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An Investigation into Trends, issues, and challenges in Knowledge Management for Educational Institutions: A methodical review

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Abstract
While the pressure of public accountability has placed increasing pressure on higher education institutions to provide information regarding critical outcomes, this paper describes how knowledge management can be used by educational institutions to gain a more comprehensive, integrative, and reflexive understanding of the impact of information on their organizations. The practice of knowledge management, initially derived from theory and practice in the business sector, has typically been used to address isolated data and information transfer, rather than actual system wide change. However, higher education institutions should not simply appropriate knowledge management strategies and practices as they have appeared in the business sector. Instead, higher education institutions should use knowledge management to focus on long-term, organization-wide strategies. Knowledge management strategies and practices can help organizations better identify their information-sharing and knowledge-generating activities, which, in turn, can help organizations capitalize on the iterative nature of knowledge-sharing activities.

Keywords: knowledge management, knowledge transfer, educational institutions

Introduction
Knowledge Management (KM) is regarded as one of the effective tool for today’s modern management. In a world of competition, every organization wants to build up new knowledge, sharing of existing knowledge and creates value from knowledge. The concept of Knowledge Management was evolved by management philosophers in early 40’s and later it has got greater importance because of technological advancements in the field of Information Technology. Based on the sociological system theory approaches there exists a specific differentiation between data, information, and knowledge. Data are always created by means of observation or
they are constructed. It may be measurable using instruments or recordable using procedures and have to be codified in some form. Data are available in huge quantity, but it is only a raw material, which does not mean lot and is of little value. A set of organized data will be termed as information. In brief Knowledge refers to any useful information, which creates value for the organization. Hence Knowledge Management focuses on developing a system which can create information and knowledge from raw data. Knowledge is the entirety of abilities that people use for solving problems. It comprises theoretical knowledge as well as general wisdom, attitudes, etc. It consists of individual and collective store of knowledge that is available for an organization to successfully fulfill its tasks. Knowledge is a fluctuating mixture of structured experience, values, context information and expert knowledge that all together offer a structural framework for the judgment and integration of new experiences and information. Knowledge is created and implemented in the brains of the knowledge bearer. It grows slowly, is shaped and canalized into different directions by means of hundreds of daily decisions and is the basis for all productive activities.

**Emerging perspective of KM**

According to management theories KM refers, managing of useful information to optimize the results of any organization and also it is considered as valuable Intangible Assets (invisible) for an organization. The knowledge management usually relate to competitive advantages of companies that successfully use knowledge resources to improve their position in the market, increase their profits due to knowledge accumulation etc. “In this society, knowledge is the primary resource for individuals and for the economy overall. Land, labor, and capital – the economist’s traditional factors of production - do not disappear, but they become secondary”

The latest advancements in the field of Information Technology have brought out new dimensions of KM, they are namely Management Information System (MIS), Artificial Intelligence (AI), Neural Networks, Data warehousing and Data Mining, Reengineering, Group Ware, Interactive IT Web Pages- E-Business, E-Commerce, On-line Transactions, Intellectual Capital etc. In addition to all these, the globalization and increasing competition has raised the importance of knowledge management to the new heights.
**KM in educational institutions**

The growing importance of KM does not spare any field. It’s success is being felt in corporate business and industry. The non-profit-sector namely schools and colleges have not shown major interest for knowledge management interventions so far. Nevertheless, excellent results and attractive offers for students are also crucial for this sector, even though financial profit is not the center of interest. Therefore, efficient and successful knowledge management may improve the performance of education institutions in the nonprofit sector. “Terms like market, customers, products, etc. have to be modified accordingly”.

Therefore it is inevitable that, KM is equally important for nonprofit organizations, namely educational institutions. In general, teachers keep this knowledge to themselves, even though it could be crucial to other teachers and the entire college as an organization. This store of knowledge has to be collected, conserved, and made accessible to everybody in the “company” (institution).

**Importance of KM in higher educational programs**

Worldwide the higher education programs are heading towards application oriented educational patterns. The countries which are able to adopt applied educational programs have succeeded in the effort of managing Human Resource in an optimum manner. India is one of the fast developing countries, which needs to optimize its potential human resource, by way of giving best education and training. An adoption of KM in educational institutions will be more supportive to realize the vision of the nation in short span of time.

*Task and aims of knowledge management in educational institutions*

The term “knowledge management” is unknown to the classical science of education. On the other hand schools dispose of huge knowledge and experience potentials that often lie idle. In these institutions new pedagogical ideas are tested, good and bad teaching methods are well-known, difficult and eager students are daily topics for conversation, curricular demands and their realization are discussed, etc... Knowledge management must not be mistaken as a means for data processing and information exchange. Its task is the coordination and organization of personal and organizational knowledge.
• Shaping colleges as “learning organizations”

Colleges need organizational intelligence as well to successfully complete their tasks. According to Peter Senge five prerequisites are necessary to create a learning organization:

a) Personal mastery (search for new opportunities for development)

b) Mental model (discussion of mental models)

c) Shared visions (created by collective discussion and decision making)

d) Team learning

e) Systemic thinking

1. Acquiring External Source of Knowledge

Networking with other colleges or other national or international educational institutions is one promising way to organize knowledge. This would enhance the image of colleges and attract students.

2. Quality management, marketing, evaluation, organization development

All these have become important features within the education system that gets increasingly dominated by competition and other dogmas of market economy. Colleges are no longer only regarded as “organizations for learning” but “learning organizations” as well. The knowledge management is closely connected to the concept of the learning organization. This is based on the willingness and ability of organization members to learn.

3. Continuous learning process of Teachers

This would enable institutions to carry out knowledge management effectively. It consists of the continuous interaction with its environment, the integration into a network and all individual experiences. In this way new knowledge is created which can successfully be integrated in the already existing system.

4. Sharing of Knowledge by Teachers

The teachers of the institutions have to learn to share their knowledge, to make it available to the system and to all members. So it is decisive if an organization succeeds in creating communication and information structures that favour the improvement of the organizational knowledge basis by individual and organizational learning processes. Organizational knowledge is created by community of practice that exists independently of particular persons or groups.
Knowledge management has to make sure that within a college this systemic knowledge based on a common context is kept vital and enriched over time to create an “intelligent organization” that can rely on an independent collective mind

**General considerations for innovations in educational settings**

The following four steps may be followed, to realize knowledge management strategies successfully within the organization culture of a college.

1. **Motivation for accepting changes**
   In this phase the necessity for changes and the readiness to agree on modifications has to be reached within a college. Everybody involved has to be assured of “psychological security” that enables him/her to try new approaches, experiment and be allowed to make mistakes within this phase of orientation. Mutual trust, problem diagnosis and the support of college leaders are essential for successfully completing this step.

2. **Development of new meanings for existing cultural concepts**
   The aim of this phase is to analyze the promoting factors in the existing college culture, especially of basic patterns and the reasons for the conservation and the reinforcement of these elements. Dysfunctional elements have to be localized to avoid negative impact on successful knowledge management.

3. **Internalization of new concepts and integration into the existing culture**
   In this phase the concentration lies on the implementation of measures and the embodiment of new structures and processes into the existing college culture. New rules have to be agreed on, the implementation has to be steered and its success monitored. During all this time the support of college leaders has to be guaranteed. Otherwise knowledge management activities like any other innovative ideas are doomed to failure. College Deans have to encourage and value such activities. This creates legitimacy and increases the motivation of teachers and other college staff.

4. **Evaluation of change processes**
   During this phase evaluation and assessment of cultural changes and the learning process of the organization are in the center of attention. Teachers have to be informed about the additional work load expected from them and be included into the development process right from the beginning. Their opinion has to be evaluated on a regular basis and taken into account. In this
way an intensive communication and reflection process is guaranteed and the identification with the new strategies by everyone involved can be secured. For a very active and committed involvement in knowledge management activities teachers should be compensated by either a financial bonus or a reduction in their teaching load.

**Implementation of knowledge management initiatives**

The exchange of thoughts and ideas by teachers has always taken place. But this has happened unsystematically, mostly in small groups and among colleagues who are friends. Conferences impart contents of new official directives and guidelines and teachers attend workshops, further education classes, etc. They sometimes do research, hold additional jobs, or work in community service. Every teacher does not only know a lot about his/her job but also has a lot of additional knowledge about many other fields.

1. **Determination of the demand for knowledge management activities in a particular college**

The prerequisites for the implementation of knowledge management strategies differ in each college and have to be modified according to the specific conditions and requirements of each institution.

2. **Definition of areas of competence and responsibilities**

College has to decide who shall be in charge of the development and implementation of knowledge management strategies. This could be individual teachers, a team of teachers, the college dean or even an external person or group. A team of committed teachers of different subject areas seems to be the most promising form for realizing a successful knowledge management strategy.

3. **Visualization of former knowledge activities and determination of new knowledge goals.**

It is not easy to learn from each other when cooperation has not been of major importance in a profession so far. Teachers could work together for the exchange and development of teaching and learning material, the development of college-based curricula, the cooperative design of lessons, the diagnosis and discussion of study habits of particular students, team-teaching at class or subject level. Knowledge management has to take care that this knowledge is collected and evenly distributed to everybody interested.
4. Implementation of knowledge management activities and use of knowledge management instruments

The College has to find out on its own a combination of which instruments will work best for its specific purposes. Recommendable instruments are the internet, the college-based intranet, databases, base management, job rotation for teachers and other college staff at different colleges to gain new perspectives and create knowledge networks, quality circles, communication platforms and communities of practice, trainings as a multiplier of knowledge, mentoring programs, or storytelling to transfer organizational knowledge by means of stories. Knowledge maps represent knowledge in text or image format. This shall facilitate the navigation process within the explicit knowledge of an organization, as knowledge maps visualize experiences, questions, discernments and understandings of a specific problem area and the specific knowledge of everyone involved.

5. Evaluation and assessment of knowledge management activities

Positive and negative consequences of knowledge management activities within a college have to be observed and discussed on a regular basis. The added value for an organization due to new and revised knowledge has to be monitored as well as the improved overall performance as a result of an increase in knowledge.

Conclusion

Supporting factors for successful knowledge management strategies are a knowledge-based and knowledge-oriented culture, the cooperation of the top-management, an adequate technical and organizational infrastructure, a clear vision, motivating elements, a certain amount of knowledge structure and multiple channels for knowledge transfer. Therefore the effective implementation of knowledge management would improve teaching, learning and general working conditions of the Country.

References


Improving Academia and Corporate Relationships

Prof N. Nagamani, Amity Education Group
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Abstract
“Corporations no longer consider themselves ‘donors’ to academia; they consider themselves ‘investors.'”

