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Editorial

Dear Readers,

Technology is all pervasive! This is true with individuals, organisations and society as a whole. Technology is an enabler and facilitates better performance with higher results. All the functional areas of management in an organization directly and indirectly use technology in different doses.

Human Resource Management and Development is one of the important functional areas of Management. In this knowledge economy, the role of Human Resource has become critical for every form of organization whether it is for profit or non profit. HRMS, HRIS, Dash Boards, HR Analytical tools, Artificial Intelligence, and Simulation are some of the important technology devices which facilitate better Human Resource Management and Development.

The other side of the coin is, technology has changed the whole way of our life. Every employee in every organization is influenced by technology both positively and negatively. It has become a challenge for the HR professionals to minimize the damage caused by technology and improve the performance of employees through better use technology. Managing stress and technology related problems have become a challenge for HR professionals. Employees themselves also have to learn to properly use technology for their work life balance.

This issue of AMBER focuses on Technology and Human Resource Management. The issue carries articles in related areas.

I thank the contributors for this volume, the Management of ABBS and the co-editor of this issue, Mr. Kiran.G for his sustained effort in seeing this issue the light of the day.

Dr. H.R. Venkatesha
Chief Editor

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Issue Theme: Technology and Human Resource Management

1 A Path Towards Technology Driven Education: Attitude Of Teachers Towards Innovative Teaching Practices

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Abstract

In today's digital age, teaching and learning is becoming dynamic. Technology is used to create unique teaching and learning experiences. Universities and campuses are moving towards technology adopted teaching and learning practices. In the global perspective, this shift is considered as an innovative practice in education. Even though most of the teachers are shifting themselves to technology adopted teaching, there is a bit of concern in adopting technology. Due to technology adopted teaching practices, teachers' role is shifting from the information provider to a mentor or facilitator. This empirical research study is done to understand the attitude of teachers towards innovative teaching practices.

Keywords: *Innovative Teaching, Attitude, Quality, Technology.*

Introduction

Technological advancement has resulted in changes in teaching methodology and innovative pedagogical practices. In today's digital age, teaching and learning is becoming dynamic. Technology is used to create unique teaching and learning experiences. Technology driven education can lead to quality in education. Due to technology adopted teaching practices, teachers' role is shifting from the information provider to a mentor or facilitator.

Review of Literature

Students learn through cognitive and experiential means. From the students' perspective, cognitive learning happens through communication skills, critical learning skills and also problem solving skills. While delivering cognitive skills to students, we need to look into teaching style of teachers. The focus should be on what students learn and also the learning outcome. Education accreditation bodies are focusing more on innovative teaching and impactful engagement of students in the classroom learning. There is a potential impact on innovation in teaching and student engagement.

Use of the term "innovative" to describe the combination of the three teaching practices described below is intentional. Student centered pedagogy and extending learning beyond the classroom are concepts that have very long histories. The term "innovative" in the context of this research describes combining these practices with technology to solve teaching and learning challenges in new ways. It is the combination of these pedagogical practices with technology that has the potential for real innovation (2013, Microsoft Partners in Learning School Research).

The implementation of innovative technologies in school is a complex process that requires creating a pedagogical, technological, and managerial systemic change in the school-culture – a process that usually fails to meet the high expectations and to create the systemic change. In light of the many recent studies, which indicate that teachers'

perception and attitudes play a pivotal role in the success or the failure of technology-implemented projects, the present study explores the teachers' perceptions and attitudes towards the implementation of an innovative technology (smart class).

The teacher's attitudes towards change and their readiness to become active partners are considered a critical success factor (Avidov-Ungar, 2010; Coffman, 2009; Day & Gu, 2007; Fullan & Smith, 1999). Similarly, resistance to change is considered one of the main reasons for failure of process that involve change in organizations in general and in the educational systems in particular (Fullan& Hargreaves, 1996; Zimmerman, 2006). In the case of innovative technology implementation in schools, teachers' resistance is most important factor in the project's success as reported by some studies (Del Val & Fuentes, 2003), mainly because the technology doesn't fit to their pedagogical practices and beliefs (Halverson & Smith, 2009; Harris & Hofer 2009). According to Del Val and Fuentes (2003), resistance to change is divided into cognitive resistance (focused on identifying and presenting weaknesses of the change and enlisting claims and reasons for maintaining the existing situation) and emotional resistance (focused on expressing negative feelings towards the change, such as anger, hostility or sadness).

Research Objectives

The main objectives of this research is to study the attitude of teachers' technology driven education. When it comes to investigation, two principal research objectives have been identified and to address the phenomenon under this study, following two objectives provided to use.

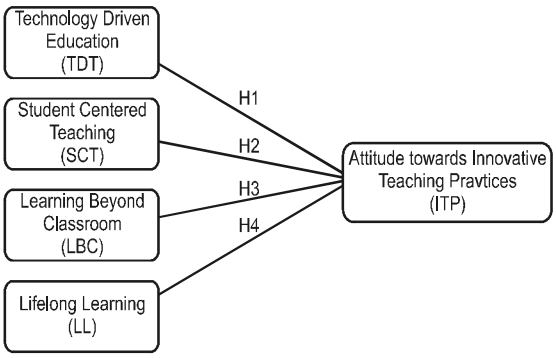
- To study the factors affecting technology driven education.
- To analyze the attitude of teachers towards innovative teaching practices.

Research Questions

Research question of this study is derivative from the evidance source of research objectives established and litrature. To achieve the above objectives, the following research questions were demonstrated for this study. What are the factors affecting technology driven education? What is the attitude of teachers towards innovative teaching practices? What is the most relevant factor affecting technology driven education?

Research Framework

Diagram showing Research Framework:



Hypothesis of the study

*H1.*There is a positive relationship between technology driven education and innovative teaching practices.

H2. There is a positive relationship between student centered teaching and innovative teaching practices.

H3. There is a positive relationship between learning beyond classroom and innovative teaching practices.

*H4.*There is a positive relationship between lifelong learning and innovative teaching practices.

Methodology

Primary data

Primary data was collected using a four-section questionnaire. Section A of the questionnaire measured different demographic attributes of the respondents. These included age, gender, education levels and job position. Section B of the questionnaire consists of four main variables, which are (1) Technology Driven Education (2) Student Centered Teaching (3) Learning Beyond Classroom (4) Lifelong Learning. Variables was measured using Likert scale (where 1=strongly disagree, 5= strongly agree) which was adapted from the scale that was used by Smith, Kendall and Hulin (2012).

Secondary data

In this study, mostly secondary data are extracted from online resource such as journal articles of relevant study field which are adopted from Emerald Library Database, ProQuest Database and Science Direct database. Journal articles used in this study are taken from the year of 2000 and up to date.

Target population

The Target population is the teachers currently working at Universities from Asia (India, Malaysia, Indonesia, Bangladesh and Pakistan) and those teaching graduates and post graduates.

Sampling selection

A total of 150 questionnaires were distributed among the teachers at university level from various universities across the world to achieve the response, where 150 samples was determined using convenience sampling method approved from Krejcie, and Morgan (2013).

Measuring instrument:

The research instrument that used by this study is survey questionnaire. The purpose of using questionnaires survey is because of the direct response and feedback from the respondents that can be collected in short period of time and in an easier manner (Chee Hong , et al., 2012).

