in the coming years: how much high technology is used in the life of our common man." - Rajiv Gandhi

REFERENCES

ARTICLES FROM EDITED BOOK

1. AkhilRathi, e-entrepreneurship: Bridging the technology and gender divide, The Editorial Book of Excel Publications, Role and Challenges of Entrepreneurship Development, By Janakiram and RaveendraPP-03-10, 2010.
2. K Prashant, "Entrepreneurship and I T Issues" The Editorial Book of Excel Publications, Role and Challenges of Entrepreneurship Development, By Janakiram and RaveendraPP-144-153, 2010
3. Vijay N Rao, Opportunities and challenges in digital Entrepreneurship,The Editorial Book of Excel Publications, Role and Challenges of Entrepreneurship Development, By Janakiram and RaveendraPP-49-53, 2010.

WEBSITES

4. Jianbo Bai, Yuzhe Hao, Guochang Miao, (2011) Integrating Building Automation Systems based on Web Services, Journal of Software, Vol 6 At http://ojs.academypublisher.com/index.php/jsw/article/view
5. IT Infrastructure and Integration Services, at www.xentaqsys.com/itinfrastructure.html

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