21st century has witnessed the dawn of a novel knowledge driven society with a significant leap in higher education. There is a rapid plea for higher education in the world today as it serves the society at various levels; the most important service is creation of intelligent and knowledgeable professionals who will in turn serve the society at large. Competition coexists with globalization. The capacity to distinguish competitors comes from skills, information, and knowledge and of course with a college degree. With this view in mind this paper will reflect on how academia and corporate relationship has become critical and prominent in order to succeed in this volatile, uncertain, complex and ambiguous world. This paper will look at issues of disconnect, challenges, how to build the synergy, what are the steps and purpose of collaborations between academia and corporate; how to connect and bridge the gap, how communication through technology should to be engaged more earnestly as a premeditated asset, an instrument, for the way we want universities to support tailor made learning rituals and enhance placement. It will look at learning experience in placements, how to recognize diversity, rapid changes, and unpredictable communication scenarios, how does one demonstrate appreciation, industry/institution mentoring and partnerships. In recent years corporate are looking at proposition of engagements with academia where shareholder value will augment by contributing to business goals, in such circumstances what are best practices both academia and corporate should adopt, what preparatory steps do they need to take…institutional support, integrated research development, one stop shopping for recruitments…few to mention. It would reflect contemporary thought and evaluations.

Keywords: Higher Education, Academia Corporate relationship, knowledge synergy.
Higher Education: Current Scenario

35.7 million students, 760 universities, 38,498 colleges, 13,19,295 teachers,…known to be one of the largest education systems in the world next to USA and China, governed by University Grants Commission, higher education is indeed the significant component of India’s growth story. It has been growing at a very fast pace, emphasizing tertiary education in science and technology; penetrating into other areas of discourse nurturing knowledge and skill development to suit the needs of the ever changing industry/businesses today. Amit Mitra, former Secretary General FICCI has said in one of his foreword “higher education has been a key factor for its ability to change and to induce change and progress in the society. Not surprising that in today’s globalized economy; it is the globalization of knowledge that will enable us to deal with the present and future challenges that is confronting us in every sphere of life, whether it is in environment, health or food security.”

21st century has witnessed the dawn of a novel knowledge driven society with a significant leap in higher education. There is a rapid plea for higher education in the world today as it serves the society at various levels; the most important service is creation of intelligent and knowledgeable professionals who will in turn serve the society at large. Competition coexists with globalization. The capacity to distinguish competitors comes from skills, adequate information and of course with a college degree.

Henceforth higher education sector is very crucial for the nation’s economic and societal advancement. Our population lump or otherwise called the Demographic Dividend is a major advantage for pushing macro-economic growth, but this will not be an automated transformation, Prof Prithvi Yadav, Director, GHSIMR & Ex Professor, IIM in his address at 8th ASSOCHAM International Educational Conference on “Imperatives for Change”, has said “strategic interventions and foresight in terms of encouraging investments in education and skills development by policy makers are needed to reap maximum benefits of demographic dividend.” Substantially right investments, transactional transparency, proper regulatory bodies, internationalization of education, right vision, effective leadership, and students centered initiatives will definitely reap results. Are we working towards these objectives?
Presently many Indian institutions and universities across have catastrophically failed in their attempt to produce valuable, skilled and knowledgeable talent to the society. The frequent need for specialized human resources by the businesses/industry is ever increasing and the supply does not complement the demand. This is majorly because, large segment of graduates lack in fundamentals, critical thinking, communication and analytical skills which are the necessary skills required by the businesses/industry today to contend at global level. Why is supply not complementing the demand? Is it because knowledge transfer is only theoretical? Is academia-industry interface critical? Are our higher education systems/policies overhauling this?

Academicians, policy makers and architects of higher education have been striving to interconnect universities and businesses/industry so that they identify their potential areas to effectively synergize and strengthen academia and corporate relationships. An emphasis on such a prerequisite for academia and industry interaction is also seen in our National Policy on Education. Perceptible progresses in spite of such efforts are not to be seen. Today, it is limited only too few educational institutions those have seriously made an effort or have been superficially using it for other purposes. What are, these issues of disconnect?

**Issues of disconnect between academia and corporate**

“A great University has a dual function: to teach and to think” said - Sir William Osler

How does one define academia-industry interface? Prof Vinay K Nangai and CashmiraPramanik, IIT Roorkee said “A good definition could be that academia-industry interface is characterised by the interactive and collaborative programme between academic institutions and industrial sector for the attainment of certain reciprocally beneficial purposes and missions. Interdependence between academia and industry should be intensified to fulfil necessity for sustenance and innovation in their own domains.”

Academia and industry interaction should be intensified by an interface where both collaboratively work together to achieve common goals. This interface can occur at diverse levels, from consulting to training, research to collaborations and many more to intensify sustenance. There is a requisite for such a shift, this relationship is unavoidable; they need to
facilitate each other to address newer challenges of the world and inclusive development of the country.

Industry and academia have always operated on different spheres. Increased globalisation, socioeconomic factors, demographics and technological changes have significantly impacted both these entities to such an extent that, the changing management archetypes and the dynamic business environment, have made it critical for these two entities to come closer and work together. Today in this knowledge driven economy they have to recognise their individual roles or face a mismatch in demand and supply of human resources which can be the foundation for commotion in the job markets.

Industry and academia are congruent to each other as industry delivers resources for academic sustenance while academic institutions, in turn, provide the intellectual capital to run the businesses. Today this interaction has become crucial because students are pursuing different professional and academic programmes and are expected to be well versed with working knowledge of these businesses. This calls for an increased level of knowledge transfer and interaction.

“Emeralds as well as glass will shine when the light is shed on them”— Japanese Saying.

Universities across should encourage this interaction especially with experts and professionals from the industry. This provides an opportunity for students to observe, espouse, acquire organizational traits, comprehend business environment and become aware of the prerequisites of industry. Universities should constantly keep track of the developments and adhere to their requirements and make students industry ready. As both these entities are interdependent, educational institutions and industry should strive to build multidimensional relationships with each other.

Although universities across have strived to develop well-thought-out, comprehensive, and personalized academic programs, it would become redundant without a complex interplay between academia and industry which ensures student persistence and success in industry. There
is a need for a shift in industry attitude, academic sphere, government machinery and last but not the least approach of these entities to facilitate, collaborate and synergises with each other to combat newer global challenges. Of course, it goes without saying that they will be facing a lot of challenges they need to overcome. What are these challenges?

**Challenges faced by industry and Academia**

A trend towards greater interaction and collaboration between industry and academia has widened worldwide today. But vital differences in priorities, perspectives, time horizons, vision, quality issues and mutual benefits are some of the major obstacles for successful industry-academia collaboration. These fundamental factors have thrown many challenges; few of them are as below

- Lack of Knowledge Transfer and Awareness
- No considerable management efforts
- No collaborative initiatives or clearly defined objectives
- Low level of engagement with industries/universities as partners
- Mismatch in terms of Identification, relevance and expectations
- Lack of training, coaching and evaluation systems/tie-ups
- No support mechanisms to share nor co-create technology
- Lack of participation in curriculum creation, not governed by laws and policies
- Lack of trust, interest and commitment
- Commercialization of ideas
- Cultural and Societal influences

Apart from the above there are other barriers from the government, such as lack of flexibility, delays in decision making, sanctions and funding, bureaucratic interference, and excessive control. Academicians in turn are disinclined to leave their comfort zones. They are unaware of the industry needs and are incapable to market their strength. Another important factor is inadequate incentives to academicians, low infrastructure and training facilities. All these factors raise some of the most astonishing questions in our mind today, few are mentioned below:
From the perspective of industry:

- Is Industry academia interaction merely a term cast-off to fill corporate and institutional brochures?
- Are there instances where the industry/corporate shave on their own interacted or collaborated with the academia?
- Have they shared the latest developments and requirements with academia to suit their needs?
- Has the industry tried to give opinions, be a part of the committees regarding syllabus and issues in the curriculum? Do they play a role in deciding the pedagogic structure?
- Has the industry/corporate tried to participate in training students? Have they thought of making, training tier two and tier three institutions as part of their CSR initiatives and share opportunities to them?
- Why is that, they are only looking at elite institutions for their talent requirements?

From the perspective of institutions

- How much of our curriculum conforms to industry related subjects?
- Are we building industry oriented competency in our students?
- Do we have proficient faculty, who has industry knowledge?
- Why FDPs and MDPs, have become more a branding/marketing propositions today in institutions?
- Is teaching today really a passion or a pass time or pocket money for many?
- Why is that, academicians don’t want to come out of their comfort zones and bring home real life experiences to students by joining hands with corporate/industry?
- Why are institutions not collaborating with industry/corporate to train their faculty and students?
- Why are no initiatives, taken by institutions to do combined research?
- Have we understood industry needs, their talent requirements and worked towards it?
- Do we really equip our students with basic values and business ethics?
- What are the lessons we are imparting to our students today?
How does one bridge this gap?

There is a huge gap between academia and industry collaboration, this gap can be removed when both industry and academia come forward to work hand in hand, integrate programmes, strategizes new and innovative ways to build relationships and trust.
In order to strengthen this interface, firstly renowned industrialists and academicians should frame policies, discussion bench and a committee; should lay down incentives schemes; should establish organized centers for training and excellence; should structure and reform internship programmes; collaborate alumni interaction; eminent faculty members should be given opportunity to work on industrial projects vice versa industrial experts should handhold classroom sessions; create research and development laboratories; conduct competitions; together customize and modernize curriculum to diffuse knowledge; develop incubation and entrepreneurial cells; should network through institutional connections; last but not the least together conduct eligibility tests, skill assessments to measure knowledge and practical application.

P K Doraiswamy in one of his article titled “The gains from industry – academia interaction” talks about the likely benefits of industry and institution interface:
For industry
“Using the academic knowledge base to improve industrial cost, quality and competitive dimensions, reducing dependence on foreign know-how and expenditure on internal R&D, updating and upgrading the knowledge base of the industry's professionals through management development programmes designed by the academia, the faculty's exposure to industry leading to improved curricula and widened and deepened teaching perspectives resulting in professional graduates of a high caliber to man industry.”

For Academia
“The satisfaction of seeing knowledge and expertise being used for socially useful and productive purposes, widening and deepening of the curricula and the perspectives of teachers and researchers; earning additional resources for a system severely constrained in this regard; securing training and final placements more easily for students based on the respect earned from and the relationship established with industry.”
Do Corporate engagements and collaborative steps exist? Yes they do.