Table Showing Variable & Instrument Measuring

Research Variables	Items
Technology Driven Education(TDE)	Satisfied with the Technology Driven Education(TDE1)
	There has been a change in education through technology over the years (TDE2)
	Technology driven education is well structured to help the students to learn more effective (TDE3)
	There is effective training and development provided to enhance technology into education (TDE4)
	Technology driven education is the most significant method of education (TDE5)
	Basic and higher level of technology in education brings deep student learning (TDE6)
Student Centered Teaching (SCT)	Allows students to choose their own learning process (SCT1)
	Allows students to choose their own topics of learning (SCT2)
	Allows students to choose their own pace of learning (SCT3)
	Make students more responsible participants in their learning (SCT4)
	Students can bring in a quality of work through technology adopted learning (SCT5)

	Technology driven education can bring in positive outcome towards learning (SCT6)
Learning Beyond Classroom(LBC)	Technology driven education can bring high performance amongst the student (LBC1)
	Satisfied with the outside classroom approach/ extended classroom approach (LBC2)
	Technology enhanced teaching is an attractive mode of teaching practice (LBC3)
	Technology driven teaching practice offered by the organization motivates all teaching practitioners (LBC4)
	Effective for students from outside class who are from other countries or cultures (LBC5)
	Technology can provide advance knowledge and engage in active learning (LBC6)
Lifelong Learning (LL)	Technology driven concept of learning process brings lifelong learning than tradition learning approach(LL1)
	Technology driven learning provide lifelong learning(LL2)
	Flexible teaching and learning hours can bring lifelong learning (LL3)
	Technology driven learning can connect global communities and bring lifelong learning (LL4)
	Technology driven learning can increase sophistication in technology and intercultural learning (LL5)
	Technology driven learning can disseminate information and knowledge and bring lifelong learning (LL6)
	Overall satisfied with present technology driven education and believe it brings in lifelong learning (LL7)
	Technology driven education brings wholesome development and Lifelong learning (LL8)
Innovative Teaching Practice(ITP)	Innovative teaching practices will bring professional growth for students (ITP1)
	Innovative teaching practices is the best extended learning beyond lassroom. (ITP2)
	Innovative teaching practices will enhance quality learning for students (ITP3)
	Innovative teaching practices will engage practice based learning (ITP4)
	Prefer using innovative teaching practice to enhance knowledge for students (ITP5)
	Overall, I believe innovative teaching practices will bring a change in student learning approach (ITP6)

Validity and Reliability

Cronbach's Alpha was used in the research to check as a measure of reliability and internal consistency. Cronbach's Alpha is a reliability coefficient that indicates how well items in a set are positively correlated to one another. It measures the inter-correlations among each item, with a measure of 1 being higher in terms of internal consistency and if the computed result shows between, 0.70 to 0.95 then it is considered being acceptable (Hair et al., 2011).

Data Analysis

Summary descriptive statistics will be extracted from responses to the first 4 questions to determine demographics of the respondents. Data will be then analyzed using various statistical tools to study the relationship between the independent variable and dependent variables and other appropriate tools to analyze using the Statistical Package for the Social Sciences (SPSS 22.0) which was also used by Usha & Devanshi, (2013). The motive of using SPSS is, the software is very much user friendly and its ability to conduct various statistical techniques (Hom, 2006) that will benefit to achieve the research objectives.

SmartPLS was used to analyze the factor analyze Cronbach's alpha, multiple regression analysis between talent management (independent) variables towards employee retention (dependent variable).

Table Showing Summary of Demographic Analysis

Measures	Items	Frequency	Percentage
Gender	Male	56	33.7%
	Female	94	62.7 %
Age Group	30-39	80	53.3%
	40-49	65	43.3%
	50-59	5	3.3%
Experience	Less than 1 year	19	12.7%
	1-5 years	73	48.7%
	5-10 years	24	16%
	10-15 years	30	20%
	>15 years	4	2.7%
Qualification	Bachelor's Degree	123	82%
	Master's Degree	27	18%
	Doctorate Degree	0	0%

Internal consistency of Reliability & Indicator Reliability (outer loadings)

When evaluate the internal consistency of the model, the values of CR should be greater than 0.7 and below than 0.9. If any item loading shows below 0.7 and above 0.9 that item should be removed following any values above 0.7 should be considered as reliable (Hair et al., 2010).

In the present study, there are 12 items that are more than 0.7. 14 items were extracted from the model since the loadings are below 0.7. The Extracted loadings are TDE2 (0.524), TDE4 (0.205), TDE6 (-0.391), SCT1 (0.333), SCT2 (0.476), SCT6 (0.141), LBC3 (0.622), LBC5 (0.271), LBC6 (0.41), LL1 (0.513), LL2 (0.325), LL3 (0.137), and LL8 (0.293).

Table below shows factor loading results. When the sample size is 85 and above, convergent validity should be done to test and observe whether all the factor loadings are greater than or above 0.7 (Zikmud, 2007). Since the present study shows the factor loadings of all the variables are greater than 0.7 and below 0.9 it can be said that the main construct used in the present study is adequately reliable.

Table Showing Factor loadings after extraction

Construct	Items	Factor loadings
Technology Driven Education (TDE)	Satisfied with the technology driven education(TDE1)	0.869
	Technology driven education are well structured to help the students to learn more effective (TDE3)	0.732
	Technology driven education is the most significant method of education (TDE5)	0.854
Student Centric Training (SCT)	Allows students to choose their own pace of learning(SCT3)	0.935
	Allows students to choose their own pace of learning(SCT4)	0.889
	Students can bring in a quality of work through technology adopted learning (SCT5)	0.800
Learning Beyond Classroom (LBC)	Satisfied with the current salaries & wages offered by the organization (LBC1)	0.848
	Satisfied with other non-monetary rewards offered by the organization (LBC2)	0.849
	Compensation package offered by the organization motivates for better employee performance (LBC4)	0.782
Lifelong Learning(LL)	Technology driven learning can connect global communities and bring lifelong learning (LL4)	0.722
	Technology driven learning can increase sophistication in technology and intercultural learning (LL5)	0.879
	Technology driven learning can disseminate information and knowledge and bring lifelong learning (LL6)	0.764
	Overall satisfied with present technology driven education and believe it brings in lifelong learning (LL7)	0.807
Innovative Teaching Practice(ITP)	Innovative teaching practices will bring professional growth for students (ITP1)	0.802
	Innovative teaching practices is the best extended learning beyond classroom. (ITP2)	0.915
	Innovative teaching practices will enhance quality learning for students (ITP3)	0.971
	Innovative teaching practices will engage practice based learning (ITP4)	0.967
	Prefer using innovative teaching practice to enhance knowledge for students (ITP5)	0.942
	Overall, I believe innovative teaching practices will bring a change in student learning approach (ITP6)	0.947

Convergence Validity

As per Esposito (2010) when reflective measurement model is to be assessed as convergence validity, then the Average Variance Extracted (AVE) should be greater than 0.5. Since all the AVE constructs of the present study is higher than 0.6 convergent validity shows the meaning of all indicators of same construct positively correlate with each other.

Table Showing validity and reliability

Construct	Composite Reliability	Items	Loading	AVE
Technology Driven Education	0.860	TDE1	0.869	0.674
		TDE3	0.733	
		TDE5	0.854	
Student Centric Training	0.908	SCT3	0.935	0.768
		SCT4	0.889	
		SCT5	0.800	
Learning Beyond Classroom	0.866	LBC1	0.848	0.684
		LBC2	0.849	
		LBC4	0.782	
Construct	Composite Reliability	Items	Loading	AVE
Lifelong Learning	0.872	LL4	0.722	0.632
		LL5	0.879	
		LL6	0.764	
		LL7	0.807	
Innovative Teaching Practice	0.973	ITP1	0.802	0.857
		ITP2	0.915	
		ITP3	0.971	
		ITP4	0.967	
		ITP5	0.942	
		ITP6	0.947	

Composite Reliability

There are 5 factors and 32 items tested to achieve the Cronbach's Alpha of the study.

Table Showing Cronbach's Alpha measurement for all variables

Factor	Cronbach's Alpha	Number of Item
Variables	0.846	32

When testing the Cronbach Alpha, all the values should be higher than 0.7 (Babbie, 2001). He also mentions that if the Cronbach's alpha values are more than 0.9 than it is considered as a very strong value. In the present study the overall Cronbach alpha is 0.846, which is above 0.7, therefore, the construct of all the variables are good and reliable.

Table Showing Composite Reliability Test (Cronbach's Alpha)

Factor	Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
Technology Driven Education	0.836	-0.015	6
Student Centric Learning	0.967	-0.075	6
Learning Beyond Classroom	0.816	0.010	6
Lifelong Learning	0.762	-0.195	8
Innovative Teaching Practice	0.853		6

The above tables show the final Cronbach's Alpha of each individual variable. Cronbach's Alpha for each independent variable and dependent variable should be more than 0.7 for all social science studies (Saunders, 2007). Reliability for Technology Driven Education is good and overall Cronbach's alpha is 0.836 (>0.7) and contains six items. Reliability for Student Centric Teaching is also good and overall Cronbach's alpha is 0.967 (>0.7) and it contains six items. The reliability for Learning Beyond Classroom is good and overall Cronbach's alpha is 0.816 (>0.7) which contains six items. The reliability for Lifelong Learning is also good and overall Cronbach's alpha is 0.762 (>0.7), and it contains eight items. The reliability for Innovative Teaching Practice is good as well and overall Cronbach's alpha is 0.853 (>0.7) and contains six items.