Pantaloons Retail started courses with ITIs, a government-run institute as a CSR initiative in association with Nasscom, to develop skilled labour to help the company. Some other initiatives are ICICI’s “UDAAN”, Infosys’s “Campus Connect” program, L&T’s InfoTech “Sparsh” program, TCS’s “AIP”, MOU signed between NASSCOM and UGC. Another initiative ‘Vidyanidhi’, a database for Indian theses developed by Department of Library and Information Science, University of Mysore and Tata Institute for Fundamental Research. Another initiative “IIT Madras Research Park” to promote research and development in partnership with industry to assist new ventures and economic growth is by IIT Madras.

Bureau of Industrial Consultancy Services of Jawaharlal Nehru Technological University, Hyderabad functions as an interface with industry; UGC’s Centers of National Facilities - Indian Institute of Advanced Studies, Shimla; Western Regional Instrumentation Center, Mumbai; Crystal Growth Center, Anna University, Chennai; and mesosphere-stratosphere-troposphere (MST) Radar Center, Tirupati; IIM Ahmedabad has created entrepreneurial initiatives like Center for Innovation, Incubation, and Entrepreneurship (CIIE); Society for Innovation and Entrepreneurship (SINE) at IIT Bombay; Tech Innovation, Development, and entrepreneurship support at IIT Chennai and last but not the least Technology Incubation and Entrepreneurial Training Society (TIETS) at IIT Kharagpur.

These engagements are right steps towards academia-industry interface; they are suggestive of convergence of interests, extension programmes for development of knowledge, skills and real time exposure to students from all walks of life.

The Way Ahead

In a national level conference stressing on the need to stimulate the economy and promote growth enterprise, Haryana CM Bhupinder Singh Hooda has said “the government, industry and academia will have to come together to create employment opportunities, both in the public and private sectors”.

In a knowledge driven economy both institution and industry, need to create a strategy for industry and academia interaction and acknowledge the need for such an interaction in all areas of
concern. Both have to find ways to integrate through many skill building activities, few such gateways are

- Summer Internship Programmes
- Industrial Visits and Industry Affiliated Programmes
- Industry personnel as mentors and adjunct faculty
- Faculty as members of boards in industry
- Certification Courses and technology sharing
- Live Project and Dissertations
- Tailor made Training/Skill Building sessions
- Conference, Seminars and Workshops
- Provide Part Time Job Options
- In house IntegratedInstitution/Industry Projects
- Knowledge Dissemination
- Creation of Joint Research Alliance and Patenting
- Consultancy and Business Incubation Centers
- Collaborative Programs, Partnerships, Awards
- Corporate partnership with academic institutions
- Sponsorships and Financial investment for grooming freshers
- Industry/University Sponsored fellowships and MOUs

Prof. Shyam Kumar Gupta in his article on Industry-Academia Interaction for Long Term Benefitshas said “In India, we see many examples of industry helping academia. There are very good examples ranging across all sections of education (from elementary to the research level). TIFR and BITS Pilani easily come to mind which have done us proud and have contributed significantly. These are shining examples which have done yeomen service. Indeed, TIFR has been the pinnacle of scientific research in India. There are many such examples, and some of their alumni are world famous today and shine on the international horizon. At international level, the best example that comes to mind is that of Stanford University.”
Pankaj Jalote, Dept of CSE, IIT Kanpur in one of his articles on the challenges of industry academia collaboration discusses different types of collaborations such as

**Producer-Consumer Interaction**
He states “a relationship that has existed for long between the two sides. This relationship necessitates some collaboration as the consumer has to ensure that the output of the producer satisfies the needs to a large extent… the industry to provide inputs back to the academic institutions regarding their perception or evaluation of their products.”

**Collaboration in Continuing Education**
“…the core competencies of academic institutions are teaching. And many institutes engaged in education at high end… Therefore, a natural collaboration possibility is for the academic faculty and institutes to conduct training in topics of interest for industry… Typically, in this form of collaboration, continuing education programs are offered which are designed for industry participants.”

**Collaboration in Research**
“…research can be considered as the activity of creating new knowledge. Though academicians in most good institutes engage in research, collaboration in this area is possible only if the industry has a need for research.”

Industry and academia alliance are premeditated to help students to cultivate healthy competitiveness, vocational training, self-awareness, job pertinent skills which would enable decision making. “The collaboration between industry and the academic world has always been an important but complex topic. Due to the rapid evolution of the business environment and the vast transformations throughout the academic realm, the subject is now even “hotter” than it has been.” We know that academia and industry have different objectives, interests, business models but they have to converge to reap mutual benefits. A close relationship between these two entities is inevitable.
Conclusion
The liberalisation policy has brought about a dynamic transformation not only in private investments but in education system as well; presently business and corporate productivity is totally dependent on the output these systems provide. Various education Commissions, National Educational Policies emphasised and have recommended industry/academia interactions. Many have started engaging with industry, management institutes have envisioned at providing sophisticated human resources and concentrated on contributing quality professionals to industry. But this transformation has transpired only in few private universities and not percolated to the entire education system. Indian educational institutions engagement with industry thus remains very timid and ceremonial than tangible visa verse Indian industry is myopically disconnected, if not absolutely dissociated from Indian academia.

Nevertheless, industry and academia must trail their individual goals and distinguish their respective terrains. Both should resist striding into each other's domain, vigorous interaction based on deference and robust synergies at every level would be appropriate.

The past decades have seen unpredicted change, be it research funding for academia; lecture from opinion leaders; trends and practices; designing the course curriculum; value added programmes; project sponsorships and consultancy; creation of employable students; faculty engagements, infrastructure, pedagogy in line with the industry’s requirements; institutionalization; FDPs, panel discussions; awards and accreditations and others, collaborations.

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**A Study on Awareness of GST among Customers with Reference To Customers Residing At Ramamurthy Nagar, Bangalore: An Attempt to Transfer Knowledge of GST**

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**Abstract:**  
Tax is levied with the intention of collecting tax revenue from the people as their contributions towards the expenses of the Government and sharing the expenses of the Govt. is also a responsibility of people in the democratic form of Government and it becomes payable when a taxable purchase is made by a customer in a market. The Study is designed to attempt transfer the knowledge of various aspects of a new concept of GST which has been recently introduced by the Government. It is a research paper where by the information is transferred and collected through primary sources and that will be tabulated and analysed so as to come to know to what extent this new concept is understood by people concerned and their preparedness to share the expenses of the Govt.  
Random sampling method is followed to collect some information and to process the same with only a small number of respondents of the area specified.  
To sum up and to say an attempt is planned with the intention of transferring the knowledge about our new concept of One Market, One Nation and One Tax to the people who are very much concerned with the same, extending helping hand to the Government in building awareness among people and to be aware ourselves what is our role in doing this attempt as a responsible citizen of the country.  
**Keywords:** GST, Customer Awareness, Government

**Introduction**  
Tax is levied with the intention of collecting tax revenue from the people as their contributions towards the expenses of the Government and sharing the expenses of the Govt. is also a responsibility of people in the democratic form of Government and it becomes payable when a
taxable purchase is made by a customer in a market. In fact, a sales tax or VAT or now GST is an indirect tax to be collected from a dealer who has effected a sale but it is payable by customer who buys a product. The dealer may act as just an agent in collecting and paying the same to the Government but onus remains with the Government as well as the people of the state or a country to be aware of the details of our own land’s tax levies and its importance in Government’s spending and a tax which is paid by people concerned, will come back to them as a facility. For making this successful process, there is a need to build awareness among public. Goods and Service tax though a new name given to a bunch of indirect taxes yet, we know that this is the mixture of many indirect taxes that were in vogue in all the states and Union territories. Further, many aspects of VAT have been adopted in the interest of dealers as well as customers in general.

An overview of GST
Meaning of GST:
New Article 366(2A) of the Indian Constitution, defines Goods and Service Tax(GST) to mean a tax on supply of goods or services, or both.
GST is a destination based tax and levied at a single point at the time of consumption of goods or services by the ultimate consumer.

Constitutional Frame Work:

• A new set up by Government of India named as ‘GST Council’. GST Council constituted w.e.f. 12.09.2016
• The GST Council consists of
  • (a) the Union Finance Minister (as Chairman),
  • (b) the Union Minister of State in charge of Revenue or Finance, and
  • (c) the Minister in charge of Finance or Taxation or any other Minister, nominated by each state government.

Orientation to CGST, SGST and IGST

• Central Goods and Service Tax (CGST)
The Central GST (CGST) is expected to replace the existing central excise duty and service tax. CGST would also cover sale transactions.
• State Goods and Service Tax (SGST)
State GST would replace State VAT, Entry tax, Octroi, Luxury tax, Entertainment tax etc. SGST would be levied on services as well
IGST- Integrated Goods and Service tax
IGST (expected to be equal to CGST + SGST) would be levied on all supplies of goods and/or services in the course of inter-state trade or commerce.

Goods
Means every kind of movable property other than money and securities but includes actionable claim, growing crops, grass and things attached to or forming part of the land which are agreed to be severed before supply or under a contract of supply

Services
• Section 2 (102) “services” means anything other than goods, money and securities but includes activities relating to the use of money or its conversion by cash or by any other mode, from one form, currency or denomination, to another form, currency or denomination for which a separate consideration is charged.

Research Design
Scope of the study: The very scope of this study relates to collect the extent of the knowledge of customers and educate them about the importance of GST so that they will be aware and it is limited to customers of Ramamurthy Nagar, Bangalore.

Objectives of the Study
This study is taken up to achieve the following objectives:

1. To Know the basic knowledge of respondents about GST
2. To study their willingness to share the expenses of Govt. by paying taxes
3. To identify the areas they lack knowledge.
4. To impart knowledge about GST and its different versions.

Methods for data collection:
There are mainly two methods of collecting data- 1. Primary method and 2. Secondary method. Since this is study based on research by collecting information from the respondents, Primary method is used:
**Primary Data:**
Primary data is collected through questionnaire specially prepared for such purpose

**Secondary Data:**
Data which is felt necessary for sharing with the respondents is collected from published books, published e journals and Government notifications.

**Sampling Method:** Simple random sampling is followed to collect information. Population related to study is large in number, but a part of it has been taken for response.

**Sample Size:** Among various customers located in the selected area, only 10 respondents have been selected for the response.

**Research Instruments:-** The following are the research instruments:

1. Questionnaire
2. Tables
3. Graphs/diagrams

**Data Analysis and Interpretation:**
Table No.1 showing the elaboration of GST:

<table>
<thead>
<tr>
<th>Elaboration</th>
<th>No. of Respondents</th>
<th>% of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good and Simple tax</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Goods and Service tax</td>
<td>10</td>
<td>100</td>
</tr>
<tr>
<td>Government’s Sales tax</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Goods and Simple tax</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>10</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Chart-1 showing elaboration of GST
Interpretation: The analysis indicates that all the respondents know the elaboration of GST.

Table No.2 showing what IGST comprises of:

<table>
<thead>
<tr>
<th>Combination</th>
<th>No. of respondents</th>
<th>% of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) SGST and CGST</td>
<td>6</td>
<td>60</td>
</tr>
<tr>
<td>b) UGST and SGST</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>c) CGSand UTGST</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>d) CST and SGST</td>
<td>2</td>
<td>20</td>
</tr>
<tr>
<td>Total</td>
<td>10</td>
<td>100</td>
</tr>
</tbody>
</table>

Chart No-2 showing what IGST comprises of:
Interpretation:
The above analysis indicates that majority of the respondents are aware of what IGST consists of.

3. Showing the date of implementation of GST in India:

<table>
<thead>
<tr>
<th>Date</th>
<th>No. of respondents</th>
<th>% of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>01/06/2017</td>
<td>2</td>
<td>20</td>
</tr>
<tr>
<td>01/07/2017</td>
<td>3</td>
<td>30</td>
</tr>
<tr>
<td>01/01/2018</td>
<td>2</td>
<td>20</td>
</tr>
<tr>
<td>01/09/2017</td>
<td>3</td>
<td>30</td>
</tr>
<tr>
<td>Total</td>
<td>10</td>
<td>100</td>
</tr>
</tbody>
</table>
Interpretation:
The above analysis indicates that only three respondents know the date of implementation GST in India. The date of implementation was 1-07-2017

4. Showing the elaboration of SGST.

<table>
<thead>
<tr>
<th>Elaboration</th>
<th>No. of respondents</th>
<th>% of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>State Goods and Service tax</td>
<td>8</td>
<td>80</td>
</tr>
<tr>
<td>Service Goods and State tax</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>Simple goods and Service tax</td>
<td>1</td>
<td>10</td>
</tr>
</tbody>
</table>
80% of the respondents know the correct form of SGST and remaining 20% are unaware of the elaboration.

5. Showing the house in which GST Bill was passed

<table>
<thead>
<tr>
<th>House</th>
<th>No. of respondents</th>
<th>% of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>In Lokasabha</td>
<td>6</td>
<td>60</td>
</tr>
</tbody>
</table>
1. Chart-5- Showing the house in which GST Bill was passed

<table>
<thead>
<tr>
<th></th>
<th>No. of respondents</th>
<th>% of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>In Rajya Sabha</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>In parliament</td>
<td>4</td>
<td>40</td>
</tr>
<tr>
<td>In State Assembly</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>10</td>
<td>100</td>
</tr>
</tbody>
</table>

Interpretation:
From the above analysis, it is clear that only 40% of the respondents know where exactly the GST bill was implemented.

6. Showing the elaboration of UTGST:

<table>
<thead>
<tr>
<th>Elaboration</th>
<th>No. of respondents</th>
<th>% of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goods and Service tax</td>
<td>No. of respondents</td>
<td>% of respondents</td>
</tr>
<tr>
<td>----------------------</td>
<td>--------------------</td>
<td>------------------</td>
</tr>
<tr>
<td>Union Territory</td>
<td>9</td>
<td>90</td>
</tr>
<tr>
<td>Union Transport</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>United Territory</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>None of the above</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>10</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

1. Chart-6. Showing the elaboration of UTGST:

Interpretation:
90% of the respondents know the elaboration of UTGST and only 10% of the respondents is not aware.

7. Showing the purpose of introducing GST

<table>
<thead>
<tr>
<th>Purpose</th>
<th>No. of respondents</th>
<th>% of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
a) One Nation, One Market and One Tax | 9 | 90
b) Maximum tax collection | 0 | 0
c) Collection of more taxes on Goods and Services | 0 | 0
d) Maximum tax revenue to Central Govt. | 1 | 10
Total | 10 | 100

### Chart-7 - Showing the purpose of introducing GST

<table>
<thead>
<tr>
<th>Authority</th>
<th>No. of respondents</th>
<th>% of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) One Nation, One Market and One Tax</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>b) Maximum tax collection</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>c) Collection of more taxes on Goods and Services</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>d) Maximum tax revenue to Central Govt.</td>
<td>1</td>
<td>10</td>
</tr>
</tbody>
</table>

**Interpretation:**

The above analysis indicates that 90% of the respondents know the purpose of introducing GST.

8. Showing the authority by whom tax is collected when goods are sold in the state:
a) Tax Authority of State Govt.  | 6  | 60
b) Tax Authority of Central Govt.  | 4  | 40
c) Tax Authority of Union Territory  | 0  | 0
d) None of the above.  | 0  | 0
Total  | 10 | 100

Interpretation:
From the above analysis it shows that 60% of the respondents know correctly the authority by whom the tax is collected.

9. Showing the opinion of sharing expenses of Govt. By paying taxes.

<table>
<thead>
<tr>
<th>Response</th>
<th>No. of respondents</th>
<th>% of respondents</th>
</tr>
</thead>
</table>

32
9. Chart-9- Showing the opinion of sharing expenses of Govt. By paying taxes.

<table>
<thead>
<tr>
<th>Response</th>
<th>No. of respondents</th>
<th>% of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Yes</td>
<td>9</td>
<td>90</td>
</tr>
<tr>
<td>b) No</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>c) Some times</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>d) Never</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>10</td>
<td>100</td>
</tr>
</tbody>
</table>

Interpretation:
As the analysis indicates, 90% of the respondents are ready to share the expense of the Government.

10. Showing whether tax invoice is insisted for purchase made
The above analysis depicts that 90% of the respondents insist tax invoice for their purchases and only 10% say that it is not necessary for all the products.

**Findings of the Study**

The related to awareness of GST among customers of Ramamurthynagar, Bangalore, has the following findings:

1. All the respondents know the elaboration of GST.
2. 60% of the respondents know that what IGST consists of and 40% are not aware.
3. Only a few respondents representing 30% know the date of implementation of GST.
4. 80% of the respondents know the elaboration of SGST and that indicates majority of customers is aware.

5. 40% of the respondents only know house where GST bill was passed.

6. 90% of the respondents know the elaboration of UTGST.

7. Majority of the respondents representing 90% know the very purpose of introducing GST in India.

8. It is found that only 60% of the respondents know the authority by whom the tax is collected when are goods are sold in the state.

9. 90% of the respondents are ready to share the expenses of the Government by paying taxes/GST on their purchases.

10. Majority of respondents representing 90% insist tax invoice for their purchase that again shows that people have become wise by knowing the importance of bills.

Suggestions

1. It is advisable in general those customers should be aware of different versions of GST so that they cannot be cheated.

2. Awareness is required to be built among customers about the tax authority and rates of taxes also by conducting week end programs.

3. Dealers should also clearly indicate the details of GST paid so that customers will come to know that the tax is paid reaches Government.

4. Last but not least, it is necessary that the people who buy products should demand bills so that black money creation can be curbed.

Conclusion

Form the study conducted, it is concluded that people who are literate are well aware of the concepts of new tax system and depicted their responsibility as the citizens of Nation but the need of the hour is to educate people who are illiterate and literate but unaware of various aspects of GST so that they will be able to understand the fact they are paying taxes to the Government by their purchase made. The ultimate aim of this study is to tell the people that tax payment is not a burden but a contribution to their own well being during the days to come. It also amounts to the concern from haves towards have-nots in the society which in turn paves the way for the poor people to come to main stream by improving their standards of living.
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Digital Transformation of Financial Services in India: Challenges and Opportunities

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Abstract
In today’s era IT can transform entire world. Financial sector play an important role for the growth of the nation and entire world. Digitalization of financial services is a tool to reach the new heights in the financial sector. Now, the traditional banking is converted in to digital banking due to digital transformation. Various new business models are developed to overcome from the traditional system of banking for the industry transformation in India. But, still there is a need to focus more on digitalization of financial services in India, where the financial literacy rate is very low. With 1.342 billion people it is a big challenge to do the digital transformation of financial services. 66.8 % population of India lives in rural India with lack of digital connectivity and knowledge. The new age of digitalization focuses on greater productivity, efficient operational activities, less time and cost and greater capital efficiency.

This research paper deals with the challenges and opportunities in the digital transformation of financial services in India for business and customer. The paper will give a clear picture about the problems faced by the business and customer due to digitalization of financial services with providing opportunities. This help the policy maker and government to make strategies accordingly.

Keywords: Financial Services, Digital Transformation, Challenges and Opportunities

Introduction
Money is the strength of any economy and proper allocation and utilization of money is the success of an economy. A strong banking system is required for the management of money in an economy.

A successful banking system will meet the financial requirement of the economy and individuals as well. Banking system in India works for the country people. Banks needs to provide the best
and advanced services to the customers to enhance their customer base, hold their existing customer and offer customized products and services which are most beneficial and preferable to them. In today’s digitalization world every customer wants fast and efficient banking services. Most of the customers are technology savvy and it is very important for banks to adapt the latest technology, such that banks are able to catch up with the pace with which customer preferences changes. Adaption of newer technology is also critical to challenge competitor banks and other institutions in offering products and services in the market place.

In today’s era IT can transform entire world. Financial sector play an important role for the growth of the nation and entire world. Digitalization of financial services is a tool to reach the new heights in the financial sector. Now, the traditional banking is converted in to digital banking due to digital transformation. Various new business models are developed to overcome from the traditional system of banking for the industry transformation in India. But, still there is a need to focus more on digitalization of financial services in India, where the financial literacy rate is very low. With 1.342 billion people it is a big challenge to do the digital transformation of financial services. 66.8% population of India lives in rural India with lack of digital connectivity and knowledge. The new age of digitalization focuses on greater productivity, efficient operational activities, less time and cost and greater capital efficiency.

This research paper deals with the challenges and opportunities in the digital transformation of financial services in India for business and customer. The paper will give a clear picture about the problems faced by the business and customer due to digitalization of financial services with providing opportunities. This help the policy maker and government to make strategies accordingly.

**Research Objectives**

This paper focuses on the development, challenges and future prospectus of digitalization of banking services in India. Following are the main objectives of the research.

- To understand the development of digitalization of financial services in India.
- To study on the challenges faced by Indian Banking Services due to digitalization of financial services.
- To identify the opportunities available for digitalization of banking services in India.
Development of Digitalization in Banking Sector

The new age is the age of digitalization, which assist to improve the standard of living in the country with fast and improved services. India is a developing country and needs to adopt digitalization in every area of services to develop the economy. Banking sector is the strength of any economy which provides a financial support for the development of a country. The development of technology in Indian Banking System could be explained in four phases as mentioned below:

Mechanization Phase - 1980s: Banking sector in India embraced technology right from 80’s, a period which witnessed mechanization of transactions and processes. This period saw the introduction of encoders, standard cheques and (mechanization of) cheque processing post the implementation of MICR. This eliminated manual way of processing negotiable instruments particularly cheques and bank drafts.