Findings of Factor Analysis

As per Bougie&Sekaran (2010) if the Cronbach's Alpha shows above 0.7 and closer to 1, the reliability of the study is very high. According to Hair et.al (2010) any value above 0.6 will be accepted to check the internal consistency of the model. Since all the values of this study model shows above 0.7, whole questionnaire is very reliable.

Discriminant Validity

For the purpose of discriminant validity both the cross loadings and square root of AVE (which is also known as Fornell –Lacker) should be tested. Hair at al (2010) mention that AVE should be greater than the correlations between the constructs. Table shows that square root of AVE is greater than the correlation with other constructs.

Table Showing Fornell-Lacker Criteria (Square root of AVE)

Variable	1	2	3	4	5
1. Learning Beyond Classroom	**0.827**				
2. Innovative Teaching Practice	-0.103	**0.926**			
3. Lifelong Learning	o.428	-0.228	**0.795**		
4. Technology Driven Education	0.304	-0.139	0.566	**0.821**	
5. Student Centric Teaching	0.329	-0.150	0.385	0.226	**0.876**

Furthermore, same time all the indicators loadings under their own constructs should also have to be greater than other cross loadings with remain constructs (Hair 2010). Table shows the satisfied requirements of all cross loading constructs.

Table Showing the Results of Cross Loadings

Items	LBC	ITP	LL	TDE	SCT
LBC1	0.848	-0.064	0.340	0.271	0.193
LBC2	0.849	-0.102	0.385	0.208	0.413
LBC4	0.782	-0.081	0.326	0.291	0.155
ITP1	-0.077	0.802	-0.103	-0.062	-0.090
ITP2	-0.064	0.915	-0.132	-0.058	-0.129
ITP3	-0.136	0.971	-0.252	-0.151	-0.172
ITP4	-0.124	-0.967	-0.239	-0.168	-0.131
ITP5	-0.037	0.942	-0.214	-0.127	-0.119
ITP6	-0.109	0.947	-0.249	-0.149	-0.167
LL4	0.106	-0.173	0.722	0.267	0.341
LL5	0.418	-0.247	0.879	0.512	0.196
LL6	0.420	-0.139	0.764	0.553	0.417
LL7	0.519	-0.069	0.807	0.515	0.414
TDE1	0.373	-0.138	0.510	0.869	0.326
TDE3	0.087	-0.086	0.424	0.733	0.154
TDE5	0.230	-0.109	0.453	0.854	0.038
SCT3	0.325	-0.167	0.360	0.183	0.935
SCT4	0.220	-0.122	0.244	0.124	0.889
SCT5	0.331	-0.087	0.445	0.344	0.800

Therefore based on the tests of Fornell-Lacker criterion as well as the cross loadings it can be concluded that the discriminant validity of the study are satisfied with each construct of the study model which also is identical from other constructs by empirical evidence.

Multicollinearity calculation

Multicollinearity is to check whether each independent variable has direct effect or relationship among other independent variables in the model. To check the multicollinearity, variance inflation factors (VIF) assessed. According to Esposito (2010) variance inflation factors (VIF) should be greater than 5, if any value is below than 5, it is considered as low multicollinearity. For the present study the VIF shows all the variables are below 5, representing low multicollinearity and model is valid.

Table Showing VIF inner values

Item	ITP
LL	1.757
TDE	1.481
LBC	1.283
SCT	1.221
ITP	

Multiple Regression Analysis: Hypothesis testing

As mentioned by Hair (2010), In order to get accurate results for the hypothesis 5,000 times of bootstrapping should be done to test hypothesis. Therefore, for the purpose of this study 5,000 times

of bootstrapping was done to test hypothesis and to get accurate result.

Item	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics	P Value
TDE - ITP	0.297	0.326	0.124	**2.406**	**0.016**
LL – ITP	0.329	0.282	0.172	1.916	0.055
LBC – ITP	-0.449	-0.372	0.230	1.957	0.050
SLT - ITP	0.049	0.052	0.100	0.488	0.626

Findings of Multiple Regression analysis

As summarized in the table below, three hypothesis namely Student Centric Teaching, Learning Beyond Classroom, and Lifelong Learning was rejected and only one hypothesis which is Technology Driven Education was accepted.

Table Showing Summary of Hypothesis

Hypotheses	Finding	Conclusion
H1: There is a positive relationship between technology driven education and innovative teaching practice	T value = 2.406 P value = 0.016 Significant at 1% level	Accepted
H2: There is a positive relationship between lifelong learning and innovative teaching practice	T value = 1.916 P value = 0.055 Not significant	Rejected
H3: There is positive relationship between learning beyond classroom and innovative teaching practice	T value = 1.957 P value = 0.050 Not Significant	Rejected
H4: There is be a positive relationship between student centric learning and innovative teaching practice	T value = 0.488 P value = 0.626 Not Significant	Rejected

Discussion and Conclusions

Implementation of technology into teaching methodology in Educational Institutions is a complex process which will require a synergy between managerial team and teaching fraternity.

From this research study it's very clearly observed that technology has been accepted by teachers in an effective manner and teachers are ready to accept innovative teaching practice. In general, teachers attitude as educators understand that this can bring professional development and growth amongst students. They also believe that innovative teaching practice will enhance quality learning for students. Teachers also prefer using technology to provide extensive knowledge to students. Many teachers believe that technology driven teaching is not really incorporating lifelong learning. They believe in the concept of blended teaching where traditional method and modern method is incorporated. Even though technology driven teaching disseminate information and knowledge teachers do not accept this method to be totally into lifelong learning process. This research study illustrates that many of the teachers accept the fact that technology driven teaching and learning process make students to learn at their own pace of learning. Even though technology driven

teaching skill are the present mantra of the 21st century, we need to understand the attitude of teachers who implement this into practice and support diversified learners worldwide. Every teacher should synthesize and practice to enhance themselves into blended or online teaching approach and accept the global settings.

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Evaluation of Different Instructional Design Methods for Training in IT companies of Bengaluru

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Abstract

Technology has been developed in the area of Human Resource Management (HRM) with the objective of virtual communication and automated processes in most of the HR processes at workplace. Numerous reasons can be ascribed to the alignment of traditional HR roles and responsibilities with technology based roles and processes in the HR domain. Cost -cutting, progression of the existing manual work with automation, global culture, changing values, virtual communication, HR as a resource and several other factors have contributed to the gradual changes. It would be very intricate to bring into line the growing demand for technical growth with diversified roles and responsibilities in HR area for the Leaders. Performance assessment metrics, HRIS (Human Resource Information Systems), IT applications on HRM, HR audit, web-based technology and various other aspects of HRM is making the HR leaders proactive in each and every phase of work. The employees call for the training which meets the global standards through technology based approach in structuring the learning and also the contentment with the job. The strategic thinking and proactive forecasting of the HR needs of the organization is one of the great challenges of HRD (Human Resource Development). This research paper is an attempt to know different instructional design methods used for training in IT companies of Bengaluru. Further, it helps to appraise the existing methods and to discern the Management reactions to the global changes of technology in HR. We would realize the training implications with the methods used for training employees in IT companies of Bengaluru.

Keywords: *Human Resource Information Systems, HR Audit, Human Resource Development, Instructional Design Methods, & Training Technology.*

Introduction

Training design deals with the identification of entire training program. The training objectives of the training designs are very essential factor in training decisions since it covers the contents, methodology and extent with the base of training need analysis. Training designs are an effective way of taking decisions of imparting training to the employees. It becomes a crucial requirement for the Management to consider in all dimensions of Employee's learning and its role in contributing to the productivity of the organization. A few surveys conducted previously by the academic researchers opine that one of the vital factors for attrition in companies is enhanced training opportunities with the new companies where the employees join. A lot of benefits and perks are given by the companies; at the same time companies should concentrate on retaining the paramount talents by providing various training opportunities to widen skills in them. There is a constant effort in making the HR as an imperative factor in bringing the success for an organization. Lot of research needs to be conducted to scrutinize the deficiencies in the training in IT industry.

Literature Review

Training and Development has a positive effect on Organizational Performance. Training Design and Delivery style have significant effect on Organizational Performance and all these have positively affected the Organizational Performance. It means, it increases the overall organizational performance (Khan, Abdul et al, 2011). Since, performance remains as one of the main objectives of any company, much research has been intended for at explaining and accepting the association among human resources practices and firm performance. It is affirmed that elucidating organizations' performance variations stay one of the most durable subjects of study (March and Sutton, 1997). A skilled and motivated workforce can have a very significant task to provide the necessary speed and flexibility to the organization to expand competitive advantage in a vibrant market environment where traditional sources of competitive advantage (quality, technology, economies of scale, etc.) have become easier to be imitated by the organization's competitors (Becker and Huselid, 1998). A considerable body of evidence has accrued over the past decade that suggests individual difference can have unfavorable repercussions on team outcomes. Constant employee training and development is necessary for organizations to generate and sustain viable advantages (Jentsch, Smith et al., 2001). Team task design can be distinguished as a sequence of structures and functions within a group context that establish the distribution of tasks, responsibilities and authority (Stewart & Barrick, 2000).