Automation Phase – 1990s: A decade initial from early 90’s saw enormous effort towards computerisation of Indian Banking systems. All branches were computerised. This resulted in high productivity improvements and banks were able to enlarge their products and services presented to customers. Connectivity between branches was engaged up post computerization. This facilitated cross branch transactions and eventually covered the platform for anywhere banking. Introduction of Electronic Funds Transfer (EFT) was a milestone success, which facilitated seamless transfer of funds between customers, branches, banks and other institutions. Core Banking solutions were implemented which introduced flawless transaction processing between different departments within the bank processing various products and services. It also improved the overall efficiency of banking operations. Productivity of bank employees improved significantly. This decade saw the introduction of ATM as well, which changed the complete gamut of customers’ experience in banking for cash transaction and other services like ordering cheque book, account statement, etc. Tech savvy New Private Banks: New Private Sector Banks commenced business as a result of New Economic Reform of 1991. These Banks were recognized as Tech Savvy Banks which introduced advanced technology of the time. These banks not only brought in innovative technology, but also concerned customers from old banks into their fold. This bound the existing banks to focus on adapting technology in their firms as well.
Internet Phase - The confinement of new millennium (year 2000) transformed all facets of banking sector. Internet was adapted by banks and brought in all new experience of banking. Customers were not required to visit branches for many transactions. Further down the line, introduction of ECS and subsequently NEFT and RTGS facilitated rapid transfer of funds anywhere irrespective of the branch, bank, and location. Cross location funds transfer which took days then was transformed to be completed in hours and in some cases minutes.

Mobile Phase (2011) - In the last few years, we are witnessing development of technology revolving mobile. Mobile Banking is all together a innovative game. Customers experience banking just by touch of their smart phones.

A graph of Technology Developments in the Indian Banking Sector:

Challenges faced in Digitalization of Financial Services
Technology has changed everything that not everyone is able to keep pace with it. Banks have a rough time adapting to new world. In the recent past, Banks were busy with compliance with the regulatory requirements. Some were so busy that they failed to adapt to newer technology. However at the same period, banking firms have developed technologies that are disruptive in nature to the critical business of banking. The financial services industry continues to face negative public opinion, with its reputation increasingly damaged by numerous scandals - mis-selling, lack of transparency, and technology failures.

- **Risk of Security** - Outside risk such as hacking, sniffing and spoofing depiction banks to security risks. Banks are also exposed to interior risks particularly frauds by employees / employees in conspiracy with customers
• **Financial Literacy / Customer Awareness** - Lack of knowledge amongst people to use e-banking services is the foremost limitation in India.

• **Fear factor** - One of the major difficulty in online banking is preference to conventional banking method by older generation and mostly people from the rural areas. The thought of losing money in the online transaction is a obstruction to usage of e-banking.

• **Knowledge and Training** - Lack of sufficient knowledge and skills is a main limit for employees to deal with the innovative and changing technologies in banks. Training at all levels on the changing trends in IT is the requirement of the day for the banks.

**Recent trends in Mobile Banking**
The importance of mobile banking is increasing day by day because of its convenience. The following table mentioned the growth of mobile banking in India.

<table>
<thead>
<tr>
<th>Year</th>
<th>No. of Users (million)</th>
<th>Volume (million)</th>
<th>Value (`billion)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012-2013</td>
<td>12.96</td>
<td>25.56</td>
<td>18.21</td>
</tr>
<tr>
<td>2013-2014</td>
<td>22.51</td>
<td>53.31</td>
<td>59.9</td>
</tr>
<tr>
<td>2014-2015</td>
<td>35.53</td>
<td>94.71</td>
<td>224.38</td>
</tr>
</tbody>
</table>
Role of banks & Telco’s in expanding mobile banking outreach

- Require to create more public awareness.
- Banks need to observe mobile banking channel as an economy avenue (reduction of cash handling charges) rather than revenue making source.
- Banks and Telco’s effort jointly for addressing customer grievances.

There is a need for a re-orientation in opinion – How investment in technology is viewed?

- Cost savings or revenue generation
- Examination between the goals of profit versus development
- Proper implementation of Financial Inclusion
- Banks require to move themselves as niche players based on inbuilt strengths
- Changing consumer behaviour with respect to where and how he avail the financial services products.
- Creation of alternatives to traditional financial services organization – for banking, physical banks may not be needed.
- Avail powerful social media platforms – Banks should influence on the escalating status of interactive social platforms for effective commitment with their customers

Conclusion
At present there are numerous technologies, infrastructure and processes accessible to facilitate banks to become super-efficient and reliable banks. Adaptation and execution of extremely capital intensive worldwide technologies, infrastructure and processes are important in order to remain in front of the curve. Evolution and Interoperability related issues viz. from traditional banking to state of the art digital banking such as data integrity, authentication (including third party authentication) and confidence factors in a digital banking atmosphere are attainment significance. Digital banking provides significant solutions to bankers for their short term and long term business and technological requirements. Today, aspects such as superior customer happiness, satisfaction and value through integrated customer experiences, quicker output, countless banking volumes, financial inclusion, functioning efficiencies, scale of economy etc. are being sought after, by leveraging digital banking and mobile technologies. Becoming a
digital bank can improve efficiency and provide a better customer experience. Digital Banking will be the most preferred form of banking in the upcoming era.

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Evolving Customer Expectations in the Era of Aggregation

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Abstract
The traditional Tourism & Hospitality service providers have persistently faced the challenges of volatility and uncertainty in its operating environment. Along with, the nature of business has compelled it to be plagued with incessantly evolving and differing consumer attitudes towards its products and services offered. One very important factor is that people travel to and stay at the same hotel infrequently. This gives the businesses very little opportunities to get to know their guests. As a result, retaining the existing customers and gaining new ones have remained a temporal challenge. Added to their woes is the advent of a new breed of service providers whose business model is based on aggregation. Lesser investment, higher reach through usage of alternate distribution channels, lowered operational costs and wider array of customization and uniformity in quality and prices are clearly their keys to success.
Keywords: Aggregator, shared economy, customer/consumer expectation, customer satisfaction, customer psychology, evolving needs, competition, technology solutions

Introduction
As early as 1776, Adam Smith in his book “Wealth of Nations” attributed the success of a country’s economy to its citizens (who were consumers) by stating ‘consumption is the sole end and purpose of all production’. The intrinsic nature of the Hospitality and Tourism products - perishability, intangibility and heterogeneity coupled with front-end and a back-end human interface creates an incredibly challenging environment. Understanding and reacting to consumer needs and behavior becomes imperative in deciding the success or failure of a business enterprise. The global hospitality and tourism industry, by far, has always recognized this as a major attribute and has thus shown enormous focus on its customers which designing and developing products and services.
Customer expectations showcase the complex human nature. There are the basic explicit expectations that consumers have from a hotel or a tourism product hovering around expectations of performance from the facilities & services promised. Besides, there are implicit expectations that stem from publicity and promotional materials, product comparisons and performance histories of brands. With passage of time & advancements in technology, the consumers expect the performance standards to evolve dynamically to suit concurrent needs. This could mean a product/service enhancement that satiates the needs of self-esteem and ego. One major expectation that guests have from hospitality & tourism products is that of empathy alongside a high level of professionalism.

There are sometimes unanticipated service expectations (could be high or low, depending on what the customer initially expected from the service provider), or expectations that are more sensory than cognitive or sometimes a gap in the understanding of the expectations of a customer, the service provider and the influencer (Smith, 2018).

Customer expectations stem from a number of variables: their motivations to purchase, their value systems and cultural make-up, the social strata to which they belong, typologies and purchasing process. Added to these is their online behavior (Houston, 1986). In present times, the internet, mobile networks, the advent of e-commerce sites and innovative marketing techniques have added a new dimension to consumer behavior. While on one hand, there are consumers who have a Pandora’s box full of information regarding hospitality and tourism products complete with customer reviews, on the other hand, as a result of the magnitude of time spent on the Internet, the service providers too have a plethora of information that is capable of predicting consumer behavior. This is gradually proving to be a great threat to the traditional products and services provider who have been left with no other option but to make their product and service related information and purchase available online (Dixit, 2017).

The Hospitality and Tourism Industry is growing year on year. More people travel now, for business or leisure. The Travel & Hospitality sector has recorded a contribution of 10.6% to global GDP and has generated 3.6% of the world’s employment in 2016 (WTTC, 2017). In the Indian scenario, this sector was responsible for an additional 17.6% foreign exchange earning and managed to attract $10.9 billion as FDI (IBEF, 2018). Despite these heartening figures, it is also important to note that competition within the industry is becoming fierce everyday. The industry is characterized by a lot of dynamism and volatility. Constant changes in technology,
customer wants and circumstances of performance – economic changes, socio-cultural changes, reduced barriers to entry makes it more and more difficult to predict the outcome of efforts induced. Constant strategizing to beat the threats posed within and outside of the industry have compelled innovation; in the variety of products and services offered as well as in its distribution and promotion mechanism. Innovative business models that cater to the needs and the purses of the contemporary travelers are proving to be a huge threat to the traditional mechanism. Aggregation has become a buzzword and within the scope of this paper, the aim is to discuss one such giant international player – Airbnb.

**Aggregation model**
The emergence of a peer-to-peer platform in which the under-utilized inventory could be sold to customers under a single fee based platform gave birth to the aggregation model. A simple model wherein a business connects with several small service providers (be it accommodation, food & beverage, transportation or even experience!), partners with them and sells their services through its single platform. The products, employees or the premises never belong to the aggregator, since it works on the basis of a contractual agreement; they simply market these facilities and create visibility for small but potential businesses. They service 2 customers simultaneously – the service provider and the end user thus forming a bridge between the two. There isn’t a huge capital investment in creating products and services, instead the investment in made in creating a brand, partnerships across the world and hosting by far, the most user friendly website or a mobile portal. Some of the key elements of this model are standardization (in services across countries and locations for drawing parity against uniform pricing) and quality assurance. Moreover, to create a win-win situation, feedback is sought from both the partner and the end customer for service assurance and quality enhancement.

Technology has simplified the ability of a multitude of suppliers to enlist their services in searchable listings for consumers with extremely low overheads. At the same time it has also awarded them the flexibility to enlist or delist their inventories/services at a simple swipe on the app. While on one hand it is a model that has minimal barriers to entry and can include any and all types of accommodations under one banner, provide price variations and discounts, the major drawback is that aggregators who sell the accommodation product under their brand experience a lot of variation despite their attempts to standardize. The issues lie with the fact that some of
the service providers are independent accommodation owners, some hotel owners and some who have just an additional room in their houses to let out. Quality assurance thus becomes a key challenge (Modi, 2016). In the Hospitality and Tourism industry, some of the key players are Airbnb, Uber, Lyft, Zipcar, Boatbound, Homeaway, Wimdu, House trip and in India, Oyo rooms.