Statement of the problem

"Evaluation of Different Instructional Design Methods for Training in IT companies of Bengaluru" is the title of the study. Over a period of time the way organizations are working is inclined by the emerging technologies and timely up gradation of the system and each and every change. But, on the contrary the training designs are also undergoing definite changes in due course of action. The technological advances have made the Human Resource Development a big challenge with upgrading the training designs and technologies in the similar pace. This study focuses on evaluating the existing instructional design methods for training in IT companies of Bengaluru.

Hypothesis

- Null Hypothesis: The choice of an instructional design is independent of the experience of Employer.
- Alternate Hypothesis: The choice of an instructional design is dependent on the experience of the Employer.
- Null Hypothesis: The choice of an instructional design is independent of the education of Employer.
- Alternate Hypothesis: The choice of an instructional design is dependent on the education of the Employer.
- Null Hypothesis: The choice of an instructional design is independent of the age of Employer.
- Alternate Hypothesis: The choice of an instructional design is dependent on the age of the Employer.

Scope

The evaluation of different instructional design methods in the organization shall definitely facilitate us in analyzing and taking decisions appropriately in the organizational context and on par with the industry standards. This would help the HR leaders of the companies to accomplish standardized training programmes and plans pertaining to their specific requirements. This would also guide to comparison of the very effective design methods and it's applicability for organization.

Objectives

- Examine the different instructional design methods of the organizations.
- Know the effective instructional design methods in industry.
- Evaluate the impact of decisions based on the design methods.

Limitations

This study was limited to companies of Bengaluru.

Research Methodology

The convenience sampling design has been applied for this study. Questionnaires were administered personally, through e-mail and telephonic discussions. Core IT Employees were chosen among different IT companies of Bengaluru region. Total of 100 respondents were chosen with five employees from each company and questionnaires were administered after pilot testing. This study was conducted through a survey questionnaire with convenience sampling respondents selected among employees (Management). Further the sources for secondary data included government documents and few researches conducted in other countries and previous researches in India. Data collected were checked for completeness before being analyzed using Statistics tools like Descriptive Statistics, Anova Tests, Reliability and validity test with Cronbach's alpha. This was supplemented by using SPSS statistical tool for analysis and illustration.

Findings and Discussion

Reliability and Validity Test: The Cronbach's alpha test for reliability and validity was done for the data which was found to be 0.7. Hence, data is valid.

Table: 01
Descriptive Statistics

	N	Mean		Std. Deviation
	Statistic	Statistic	Std. Error	Statistic
E-learning Framework	100	3.97	.072	.717
Instructional Design Coordinator	100	3.96	.079	.790
Training	100	3.89	.089	.886
Educational Assessment	100	3.69	.081	.813
Interdisciplinary Teaching	100	3.52	.107	1.068
Educational Technology	100	3.43	.108	1.075
ADDIE Model	100	3.36	.092	.916
Education	100	3.19	.049	.486
Instructional Theory	100	2.75	.113	1.132
Educational Animation	100	2.74	.100	1.001
Experience	100	2.69	.063	.631
Learning Object	100	2.58	.090	.901
Interaction Design	100	2.43	.109	1.094
Storyboard	100	2.27	.062	.617
Mobile Learning	100	1.64	.070	.704
Valid N (list wise)	100			

The choice towards selecting the instructional design methods are represented above in decreasing order of preference. The E-learning framework is in the top and the mobile learning is the least preferred instructional design method among the rest. It shows that the respondents are more inclined towards E-learning framework in the design of training. Instructional Design Coordinator and Training are subsequently second and third in the preference list among the respondents which makes us to know that still respondents haven't completely moved towards other design methods.

ANOVA Table: 02

		Sum of Squares	df	Mean Square	F	Sig.
ADDIE Model	Between Groups	3.234	2	1.617	1.965	0.146
	Within Groups	79.806	97	0.823		
	Total	83.04	99			
Educational Assessment	Between Groups	3.369	2	1.685	2.635	0.077
	Within Groups	62.021	97	0.639		
	Total	65.39	99			
Educational Animation	Between Groups	0.929	2	0.465	0.458	0.634
	Within Groups	98.311	97	1.014		
	Total	99.24	99			
Educational Technology	Between Groups	8.123	2	4.062	3.703	0.028
	Within Groups	106.387	97	1.097		
	Total	114.51	99			
E-learning Framework	Between Groups	0.841	2	0.42	0.815	0.446
	Within Groups	50.069	97	0.516		
	Total	50.91	99			
Instuctional Theory	Between Groups	0.925	2	0.463	0.357	0.701
	Within Groups	125.825	97	1.297		
	Total	126.75	99			
Interaction Design	Between Groups	0.665	2	0.332	0.274	0.761
	Within Groups	117.845	97	1.215		
	Total	118.51	99			
Learning Object	Between Groups	0.491	2	0.245	0.298	0.743
	Within Groups	79.869	97	0.823		
	Total	80.36	99			
Mobile Learning	Between Groups	1.354	2	0.677	1.377	0.257
	Within Groups	47.686	97	0.492		
	Total	49.04	99			
Instructional Design Coordinator	Between Groups	1.662	2	0.831	1.34	0.267
	Within Groups	60.178	97	0.62		
	Total	61.84	99			
Storyboard	Between Groups	0.023	2	0.011	0.029	0.971
	Within Groups	37.687	97	0.389		
	Total	37.71	99			
Training	Between Groups	2.204	2	1.102	1.414	0.248
	Within Groups	75.586	97	0.779		
	Total	77.79	99			
Interdisciplinary Teaching	Between Groups	4.338	2	2.169	1.937	0.15
	Within Groups	108.622	97	1.12		
	Total	112.96	99			

Note: The following hypothesis is used for table 2.

- Null Hypothesis: The choice of an instructional design is independent of the experience of Employer.
- Alternate Hypothesis: The choice of an instructional design is dependent on the experience of the Employer.

The above ANOVA table shows that the null hypothesis is accepted at 5% level of significance for all the instructional design except for "educational technology". This means that the decision to choose a particular instructional design is not influenced by the experience of Employer. However, this is not true for "educational technology".

Table: 03

		Sum of Squares	df	Mean Square	F	Sig.
ADDIE Model	Between Groups	2.864	2	1.432	1.732	0.182
	Within Groups	80.176	97	0.827		
	Total	83.04	99			
Educational Assessment	Between Groups	0.017	2	0.009	0.013	0.987
	Within Groups	65.373	97	0.674		
	Total	65.39	99			
Educational Animation	Between Groups	0.519	2	0.259	0.255	0.776
	Within Groups	98.721	97	1.018		
	Total	99.24	99			
Educational Technology	Between Groups	2.987	2	1.493	1.299	0.278
	Within Groups	111.523	97	1.15		
	Total	114.51	99			
E-learning Framework	Between Groups	0.794	2	0.397	0.769	0.466
	Within Groups	50.116	97	0.517		
	Total	50.91	99			
Instuctional Theory	Between Groups	0.621	2	0.31	0.239	0.788
	Within Groups	126.129	97	1.3		
	Total	126.75	99			
Interaction Design	Between Groups	3.785	2	1.893	1.6	0.207
	Within Groups	114.725	97	1.183		
	Total	118.51	99			
Learning Object	Between Groups	1.228	2	0.614	0.753	0.474
	Within Groups	79.132	97	0.816		
	Total	80.36	99			
Mobile Learning	Between Groups	1.596	2	0.798	1.631	0.201
	Within Groups	47.444	97	0.489		
	Total	49.04	99			
Instructional Design Coordinator	Between Groups	1.232	2	0.616	0.986	0.377
	Within Groups	60.608	97	0.625		
	Total	61.84	99			
Storyboard	Between Groups	3.957	2	1.978	5.685	0.005
	Within Groups	33.753	97	0.348		
	Total	37.71	99			
Training	Between Groups	3.725	2	1.862	2.439	0.093
	Within Groups	74.065	97	0.764		
	Total	77.79	99			
Interdisciplinary Teaching	Between Groups	0.393	2	0.197	0.17	0.844
	Within Groups	112.567	97	1.16		
	Total	112.96	99			

Note: The following hypothesis is used for table 3.

- Null Hypothesis: The choice of an instructional design is independent of the education of Employer.
- Alternate Hypothesis: The choice of an instructional design is dependent on the education of the Employer.

The above ANOVA table shows that the null hypothesis is accepted at 5% level of significance for all the instructional design except for "storyboard". This means that the decision to choose a particular instructional design is not influenced by the education of Employer. However this is not true for "storyboard"

Table: 04

		Sum of Squares	df	Mean Square	F	Sig.
ADDIE Model	Between Groups	6.447	3	2.149	2.694	0.05
	Within Groups	76.593	96	0.798		
	Total	83.04	99			
Educational Assessment	Between Groups	4.433	3	1.478	2.327	0.079
	Within Groups	60.957	96	0.635		
	Total	65.39	99			
Educational Animation	Between Groups	4.675	3	1.558	1.582	0.199
	Within Groups	94.565	96	0.985		
	Total	99.24	99			
Educational Technology	Between Groups	0.969	3	0.323	0.273	0.845
	Within Groups	113.541	96	1.183		
	Total	114.51	99			
E-learning Framework	Between Groups	3.003	3	1.001	2.006	0.118
	Within Groups	47.907	96	0.499		
	Total	50.91	99			
Instuctional Theory	Between Groups	1.9	3	0.633	0.487	0.692
	Within Groups	124.85	96	1.301		
	Total	126.75	99			
Interaction Design	Between Groups	2.83	3	0.943	0.783	0.506
	Within Groups	115.68	96	1.205		
	Total	118.51	99			
Learning Object	Between Groups	1.719	3	0.573	0.7	0.555
	Within Groups	78.641	96	0.819		
	Total	80.36	99			
Mobile Learning	Between Groups	1.394	3	0.465	0.936	0.426
	Within Groups	47.646	96	0.496		
	Total	49.04	99			
Instructional Design Coordinator	Between Groups	2.666	3	0.889	1.442	0.235
	Within Groups	59.174	96	0.616		
	Total	61.84	99			
Storyboard	Between Groups	0.763	3	0.254	0.661	0.578
	Within Groups	36.947	96	0.385		
	Total	37.71	99			
Training	Between Groups	0.354	3	0.118	0.146	0.932
	Within Groups	77.436	96	0.807		
	Total	77.79	99			
Interdisciplinary Teaching	Between Groups	1.151	3	0.384	0.329	0.804
	Within Groups	111.809	96	1.165		
	Total	112.96	99			

Note: The following hypothesis is used for table 4.

- Null Hypothesis: The choice of an instructional design is independent of the age of Employer.
- Alternate Hypothesis: The choice of an instructional design is dependent on the age of the Employer.

The above ANOVA table shows that the null hypothesis is accepted at 5% level of significance for all the instructional designs. This means that the decision to choose a particular instructional design is not influenced by the age of Employer.

From table 2, 3 and 4, it is inferred that the training design does not depend upon experience, qualification and age of the Employer.

From table 1, it is inferred that the following designs are popular (in order of preference among Employers).

Preference	Instructional design
1	E-learning Framework
2	Instructional Design Coordinator
3	Training
4	Educational Assessment
5	Interdisciplinary Teaching
6	Educational Technology
7	ADDIE Model
8	Education

Recommendations

The training designs have an impact on the behavior and attitude of employees due to various factors. For the improved job performance, the effective instructional method needs to follow which is according to the preference of the respondents in the survey. E-learning framework can be still enhanced since it is the most preferred design for conducting the training in the IT industry. As a part of strategic thinking and to make Employees to be strategically knowledgeable to face the uncertainties, the Management should identify the best instructional design Coordinators to carry on the tasks. These Coordinators can competently modify the TNA (Training Need Analysis) appropriately with the emerging methodologies. This also helps the Managements of IT industry companies to retain skilled and efficient workforce with their effective training design methods. Employees look for interesting and challenging environment to stay and work on building their career which can be considered as a most effective tool to build up future talents.

Conclusion

Training designs are very essential for the Managers to compete with the competitors and equip their employees to face the challenges in the industry. It not only focuses on the competition part but at the same time the different internal and external factors in the process of organizational success. Better instructional designs can foster greater organizational stability and less employee turnover and conflicts in this stressful competitive environment. We shouldn't underestimate the rest of training designs, even though other training designs are most effective in meeting the purpose of the training requirement.

Scope for further research

This study was limited to the different instructional designs. Further, the studies can be conducted related to participation in the training decisions, skills of the Trainer, organizational climate and training content.

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3 The Impact of Technology on Contemporary Practices of HR and Its Role in Enhancing The Organizational Effectiveness - An Empirical Study

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Abstract

In contemporary times, the influence of technology has made the world a global village. Advanced means of communication and transportation has reduced the distance of miles into few hours/minutes. The advent of computers and internet has its significant impact on every aspect of society. Today the business world cannot survive without technology. This paper tries to explore and study in an empirical way, the impact of technology on contemporary practices of HR and its role in enhancing the organizational effectiveness.

Keywords: - *Technology, Human Resource, Organizational Effectiveness*

Introduction

"The e- revolution has finally freed HR to focus on strategies to support the company business- the acquisition, retention and growth of the company's most important assets: its people and its collective knowledge."- Watson Wyatt, HR consulting firm.

Today, the business world is facing a lot of challenges and is undergoing a substantial change. Organizations are facing the problem of job hopping, job poaching, attrition, employee turnover etc. The organization which supports the traditional HR functions fails to catch up with the dynamic changes happening in the environment. They are lagging behind in collecting employee information, monitoring individual performance and implementing organizational policies. There is constant pressure on HR to adapt itself swiftly with the environment. Effective management of human resources can provide organizations with a significant competitive advantage in this globalized and liberalized world. The organization has to make all efforts to bridge the knowledge gap. It has to support the strategic objectives, focus on value adding activities which will lead to change in the job content and expectations from employees. Managing the human assets is critical for the organization as it has a significant impact on organization's goodwill and profitability in the market.

Procurement: - Today organizations are using more elaborated and creative methods to hire the right people from the shrinking pool. The organizations are using their own websites as well as job portals like monster.com, Hotsjob.com, Hiree.com, Headhunters.com, Naukri.com and Timesjob.com to hire a quality talent. Getting the resumes in an electronic form has its own advantages like dealing with less paperwork, storing the resumes in their databases, greater ease of sharing the information with others involved in hiring processes.

Development:-Organization invests heavily on training and development of the employees. This is one area where most of the companies are looking for an opportunity to minimize their expenditure. Technological tools try to rectify this problem. Helping the employees to learn better and faster is the key concern for the HR executives of the organization. Lack of skilled employees is the potential barrier for most of the organizations. Online training helps the organization in significant

ways like it delivers training material anywhere and anytime; it has the ability to help the employees to learn faster and in some cases better; delivers learning free of limitations of time and space; if the material is interactive it allows the learner to respond to the questions and receive immediate feedback; it also helps in tracking and evaluating the effectiveness of training. In addition to this many organizations are providing customized training programs for different employees.

Compensation: - Compensation and benefits has undergone a sea change in the past few years. The technology has its profound impact on the compensation and benefits administration. Compensation plan should be at or above market level, including stock options; quality of life with flexible work time and more vacation time; opportunities for personal development and skill development; performance and skill based incentives. Presently the compensation benefits available are more of a self-service operation on the company's website. The other advantages of integrating technological tools in compensation are, it provides greater access to relevant information about compensation benefits etc.

Retention:- Retention of critical talent is prudent for organization's survival, long term profitability and growth. Organizations are employing a plethora of techno savvy techniques to meet this challenge. The techniques used to find out why the employees stay or leave the organization are employee opinion surveys and exit interviews. The opinion surveys help in knowing the mind-set of the employees. The exit interviews often help organizations to better understand the rationale of employee turnover. Most of the organizations are emphasising on the importance of culture. They are also making it sure that employees have the best tools to do their job effectively. Because of intense competition it is a daunting task for organizations to retain the critical talent.

Human Resource Information System (HRIS):- HRIS can briefly defined as integrated systems used to gather, store and analyse information regarding organization's human resources. It refers to the system and processes at the intersection of HRM and information technology. It is an information system that provides a single centralized view of data that a human resource management require for completing HR processes.