**Case example: Airbnb**

Airbnb started off as an idea for 3 friends to make a few quick bucks by offering air mattresses and home made breakfast to travellers who were not strapped for cash but came in at times when accommodation was scarce. Headquartered out of San Francisco, California, today, the brand is valued at $31 billion with presence in more than 65000 cities and 191 countries, 4.85 million listings and approximately 150 million guests using their services across the globe daily (Airbnb, 2018; Das, 2017). It allows the community to list and rent vacation spaces for a processing fee. They usually charge every guest service fees that range between 9% and 12% (depending on the type of service provided and length of stay). Simultaneously the hosts shell out 3% of the room revenue towards processing payments.

Their business model is associated with the concept of ‘shared economy’ and works on 3 basic assumptions: one, that the home owners cant afford to maintain their own homes and would like to rent out unutilized spaces to earn; two, there are travellers for whom a starred accommodation comes with an additional tab that they might want to utilize towards other expenditures incurred while travelling and third that there are a number of travellers who want to experience the real cultures and traditions of different communities and continents and while affordability is not a criterion, exposure to curated experiences are a concern. The businesses (rented accommodations) run on minimal regulatory controls in most locations and works on creating an extensive client-customer profile that encourages open feedback and mutual trust. Both the hosts and the customers are verified using their government issued credentials. Location photographs and product information is made available on the site and feedback of previous customers and their ratings shared to help hosts build online reputations and for the guests, to facilitate decision making. They offer 24/7 assistance to both hosts and clients. One unique provision for the hosts is that they offer a ‘host protection guarantee’ and ‘$1 million host guarantee’ against any
damages incurred on account of any guest (2015 data indicates 0.002% claims over $1000). The website allows secured payments in advance of availing the service (released to the host within 24 hours of completion of stay) thereby negating the possibility of mounting credits and businesses losses. Airbnb has a variety of accommodation listings. From rooms, entire apartments, villas, chalets, log cabins, boats to islands, tipis and igloos. In general, as a hospitality product, Airbnb is perceived as less expensive than hotel rooms. Studies indicate that costs savings while renting a private room against a hotel room are approximately 49.4% and against hiring an entire space is 21.2% (Bea, 2013 in Nguyen, 2014).

Airbnb has recorded exponential growth since its inception in 2008. Growth in its listings, growth in the number of users and of course in the amount of funding it received despite all the lobbying against its business rationale. This growth is attributed to several facts:

• The fact that it has paved the path for a new economic opportunity for middle class families, senior citizens, freelancers etc.
• It has helped bring in the much-needed revenue to cities and in areas that are beyond the usual tourist spends.
• On the advise of local hosts, guests have visited and spent in local shops (known usually to residents) for unique experiences.
• Fostered environmental sustainability by providing available resources and not creating new ones.
• The company runs a Global volunteerism campaign within which its employees receive 4 hours of paid time off every month to contribute towards the local community development. They encourage hosts to partner and their efforts had led to more than 16000 hours of community service in 2016.
• Airbnb has a program called Airbnb Open homes that provides free or very low cost accommodation for short stays to help people during times of need such as medical patients, low-income students or social entrepreneurs.
• Since the hosts are an intrinsic part of the community and not ‘business houses’, their homes were opened for free towards providing relief to disaster struck and displaced families and relief workers. 7490+ homes have been opened more than 16000 nights donated to this cause.
Impact of Airbnb on traditional hospitality businesses and local economy

An initial study conducted by the Boston University between the periods of 2003 – 2013 using variables such as hotel rooms available, Airbnb listings during that period, revenues generated, unemployment rate, inflation, population statistics revealed that a 1% increase in Airbnb listings led to a 0.05% decrease in hotel revenue. The study was conducted including upscale and luxury hotels, business hotels and budget hotels and the findings indicated that while the impact was felt strongly by the economy hotels, budget hotels and mid-scale hotels (decrease of revenue by 2.6%, 2.1% and 0.9% respectively) in the event that the listings doubled but negligible in luxury hotels (Zervas, Proserpio, & Byers, 2014).

The target market of the traditional hospitality businesses and Airbnb are different as on several occasions it has been studied that an increase in hotel occupancies have not impacted the occupancy at Airbnb listings in the same area. Also the Airbnb users tend to demonstrate a longer length of stay thereby ensuing a higher economic advantage to the region (HR&A Advisors, 2014).

What are customer expectations of contemporary hospitality businesses?

Some of the main attributes that a customer is looking for are location, price, service quality, brand name and security. While price is the forerunner, reliability and quality assurance are equally important. Prompt and courteous service, physical attractiveness of the hotel, ease of access and reputation of the hotel often contribute towards favorable purchase decisions.

Some of the guest feedbacks at Airbnb resulted in the following data1:

- 79% of guests who chose Airbnb because they wanted to live like a local
- 66% of guests said the environmental benefits of home sharing were important in their choice of Airbnb.
- 89% of guests said that they chose Airbnb because it was more conveniently located throughout the city than hotels
- 42% of guest spending happens in the neighborhoods where guests stay
- 53% of guests spent the money they saved using Airbnb at businesses in the cities and neighborhoods they visited.
- In a study conducted in Sydney, 31% of Airbnb guests said that they would not have been able to take the trip had it not have been for Airbnb.
These indicate that while the general expectations of price, quality service, location, privacy, safety etc. remain, the contemporary consumer is also looking at the environmental footprint their buying decisions are making, their innate requirement of understanding and experiencing the varied cultures and their humanitarian need to support the micro-economic structure of a location.

**The Way Forward**

The Hospitality Industry has always been very competitive. The increase in the number of service providers, low levels of product and service differentiation and low switching cost to the consumer have made the situation rather volatile, uncertain, complex and ambiguous. Therefore understanding customer expectations and strategizing towards profitability is essential.

“Information is the oil of the 21st century, and analytics is the combustion engine.” – Peter Sondergaard, EVP – Research, Gartner Inc. (Gartner, 2011)

Digitization has entered the business scenario and revolutionized the way trade is conducted. Today the customers across the world have access to the digitized space and for the marketers; there is an explosive amount of customer data. This is the age of the Customer. The customer has completely taken over the buying function due to their profound access to product and pricing information and wields a huge power over the service providers by sharing personal experiences and feedback on open spaces like social media sites, thus influencing the purchase decisions of others. Data, knowledge and insights to customer needs, psychology and tastes are the most strategically important components of business today especially so for the service sector. What worked previously in terms of consumer acquisition, engagement, retention or loyalty may not work at all now. Customer expectations exist across every decision stage that a buyer moves through - discovering the service product, exploration, comparison, buying, engaging and finally advocating. Understanding these expectations help companies personalize the marketing efforts towards customers. Traditional businesses can considerably alleviate the threat posed by online aggregators by focusing on creating a strong presence in the digitized spaces. Customers today, are accustomed to a lot of personalization as a result of their online shopping experiences. The CRM processes in hotels over the last 20 -25 years have been evolving to create and enhance customer relationships, however, ironically they have also resulted in impersonalization of
relationships. While the customer needs have been looked after, their emotional needs have not been catered to. Players in the shared economy space have cannibalized on this shift in the mindset from standard hotel rooms to a homier experience. The ability of a prospective guest to communicate directly, tell the host who they are, what they like, why they plan to book the accommodation allows the service provider to completely personalize the experience. Stocking up food of their choice, leaving small notes to local spots, charting a travel itinerary based on the guest’s experiential needs and even small efforts like the home décor providing a slice of the local cultural essence – all go a long way in satiating customer expectations.

Moving towards the use of Hospitality Analytics seems like a possible way forward. Improving occupancy rates, rates, yield, identifying the right marketing strategies and personalizing guest services are possible through the use of data analytics. Hospitality analytics can help predict the menu items a guest is likely to order or a tour itinerary that he/she may like to follow or the optimal rate that a guest may be willing to pay. For example, a study conducted by Gupta (2015) revealed that the Denihan Hospitality Group successfully uses IBM’s analytics program to sieve through large amounts of customer feedback data pertaining to room prices, average length of stay, preference of location etc. to analyze the reasons behind the purchase decisions.

**Conclusion**

For traditional hospitality business to remain competitive in the current scenario, the focus must clearly be on pricing strategies and creating a personalized experience for the customers. They must advocate leanings towards use of social media, booking platforms and other digitized spaces so as to make their offers available to a large segment of the global population. Technology solutions for making payments online in a safe and secure manner and providing a virtual connect with the brand to the customers will go a long way in deposing the threat. The industry in the current millennium is witnessing an incremented need of travellers to vacation. Work stress, increased travel options and destinations, exposure to a multitude of cultures through television, improved affordability etc. are all contributing to better business propositions to the entire industry. There is enough for everybody, the businesses must learn to keep their overheads low and innately understand customer needs and expectations and deliver accordingly.
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Strategic Analysis of Business Innovation and Technology adoption in Manufacturing Companies in India

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Abstract
Now a day’s manufacturing companies requires adopting innovation and technology to reap the competitive advantage to attract more customers. Strategic Analysis of Business Innovation and Technology adoption in Manufacturing Companies in India helps to improve the operational efficiency of the firms. The firms should adopt information technology adoption through web applications, Internet of Things and Kaizen activities in improving the organizational performance. Innovation in the business field can be more useful for the use of products in the business activities. This type of innovation will be helpful to access the next generation level systems; process and the service development are more useful to make sure of how every preferred technology is activated in the business field. Technology will always support and operate innovation this will be leading to the forum of processing in production.

The advancement in the technology and manufacturing will be helpful for creating high goods and the quality of the faster production of the goods in this way of intension will be defined as the production of more products at time with the processing of less expenses these products are manly used to produce more products where they are used to sustain in the competitive world. The esteemed needs has to satisfied by the customers based on the innovation of the new technology, those type of issues are to be followed by the top companies ,whenever the new production of product is introduced they has to be marketed in the marketing and those are used to be in form of technology. They are need to provide the products to the marketing process, those are use to be having the competitive processing.

Key words: Innovation, Technology adoption, Competitive advantage, Kaizen, Internet of things, Business analytics
Introduction
Information Technology (IT) has been one of the important factors to induce change in the environment. Manufacturing companies have experienced a period of intense innovation and use of technologies, critical elements to the pursuit of higher levels of performance and competitiveness; and they also say that there has been a corresponding recognition of the IT potential contribution to organizational success. Thus, IT made it possible to improve internal efficiency as well as companies’ innovation. As a result of such a new way of seeing and using information, many information systems were recognized as strategic because they presented positive impacts on the competitiveness of the companies that used them.