HRIS helps in implementing and administering the organization compensation policies. It provides statistical summaries and special reports involving pay grade, performance data, pay roll information and other employee records. HRIS is integrated with payroll system of the organization to prepare bonuses, benefits and maintaining payroll records.

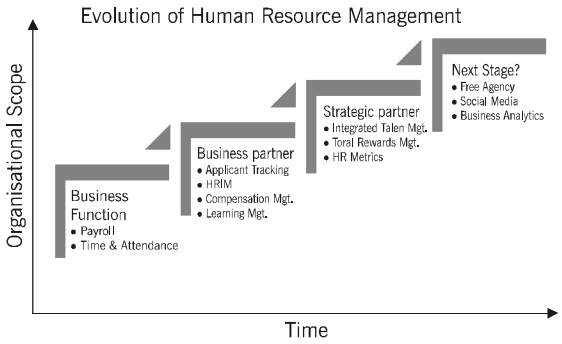
Application tracking system is also known as candidate management system. It is a software application designed to help an enterprise recruit employees more efficiently. It can be used to post job openings on a corporate website or job board, screen resumes and generate interview requests to potential candidates by email. It also helps in customized input forms, pre-screening questions, response tracking and multilingual capabilities.

HRIS helps in HR professionals to comply with regulations and can also make the process of compiling information and reports much less painful and time consuming.

Organizational Effectiveness: - It is the concept of how effective an organization is in achieving the outcomes the organization intends to produce. It is the ability of an organization to account successfully for its output and operations to its various internal and external constituencies.

Review of Literature

Traditional HR functions were limited to recruitment, selection, training & development, performance management etc. Early systems were narrow in scope and typically focussed on a single task such as improving the payroll process or tracking employees work hours. The intervention of technology has brought tremendous changes in the field of HR.



Source:-Mark Berry, 2015, HR Analytics: - The GPS of true HR transformation

Table showing changing role of HR from transactional to transformational

The dimensions of differentiation	Personnel management practice	Human resource management practice
The evaluation of personnel.	As variable costs.	As the most valuable of all the organizational assets.
The emphasis on : strategy and planning ; Problem- solving and mediation.	Short-term (reactive) orientation, (emphasis on problem- solving and mediation).	Strategic (pro-active) orientation (emphasis on strategy and planning).
The role of line managers.	Involves personnel managers.	Involves all managerial personnel.
The key levers of implementation of observed practice.	Based on personnel procedures and rules.	Based on the management of organizational culture.

Source : Bensahel, Chamsoutdinova: adapted from Besseyre des Horts 1988, pp. 51-68; Sisson, in Sisson (ed.), 1989, pp. 3-52; Bluton, Turnbull, in Bluton, Turnbull (eds.), 1992, pp. 1-15; Citeau, 1994, pp. 30-34; Storey, in Storey (ed.), 1999, pp. 3-31.

Gardner etal (2003), in their research work investigated the influence of extensive use of information technology in human resource. The findings suggest that use of technology can reduce routine work and allow better information communication and autonomy, which leads to fundamental change in the functioning of HR.

Hussainetal (2006), have discussed the use of technology in different size of companies. The application of technology can enhance the strategy partner role of HR professionals. The researchers also noted that application of technology can provide value added services and raise the status of not only HR but of organization as a whole.

Haines and Lafleur (2008) examines the influence of technology on the role and effectiveness of the HR function. The results reveal that the frequent use of technology in human resource applications result into the increased involvement of HR in the strategic role of organization.

Rueletal (2008), has opined that organizations can manage an increasing number of HR processes in an effective manner with the improved technology and this will help the HR to play a strategic role in attaining enhanced competitive advantage.

Adewoye (2012), has mentioned that the interaction and intersection between technology and HRM leads to emergence of human resource information system. It merged all HRM activities and processes with technology which provides strategic, flexible, cost efficient and customer oriented services.

Research Methodology

The study is descriptive and empirical in nature. It is based on primary data collected from various sample of the organizations. The research is quantitative in approach. Primary data has been collected through structured questionnaire. The questionnaire was close ended and is based on Likert five point scale. Secondary data has been collected through journals, books etc. Ten leading IT companies have been selected for study. These companies are listed in NASSCOM. The selection of these companies have been based on convenience sampling, although certain criteria to select the companies like the number of years in operation (i.e. min. of 10 years) and number of employees (i.e. min. of 1000) has been used. The questionnaire was self-administered to the HR executives to give their feedback.

Objectives of the Study

1) To assess the impact of technological tools used for procurement of employees on organizational effectiveness.
2) To evaluate the impact of technological tools used for the development of employees on organizational effectiveness.

3) To find out the impact of technological tools used for retention of employees on organizational effectiveness.

Hypotheses

H_{01} = There is no significant relationship between technological tools used for procurement of employees and organizational effectiveness.

H_{a1} =There is a significant relationship between technological tools used for procurement of employees and organizational effectiveness.

H_{02} = There is no significant relationship between technological tools used for development of employees and organizational effectiveness.

H_{a2} =There is a significant relationship between technological tools used for development of employees and organizational effectiveness.

H_{03} =There is no significant relationship between technological tools used for retention of employees and organizational effectiveness.

$H_{a3=}$ There is a significant relationship between technological tools used for retention of employees and organizational effectiveness.

Analysis & Interpretation

Table showing the relationship between technological tools used for procurement of employees and organizational effectiveness

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.925[a]	.856	.852	.19367	.856	225.909	1	38	.000

a. Predictors: (Constant), AV of F

This table provides the value of R and R square. The R value represents the simple correlation and is 0.925, which indicates a high degree of correlation. The R square value indicates how much of total variation in the dependent variable, technological tools for procurement of employees, is explained by independent variable, organizational effectiveness. In this case it is 85.6%.

ANOVA

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	8.473	1	8.473	225.909	.000[b]
Residual	1.425	38	.038		
Total	9.898	39			

a. Dependent Variable: AV of A

b. Predictors: (Constant), AV of F The above ANOVA table, which reports how well the regression equation fits the data (i.e. predicts the dependent variable). This table indicates that the regression model predicts the dependent variable significantly well. The F ratio tests whether the overall regression model is a good fit for the data. The table shows that the independent variable statistically and significantly predicts the dependent variable (1, 38) =225.909, $p<0.0005$ (i.e. the regression model is a good fit for the data.This proves the first alternative hypothesis that there is a significant relationship between technological tools used for procurement of employees and organizational effectiveness.

Table showing the relationship between technological tools used for development of employees and organizational effectiveness

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.961[a]	.924	.922	.15775	.924	464.051	1	38	.000

a. Predictors: (Constant),

This table provides the value of R and R square. The R value represents the simple correlation and is 0.961, which indicates a high degree of correlation. The R square value indicates how much of total variation in the dependent variable, technological tools for development of employees, is explained by independent variable, organizational effectiveness. In this case it is 92.4%.

ANNOVA

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	11.548	1	11.548	464.051	.000[b]
Residual	.946	38	.025		
Total	12.494	39			

a. Dependent Variable: V4

b. Predictors: (Constant), V5

The above ANOVA, table reports how well the regression equation fits the data (i.e. predicts the dependent variable). This table indicates that the regression model predicts the dependent variable significantly well. The F ratio tests whether the overall regression model is a good fit for the data. The table shows that the independent variable statistically and significantly predicts the dependent variable (1, 38) =464.051, p<0.0005 (i.e. the regression model is a good fit for the data.

This proves the second alternative hypothesis that there is a significant relationship between technological tools used for development of employees and organizational effectiveness.

Table showing the relationship between technological tools used for retention of employees and organizational effectiveness.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.973[a]	.946	.945	.1785317	.946669	.412	1	38	.000

a. Predictors: (Constant), V11This table provides the value of R and R square. The R value represents the simple correlation and is 0.973, which indicates a high degree of correlation. The R square value indicates how much of total variation in the dependent variable, technological tools for retention of employees, is explained by independent variable, organizational effectiveness. In this case it is 94.6%.

ANNOVA

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	21.337	1	21.337	669.412	.000[b]
Residual	1.211	38	.032		
Total	22.548	39			

a. Dependent Variable: V10

The above ANOVA, table reports how well the regression equation fits the data (i.e. predicts the dependent variable). This table indicates that the regression model predicts the dependent variable significantly well. The F ratio tests whether the overall regression model is a good fit for the data. The table shows that the independent variable statistically and significantly predicts the dependent variable (1, 38) =669.412, p<0.0005(i.e. the regression model is a good fit for the data).

This proves the third hypotheses that there is a significant relationship between technological tools used for retention of employees and organizational effectiveness.

Suggestions

1) For procurement of employees it can be suggested that organizations examine the benchmark in their industry and use electronic resumes. The organizations together with their HR professionals should search out on line resources and databases to fill positions or categories of employees.
2) For developing human resources, organizations should consider assessing the strategic and training needs of the employees. HR managers should work with employees to search out online career tools and use this as a tool of retention.
3) In terms of compensation and benefits the organizations must realize that due to advent of technology employees are more knowledgeable than ever before and it is prudent to monitor market trends in terms of pay and compensation.
4) Organizations should emphasize on employee retention through variety of strategies like supporting work-life balance, cultivating a corporate culture which focuses on employee development, offer options like telecommuting and flexible schedules.
5) There is a need for more direct tangible accountability for developing employees, leaders and managers, but this accountability needs to work both ways. Organizations must provide the training and support managers need, to build their management skills and capabilities.

Conclusion

Expedited investment and innovation in technology offers prospects for conducting businesses in the ways that are radically different from the past. Technology should be installed in the organization in such a way that it inspires confidence among the employees. Organizations and HR professionals must work together to leverage the innovations in technology in coming years. In future, those firms that undertake technology initiatives with more focus on value added activities are the ones which will realize the full potential of technology.

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4 Managing Business Competitiveness Through Technology & Strategic Human Resource Management

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Abstract

The field of strategic human resource Management considers people as a vital and a strategic asset of an organisation thereby making a major assumption that the way an organisation performs, significantly depends upon the way people perform. The fact that human resources are considered as strategic asset invariably makes it a source of competitive advantage. To sustain this competitive advantage, it is crucial for the organisations to implement HR strategies that have a positive impact on their performance. However, the link between HR strategies and organisational performance is an under researched area. This paper, thus examines the role played by human resource strategies on an organisation's performance and thereby sustainable competitive advantage.

Key words: *Strategic Human Resource Management, Human Resource Strategies, Competitive Advantage, Organizational Performance.*

Introduction

An organisation operating in the present competitive world, cannot entirely depend on production capabilities, financial resources, distribution channels and marketing expertise for gaining advantage over its competitors. This is because, all these factors that were once thought of as providing competitive advantage to the company,are now equally available to other companies as well. Thus these factors are now considered as mere assets and not assets that give competitive advantage. Organisations are now realising that they need to equip themselves with such assets that cannot be duplicated by the competitors. Contemplating the possibility of existence of such assets has given rise to the thought that the only asset in an organisation that fit the bill is the people employed by it. People are the key asset which an organisation can acquire and also, it is the only asset that has the potential to learn, grow and contribute (Fitz-enz, 1995).This makes human resources a strategic asset. In a world in which all work is knowledge work and intellectual capital is crucial for economic success, it is logical that the ability to attract, retain, and use the talents of people provides a competitive edge (O'Reilly &Pfeffer, 2000). Consequently, human resource management which deals with recruitment, training and development of the people, has now become a part of strategic management and has evolved as Strategic Human Resource Management. Strategic human resource management set out what the organization intends to do about its human resource management policies and practices, and how they should be integrated with the business strategy and each other. This suggests that there is a growing consensus that the skill levels, behaviour, abilities and values the employees have, are principal in an organisation's success.

Needless to say, businesses compete with each other to gain maximum market share leading to improved organisation performance that get reflected by way of increased profits. Extensive

research does exist in HR domain where a positive relationship has been documented between Human Resource Management practices and firm/unit performance. But, there still exists a gap in this strategic area of HR where a relationship needs to be established between HR strategies and organisational performance. Keeping this as a backdrop, this study attempts to address this gap by examining the impact of six important human resource strategies viz., staffing, training, involvement and participation, performance appraisal, compensation/reward and employee caring has on Organisational performance in the context of Mangalore Chemicals and Fertilizers Limited, a manufacturing company in Karnataka.

Literature Review

Organisations in the competitive scenario are continuously faced with the necessity to create and sustain practices that facilitate value creation (Jyothi&Venkatesh 2009). Effective organisations are increasingly realizing that, of the varied factors that contribute to performance, the human element is clearly the most critical (Jeffery2009). Human resource management deals with people related issue and is defined as "the process of acquiring, training, appraising, and compensating employees, and of attending to their labour relations, health and safety, and fairness concerns" (Dessler&Varkkey, 2008). Wright et al. (1999) conducted research on 190 US petro-chemical refineries in which they examined the impact of HR practices (selection, training, compensation and appraisal) on firm performance. Their results confirmed the existence of a direct relationship between training and compensation with workforce motivation. However, they found that HR practices (selection, compensation and appraisal) are positively related to firm performance only under highly participative systems. Bae and Lawler (2000) examined the effects of organizational strategic variables regarding HRM and the source of competitive advantage of 138 Korean firms. They found that firms with high-involvement HR strategies had better performance. Research conducted by Paul and Anantharaman (2003) suggested that practices like training, job design, compensation and incentives had a direct effect on the operational performance parameters. The significant relationship between HR practices and firm performance is encouraging and is in agreement with findings from other studies (Arthur, 1994; Pfeffer, 1994; Huselid, 1995; Delery& Doty, 1996; Delaney and Huselid, 1996; Guest, 1997; Huselid et al., 1997; McMahan et al., 1999; Fey et al., 2000; Huang, 2001; Stavrou and Brewster, 2005; Christiansen and Higgs, 2008). Thus, lot of research work has been done to find the impact HR strategies have on firm performance, but, very few studies have been made to find the link between HR strategies and Organisational effectiveness.

Objectives of the study

In the light of the literature review, the main focus of this study is to find out the impact the six human resource strategies viz., staffing, training, involvement and participation, performance appraisal, compensation/reward and employee caring has on organisational performance.

Research Hypothesis

Based on the reviewing of past empirical studies, the following six hypothesis have been generated linking HR strategies and organisational performance:

H1: A positive relationship exists between staffing strategies and organisational performance.

H2**:** A positive relationship exists between training and development strategies and organisational performance.

H3: A positive relationship exists between employee involvement & participation strategies and organisational performance.

H4: A positive relationship exists between objective performance appraisal strategies and organisational performance.

H5: A positive relationship exists between compensation & rewards strategies and organizational performance.

H6: A positive relationship exists between employee caring and organizational performance.

Methodology and Research Design

A survey research method was used to collect data from the case study company. Questionnaire was administered to the respondents through personal contacts. The respondents were managers/executives in the company at various levels of management. In total, the company has 114 management level employees to whom the questionnaires were administered. Out of 114 questionnaires, 98 usable questionnaires were received with a response rate of 85.96%. The respondents had to rate the questionnaire statements on a five-point Likert type rating scale, from little or no extent being 1 to very great extent being 5. Apart from the viewpoints of middle and lower level executives from different departments, views of HR department were taken into account through personal interview.

Concept of Research model

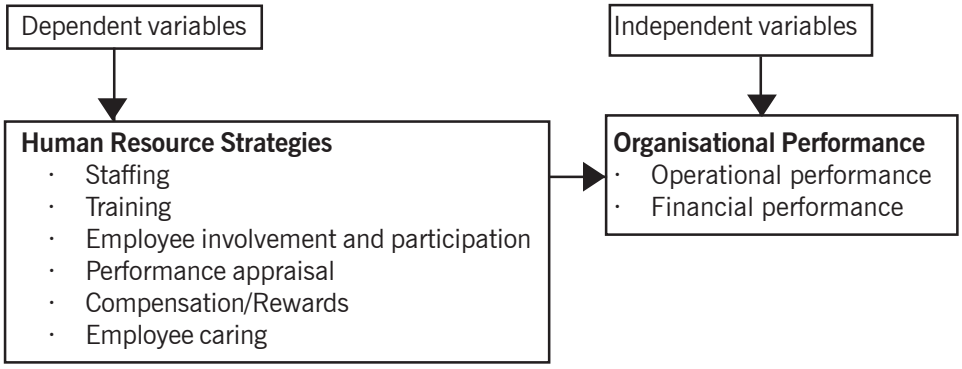

Figure: Research Model

Dependent variable

In this study, the dependent variable, organisational performance, was measured from two dimensions: Operational performance and financial performance, as proposed by Dyer and Reeves (1995). Operational performance included five statements related to improvements in employee turnover rate, absenteeism rate, skill development, employment productivity and product quality. Financial performance included three statements which included improvement in organisational growth, increase in return on investment and improvement in profitability.