Objectives
1) To study the IT It’s impact on Manufacturing Innovation & Productivity in India
2) To analyze the managerial process and decision making variables in respect of Manufacturing companies performance.
3) To analyze the Manufacturing companies business innovations in project management
4) To suggest efficient and effective measure to improve the Manufacturing companies innovation through information technology implementation.

Hypothesis
\( H_0 \) - There is a negative relationship between IT factors on Manufacturing companies innovation and productivity
\( H_1 \) - There is a positive relationship between IT factors on Manufacturing companies innovation and productivity

Sample
The study had conducted by a multistage sample model with interacting 150 sample respondents representing from Executives, managers and consultants connected with manufacturing companies in India.
The results clearly illustrated that the initial four constructs adequately measured the impact of IT on manufacturing companies Innovation & Productivity work. Reliability was high, and the factorial invariance tests showed that, generally speaking, the evaluation model was invariable regardless the countries being studied or the levels of management.

**IT and Manufacturing companies Innovation & Productivity Model**

Figure 1, the conceptual model of this research details the constructs and investigates variables. In the first group, we have the information technology of the Manufacturing companies Innovation & Productivity work consisting of two other constructs. The first is the work process, based on Torkzadeh and Doll (1999) and Torkzadeh, Doll, and Koufteros (2005). It is composed of the following constructs: *productivity, innovation, customer process.*

Key variables constructed model:

![Diagram]

**Methodology**

Therefore, this study aims to measure, following an ordering scale, the intensity of IT benefits in professional activities from the point of view of its own users’ considerations.
Sample

IT and Manufacturing companies & Productivity Factors

<table>
<thead>
<tr>
<th>S. No</th>
<th>Description</th>
<th>Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Manufacturing companies Innovation.</td>
<td>0.926</td>
</tr>
<tr>
<td>2</td>
<td>Productivity Improvement.</td>
<td>0.852</td>
</tr>
<tr>
<td>3</td>
<td>Innovative ideas.</td>
<td>0.794</td>
</tr>
<tr>
<td>4</td>
<td>Generating of new ideas.</td>
<td>0.768</td>
</tr>
<tr>
<td>5</td>
<td>Create new technology performs.</td>
<td>0.842</td>
</tr>
<tr>
<td>6</td>
<td>Customer Service Quality.</td>
<td>0.822</td>
</tr>
<tr>
<td>7</td>
<td>Improve customer satisfaction in Banking.</td>
<td>0.869</td>
</tr>
<tr>
<td>8</td>
<td>Time saving in transaction process.</td>
<td>0.862</td>
</tr>
<tr>
<td>9</td>
<td>Mangement control in banking process</td>
<td>0.918</td>
</tr>
<tr>
<td>10</td>
<td>Management control performance</td>
<td>0.866</td>
</tr>
<tr>
<td>11</td>
<td>Management control audit</td>
<td>0.865</td>
</tr>
</tbody>
</table>

The IT influenced Manufacturing companies innovation and productivity factors such as

1) Manufacturing companies innovation, productivity improvement, generating new ideas, Innovation ideas, create new technology performs, customer service quality, digital marketing time save in transaction process and other management control variables were shown in the above table.

2) It relates to management control; Factor (2) relates to innovation; Factor (3) to customer satisfaction; Factor (4) to productivity. To check the reliability of the scale, Cronbach's Alpha of the instrument was calculated with eleven final variables, individually and by construct. Caution in relation to the estimated coefficient should be emphasized, so that no correlation was negative

IT in Manufacturing companies Decision-making process

<table>
<thead>
<tr>
<th>S. No</th>
<th>Description</th>
<th>Factor</th>
</tr>
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57
<table>
<thead>
<tr>
<th></th>
<th>New product decision.</th>
<th>0.915</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>New market decision.</td>
<td>0.862</td>
</tr>
<tr>
<td>3</td>
<td>Lending decision.</td>
<td>0.854</td>
</tr>
<tr>
<td>4</td>
<td>Project management</td>
<td>0.876</td>
</tr>
<tr>
<td>5</td>
<td>Customer services</td>
<td>0.916</td>
</tr>
<tr>
<td>6</td>
<td>Govt. Support</td>
<td>0.785</td>
</tr>
<tr>
<td>7</td>
<td>Product innovation</td>
<td>0.744</td>
</tr>
<tr>
<td>8</td>
<td>Marketing strategies</td>
<td>0.924</td>
</tr>
<tr>
<td>9</td>
<td>Technology services.</td>
<td>0.824</td>
</tr>
<tr>
<td>10</td>
<td>Manufacturing companies technology in future.</td>
<td>0.855</td>
</tr>
</tbody>
</table>

The analysis of results shows that majority of the factor score had highly showed a positive relationship with Manufacturing companies development.

**Relationship between Characterization and Respondent satisfaction**

The descriptive analysis of both basic instruments was performed by assigning the degrees of awareness of the benefits through the use of the Likert scale, ranging from "1" (very little), "2" (a little), "3" (neither little nor much), "4" (much) and "5" (very much). In below Table, the simple averages of the assertions can be seen as well as the weighted average of the constructs and instruments, which were calculated by multiplying the replies (scale 1-5) by the factorial weight of each assertion statement achieved.

Managerial decision, the overall average was 3.56, with respondents more satisfied with the benefits of management control [3.67] and productivity [3.10]. Innovation received the worst satisfaction average [2.69]. When comparing the benefits in the Managerial decision processing Manufacturing companies with the main functions performed by the sample (financial, accounting and human resources), one realizes that many tasks that were once carried out manually have been automated with the use of IT and hence more tightly controlled, for example, payable and receivable accounts, import of accounting entries, generating reports, payroll calculations in companies etc.

**Manufacturing companies technology benefits**
Customer satisfaction of Manufacturing companies had a median average, so that it is possible to see, in any organizational department, the facility to generate information on-line for customers by using IT, which helps, above all, to satisfy customers. Another point concerns the applications that, in general, have more than one function, which allows detecting IT users’ accumulation of
functions and, therefore, without time to explore and investigate new ideas because they are more demanded than others. Such results show that the technological tools used by the sample are centered on an industrial model, aiming at improving productivity and management control. The Decision-Making Process had an overall average of 3.25; the design phase being the best evaluated one [3.18], and the choice phase, with 2.39, the worst of all. By analyzing each question, all the assertion averages are higher than 3.00. It may be observed that IT usefulness in checking possible alternatives (design phase) is the most intense one in the decision-making process;

**Conclusion**

Additive manufacturing was actually developed in the 1980’s, but has picked up more significant interest in the last few years. It covers any and all processes involved in printing a 3-dimensional product, the reason it’s commonly referred to as 3D printing. Additive manufacturing includes a technique called cold spraying, which involves blasting metallic particles through a nozzle at high speeds, binding particles together to form shapes. This creates a part by building materials layer by layer through the control of a computer. Because the end result is a high precision replica of an original design, there is less waste during the production process and can save the manufacturer money.

However, efforts are underway to develop manufacturing processes that lower cost and speed production such that advanced composites are integrated into a much wider range of products and applications in the coming years.

Cloud based computing uses network connected remote services to manage and process data. Life in the cloud will gain momentum, but security concerns must be continually addressed. Companies are increasing use of this technology across various geographic locations to share data to make better business decisions. Cloud Computing helps reduces costs, improve quality control and shorten production times.

A manufacturer can be innovative in various ways beyond the use of technology. Innovation can include the utilization of new business models, the development of new processes and services, and the enhancement of existing products too.
Technology does support and drive innovation. Technological advancements can allow manufacturers to create higher quality goods faster than before, with less expense and help them realize more efficient operations to become more competitive.

Innovators and engineers are constantly improving upon existing technologies to fulfill unmet needs, provide goods for untapped markets, and most importantly, looking forward to stay ahead of the competition!

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Further Readings

Transactional Analysis

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The concept as told in the abstract is very clear that recipient as well as the communicator goes through a PAC model (parent, adult, child).
As long as the transaction is a straightened transaction there is happiness between the communicator and the recipient.
The problem starts when there is a cross transaction, which is very clear by the below mentioned model:

As it is clear from the model above that, when the transaction of communication is straightened, the agreement factor is very high. The problem starts when a diffused transaction takes place from one level to the other level of the recipient; it leads to conflict many a times it is seen that the communicator purposefully plays the diffused communication and straightened communication in one phase of communication. So the recipient understands both the deliverables and it doesn’t lead to conflict.
For Eg 1: A father from the communicator side explains the child, treating him/her as a matured entity, the communication will be accepted very well, but in the same process the father gives the communication in a diffused state to the child, the child will receive both the communication sportingly.
For Eg 2: An employer is discussing target finalization with the employee and both are reasoning the numbers logically, so an adult to adult transaction is taking place, but the diffused transaction can also happen when the employee answers the logic through a higher level of productivity, the employer accepts it. Simultaneously if the employee accepts the target with some free sops, there the transaction is positive and leads to fulfillment of targets.
For Eg 3: Two young children preferably college students, will have a straightened transaction of communication and will lead to happiness in productivity in whatever nature it is.
Simultaneously if one child is mature and handles the other friend on a different maturity level from adult or parent, this diffused transaction will also be appreciated by both the entities. To sum up I would like to state that age has nothing to do with behavior, there can be a child who can behave like a parent or an adult based on the situation he is put into and vice-versa, a parent and an adult can behave like a child, again based on the situation. The conflict will only happen when there is a cross transaction in communication without any diffused transaction. It is always better to use both straightened and diffuse transaction based on situation to situation and will always lead to happiness even when it is the state of stress and anger. We can use this model on the various international dynamics also; if you look at the global psyche there also we have people from different frame of mind. For eg: US, since the economy is a developed economy the child transaction is hardly there. Most of the entities work from the parent and adult mode. In Europe, although it is developed economy but the demography has a huge role to play, the demography is aged demography. Same is seen in Japan. So the model is predominantly parent and a little percentage of logic as well, but when you come to Asian economy you can see all the three models prevalent and if you want to strike productivity here you have to use both direct and diffused transaction because predominantly a semi-developed and under-developed economy needs both the CUEs to strike success. If you go to China which is predominantly a closed economy along with South Korea and North Korea, the cross transaction is the only way in which the work gets completed because they are pseudo-capitalist people with a huge background of communism. When you come to the African Nation, the central, north and east African Nations deals with only the parent and the child CUE, they hardly use logic, but when you go to South African nations, the transaction is again straightened and diffused. In the Asian nations Singapore, Malaysia and Thailand, is basically surviving because of the diffused transaction, since the country as a whole is very limited in their land pool and infrastructure resources. The explanation of this paper will be further given through a role play and case study when we have faculty development program on 15th June along with the Registrar, Mr Pradeep Seraphim. We will also like to welcome criticism and discussions because only then the paper becomes more presentable.

Regards,
Dr Sarit Kumar.
Societal Security for Indigenous Games in order to Enhance its Presence World Wide

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The culture of any country speaks of its rich tradition. India is one such nation which is very well known for its ancient traditions and values. The old culture is slowly getting over shadowed by the western influence be it in terms of the costume, food, life style or games. There are many traditional practices that are disappearing from our society. Every state in India is known for its unique traditional games. Karnataka is one such state in South India which has its own unique games that includes ChinniDandu, Buguri, Goti, Pagade, but it is a great question if today’s generation even knows the name of these games? Many such traditional games are slowly disappearing. Today’s generation is influenced by media and technology, which diverts their interests to other activities. Children today are more interested in mobile games and play station than the traditional games. Factors such as globalization, migration, societal changes contribute to the disappearance of the traditional games. It is necessary that we preserve our old and rich tradition of the indigenous games. Within each one of us, there is a motivated social thinker, educationists, an activist and a child. We have to create awareness on the importance of traditional games and let the child within us live in a synergetic environment. Giving life back to the indigenous games will ensures togetherness, social interaction, enhance physical and mental health and create a lively and synergetic environment. Kabaddi is the one of the traditional games which is played in world level now. Why not the other traditional games? Play the traditional game; give birth to you and your culture. This paper aims to study the various games of Karnataka and analyse their relevance in today’s fast paced culture.

Keywords: Traditional games, relevance, modern society

Introduction:
There are about 195 countries present on the surface of Earth. Each country is unique from the other in many ways. But India stands out from the rest as it is a nation known for its rich and ancient tradition. But, this all changed in the 20th century. Our old culture which was rich in tradition and values was slowly engulfed by a dark plague which was brought forth by the western countries. This “plague” was the spread of western culture which was dominating Indian culture in various fields like in terms of costumes/clothes, food, lifestyles and games. This has resulted in the endangerment and even the extinction of many traditional practices of India. Indian is known for its culture. Similarly each state of India has its own unique traditional game. Karnataka is one such state of South India which has a wide range of diverse traditional games. These include ChinniDandu, Buguri, Guti, and Pagade. Now a question arises whether today’s generation even remember these games or even know their names? It is a really unyielding question as today’s generation is influenced by media and television. This has resulted in the change of their interest from traditional games to mobile games and play stations.It is necessary that we preserve our old and rich tradition of the indigenous games. Within each one of us, there is a motivated social thinker, educationists, an activist and a child. One is said to have lived properly if there inner child has been awakened twice, in their childhood and when they play in their adulthood. To truly awaken the child, one must play traditional games rather than playing on an electronic gadget. Giving life back to the indigenous games will ensures togetherness, social interaction, enhance physical and mental health and create a lively and synergetic environment. Kabbadi is the one of the traditional games which is played in world level now. Why not the other traditional games? This paper aims to study the various games of Karnataka and analyze their relevance in today’s fast paced culture. Let us start of by having a glance over a few of Karnataka’s traditional games that were once enthusiastically played across Karnataka.

Games of Karnataka

1. **Chinni Dandu (Gilli Danda):** - This game was a very famous game of India, mostly in Karnataka and Tamil Nadu. It was so popular that it spread across the whole of South Asia. It is called Chinni Dandu in Karnataka. It is believed that this game is the origin of many European and American games like cricket and baseball. It is played with a peg
(gilli) and a stick (dandu) both of which are made of wood. It is a team game and improves hand-eye coordination and concentration.

2. **Goti**: - Popularly known as marbles or kancha or goli, it is the favorite gully game of Karnataka. It is called goti in Karnataka. This is a classic game which requires the player to hit the selected target ‘marble’ using his/her marble. The winner of the game walks away with all the others player’s marbles. This game requires as well as improves aiming and concentration skills of an individual.

3. **Pagade**: - Pagade is a cross and circle board game that is very similar to the ancient game of pachisi or chaupad. This game requires 2 or 4 players to race their respective pawns to reach the innermost square. The origin of this game can be traced to the 4th century AD and it has remained popular throughout history. Many people of today’s generation refer this game as ‘Ludo’. By playing this game, one’s strategic abilities soar to their max.

4. **Paramapada**: - Paramapada is a classic board game that originated in ancient India. The game can be played by two or more players on a game-board that has been numbered, gridded squares. The board has several ladders and snakes drawn on it. Players have to navigate their game piece from the start to the finish based on die rolls. The ladders help the game pieces to progress while the snakes hinder their movement. This game is popularly known as ‘Snakes & Ladders’. It supports the development of an individual’s competitive nature.

5. **Lagori**: - A stack of stones, a ball and a focused eye is all you need to play the game of Lagori in an open courtyard. This game is quite popular in North and Eastern states of India but originated in Karnataka. The game involves a pile of flat stones and two opposing teams. The players of the opposite team stand ready as the first team throws the ball trying to disrupt the pile of stones. If they succeed, the opposite team reaches for the ball and tries to hit the players of the other team with the ball. Meanwhile, the other team tries to dodge the ball and re-make the pile of stones. It barely makes use of any expensive tools or equipment and is really fast to follow. No wonder it has been gaining heat lately. It increases an individual’s accuracy, speed and reflexes.

6. **Kambala**: - This is a dangerous game like Jallikattu. But unlike Jallikattu, people have to make their bull go fast rather than stopping them. This game is mostly played by men as it was considered too dangerous for women. These are held annually in Karnataka. The
Kambala season starts in November and lasts until March. It was banned because of PETA.

From the above information, we can see that playing such ancient and traditional games are not boring as today’s generation think. Instead, they are very fun and improve various abilities of an individual. But what measures are taken by the society to increase the range to which this knowledge may pass and how? This will be our next case. Many people in Karnataka and throughout India have paid their efforts to spread these traditional games. This is how Kabbadi has become such a popular game world-wide.

But what about the traditional games which we just discussed? Now, we will discuss about the efforts made by the society to relaunch traditional games.

- Kavade: - A 38 year old genetic scientist once swore that she would inculcate the traditional games into her child. In 2008, ‘Kavade’ the brainchild of Dr.Shreeranjini.G.S was born. She taught her child ‘Kavade’, about all the traditional games. Kavade loved it very much and since see saw that the interest in these games were declining, she made a stand against it. The Kavade store, which is run by Kavade, is a toy store in Seshadripuram. In the store, there are no modern games. Instead there are all traditional games which had been taught by her mother. This shop also allows children as well as parents to play with these games.

- We all have heard of Jallikattu, but there is a game of Karnataka called Kambala. It is a bull-racing game which was banned along with Jallikattu by PETA. Now, since the ban on Jallikattu has been lifted, protests soared in Karnataka’s Dakshin Kanada District. About 300 people gathered to protest against the ban on Kambala. This proves that there are people who wish to spread the traditional games.

From this article we see that the western culture has influenced the Indian culture to vanish. But there are people who want remove the western culture and reintroduce Indian culture to the modern society. But they cannot do this alone, so I would like to convey the message to spread the knowledge of traditional games and make Indians truly “Indian”.

But how can other normal citizens spread their knowledge about traditional games? The mains of how information can spread without media are as follows: -
• **As Parents:** - If you are a parent of a child/children, you can help spread this knowledge in the following ways:-

1. Until your child/children reach the age of 8 years, teach him/her/them to play the game/games. This will develop an interest and curiosity towards traditional games.
2. Try to avoid playing in your phone/computer as this will divert their interest towards electronic gadgets rather than traditional games.
3. Let them make new friends and roam further as your child/children will spread it to his friends and so on. By allowing them to roam, they will make new friends and will spread this knowledge to them and they in turn will spread it to their friends and so on.
4. Mainly, don’t forget to play these games with them daily. If you don’t play with them daily, they may lose interest in the games and will start playing mobile and pc games.
5. Every once in a while, conduct a competition in your neighborhood. Instead of playing normal, modern games like lemon and spoon, sack races, running race, etc, make the competition full of traditional games like chowkarabara and ashthapada.

• **As members of educational institutions:**- Teachers and non-teaching staff of schools can spread the knowledge of traditional games better than those in colleges because the students in school respect their teacher more than that of college.

**In School:**- Teachers in school can spread their knowledge of traditional game in the following ways.

1. Whenever your class is free and there is nothing to teach, you can teach them these games and ask them to play and spread it in their neighborhood.
2. You can try to teach the lesson through these traditional games and they will get benefited in two ways. One, they will be able to remember the lesson much easily as they are remembering it through a game and no one forgets anything learnt through a game. Secondly, the students get to learn a new fun game and will spread it to others.
3. Teachers can also recommend and/or teach these games other student’s parents.

**In college:** - Even though the teachers in college receive less respect from the students, they can still teach and spread these games in many ways like:-

1. The principle of the college must introduce a new period at the end of the day which should consist of about half an hour of time to play traditional games.
2. Many occasions like Tamil day, Telugu day and Kannada day are held in colleges. Along with this, they must add a traditional games day so that everyone plays these games.

- **As rich citizens/people who have more money:** These include people such as rich businessmen and contractors who also want to spread the knowledge of traditional games. They can build small, compact and free parks which unlike normal parks will not contain any slides or swings, but instead will consist of games like Ludo and Snake and Ladders. Also, build benches around the park so that the parents may rest while their child/children play to their hearts wish.

- **Theme park owners:** Theme park owners like the owners of Wonderla and Imagica can build unique parks which contain many traditional games but from a different angle. For example, they can build the board game snake and ladders in such a way that the pawns will be the players themselves, the ladders will be real ladders and the snakes will be slides. This way the owner will also get money and the visitors have a pleasant day by having fun with unique games.

- **Increase interest in these games by changing them:** The main reason in the decline of traditional games is the loss of interest in them. The citizens can increase interest in traditional games in two ways.
  1. The citizen can try and mix-match or fuse two games together to make a new game. This makes it more interesting as it will have more rules, different game play and different strategies.
  2. The citizen can try to make twists in the game or the in the environment in which they are playing. For example, the person can suddenly reduce or increase the number on the dice in a game of Ludo or he can make it challenging by making them play it while swimming in water. This will also create interest in them as it will become more difficult for them to play and also increases their multi-tasking abilities.

- **Last but not the least:** If a person is to achieve his/her goal of promoting traditional games to a national and international level, one must first spread these games in the government officials. It is a very risky and daring task but if it is done, then the citizen’s work is done as now the government officials will start spreading the message of traditional games throughout India. Now, if any representative of our country goes to any
other country and vice versa, it will be spread to an international level and will soon become an international game/sport.