Independent variables: Strategic approaches of the company in staffing practices are measured with the help of ten statements; training practices are measured with the help of nine statements; employee involvement and participation practices are measured with the help of five statements; performance appraisal practices are measured with the help of seven statements; compensation/reward practices are measured with the help of four statements and employee caring practices are measured with the help of three statements. The scale was on Likert five point scale (Little or no extent, Some extent, Moderate extent, Great extent and Very great extent). The questionnaire statements relating to the Human Resource strategies were drawn from extensive review of literature.

Analysis and Results

Profile of the case study company

Mangalore Fertilizers Limited was incorporated in the year 1966 and is a part of the United Beverages (UB) Group. The company manufactures urea, di-ammonium phosphate, muriate of potash, granulated fertilizers, micronutrients, soil conditioners, and specialty fertilizers; and

ammonium bi-carbonate, sulphuric acid, fertigation products, and organic products. It also produces ChemCF NL and ChemCF NP, which include sulphonated naphthalene formaldehyde liquid and powder products. It is the only manufacturer of chemical fertilizers in Karnataka state. The company has in total 872 employees of which 114 are in the management level.

Profile of respondents

The questionnaire was administered to the line managers from the different departments and to the assistant managers from HR and Finance department. The respondents are well qualified holding bachelor's/master's degree in various academic field.

The demographic analysis indicates that majority of the respondents are male i.e., 98%. This is because of the nature of the company i.e., manufactures of chemicals and fertilizers and hence female employees are considerably low. About 56% of the respondents are at least 35 years old. 80% of the respondents have put in at least 5 years of service in the company and 45% of the respondents have been employed for more than 15 years. This shows that the respondents have actually spent enough time in the service to know how strategic the recruitment/selection and training/development practices are in the company. However, the demographics data has not been used for analysis in this study.

Data Analysis

Factor analysis is a statistical method used to describe variability among observed variables in terms of a potentially lower number of unobserved variables called factors and this technique is applied when the reliability is below 0.8. Factor analysis assumes that all the rating data on different attributes can be reduced down to a few important dimensions. This reduction is possible because the attributes are related. In the questionnaire survey, the reliability test has been conducted to test the internal consistency reliability between the items in the questionnaire. The internal consistency reliability indicates the extent to which items on a given measure assess the same construct. The reliability test generated results, which were above 0.8 for all the dependent and independent variable relationships.

Hypothesis 1 predicted that a positive relationship exists between staffing strategies and organisational performance. The study found (Table 1) significant positive relationship of staffing with organizational performance ($r=.76^{**}$, $p<.01$).Thus hypothesis is accepted. Regression results in Table 2 also supported the hypothesis with organization performance ($â=.64^{*}$, $p<.05$). Hypothesis 2 predicted that a positive relationship exists between training and development strategies and organisational performance. The research indicated significant positive relationship of training and development strategies with organizational performance ($r=.76^{**}$, $p<.01$). Thus hypothesis is accepted. This is also supported by regression analysis ($â=.65^{*}$, $p<.05$). Hypothesis 3 predicted that a positive relationship exists between employee involvement & participation and organisational performance. The study reported significant positive relationship of involvement and participation with organizational performance ($r=.76^{**}$, $p<.01$). Thus hypothesis is accepted. This is also supported by regression analysis ($â=.75^{*}$, $p<.05$). Hypothesis 4 predicted that a positive relationship exists between objective performance appraisal and organisational performance. The study reported positive significant relationship of performance appraisal with organizational performance ($r=.52^{**}$, $p<.01$). Thus hypothesis is accepted. This is also supported by regression analysis ($â=.45^{*}$, $p<.05$). Beta value greater than .5 is considered as strongly associated with each variable. Hypothesis 5 predicted that a positive relationship exists between compensation & rewards and organizational performance. The study reported positive significant relationship of compensation & reward with organizational performance ($r=.46^{**}$, $p<.01$). Thus hypothesis is accepted. This is also supported by regression analysis ($â=.47^{*}$, $p<.05$). Hypothesis 6 predicted that a positive relationship exists between employee

caring and increase organizational performance. The study reported no relationship of caring with organizational performance. Thus hypothesis is rejected. This is also supported by regression analysis (â=.09*,p<.05).

Table showing Means, standard deviations, reliabilities and correlations

TABLE 1

Variables	Mean	SD	1	2	3	4	5	6	7
1. Staffing	**4.4**	**.5**	**(.8)**						
2. Training	**4.4**	**.5**	**.65****	**(.8)**					
3. Involvement & participation	**4.3**	**.4**	**.65***	**.71****	**(.82)**				
4. Performance appraisal	**4.4**	**.4**	**.39****	**.41****	**.29****	**(.8)**			
5. Compensation/Rewards	**4.5**	**.4**	**.38***	**.57****	**.46****	**.23****	**(.81)**		
6. Employee Caring	**4.2**	**.7**	**.13**	**.23***	**.16**	**.06**	**.17**	**(.82)**	
7. Organizational performance (.8)	**4.2**	**.4**	**.76****	**.76****	**.77****	**.52****	**.46****	**.16**	

*N=98, **p<.01, *p<.05*

Table showing Regression Analysis results

TABLE 2

Variables	Organizational Performance			
	B	T	F	AR^2
Staffing	.64*	11.85	140.58	.58
Training	.65*	11.91	141.91	.58
Involvement & participation	.75*	11.98	143.51	.59
Performance appraisal	.48*	6.04	36.5	.26
Compensation/Rewards	.47*	5.12	26.3	.2
Employee Caring	.09*	1.64	2.7	.01

*N=98,*p<.05*

DISCUSSION

The result shows that staffing has significantly higher relationship with the organizational output. The key to maximizing organization's success and minimizing its risk is the implementation of a systematic staffing approach that is fair, job-related and legally defensible. According to Hogg (2001) recruitment and staffing provides the overall framework for the process of planning, recruiting, selecting, and hiring of employees. Employee recruitment, selection and retention play vital role in accelerating organization's overall performance because it is the skilled employees who eventually make contribution for organizational success. Training has direct effect to boost up performance which later on moderates efficiency and effectiveness followed by organizational performance. Kintana, Alonso and Olaverri (2006) indicated that training has positive effects on productivity. Martell & Carroll (1995) indicated that training has positive effects on competency, turnover and employee commitment. The study also indicated significant relationship of training with the organizational performance. Involvement and participation has been proved to be another factor to ensure organizational performance. Employee involvement and participation at work have been identified as key factors in developing successful and mutually beneficial workplace relationships

which lead to organizational success (Das 2003). Employee participation is in part a response to the quality movement within organizations. The more employees are encouraged to take part in decision and policy making process for the organization the higher the level belongingness will be pronounced in the organization. Performance appraisal has positive significant relation with the organizational performance. The purpose of performance appraisal is to measure the current performance and the level of development of individuals. Depending on the requirements, employees are further trained, promoted or valued by the organization. LeBoeuf (1985) suggested that managers secure desired results through a compensation and reward philosophy that recognizes employees for the right performance. Even for training programs to be successful, organizations should reward managers who prove to be excellent trainers. The research found no relationship of employee caring with organizational performance. This was not considered important by the employees.

Conclusion

This study is based on empirical research reviewing the impact of human resource strategies on Organisational performance in Mangalore Chemicals and Fertilizers Limited. The current study reveals that the selected human resource strategies has a positive impact on organisational performance, thereby reiterating the existing literature that human resources if used as a strategic asset can indeed be used to manage business competitiveness. Thus, we can conclude that Human resource strategies lead to increase in employee productivity and employee efficiency which gets projected in the organisational performance. Failure of any one of the components of human resource strategies will have an impact on other components which in turn will lead to poor organisational performance.

Limitations

Small sample size was one of the major limitation of the present study. Moreover, the study did not take into account all the HR strategies of the surveyed manufacturing firm. In addition, the results of this research must be viewed with caution since it is a case based study. As such the results of this study cannot be generalized. However, this study could be used as a reference to find out the impact of strategic human resource management on organisational performance.

Directions for future research

In order to validate the findings of this study, future research may be carried in other industries. Future research with larger sample sizes would be productive to provide a support for the present findings. Additionally, the results of this study can be retested in other business organisations, so that the results can be generalised to other economic sectors.

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5 "Impact of Technology On Work Life Balance"- An Empirical Study

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Abstract

Technology is impacting us all, with devices becoming increasingly portable and fast, we can now access our work almost everywhere. The rapid spread of computer and telecommunication technologies throughout the work has forced us to consider the impact of these technologies on the people who use them directly and on the work force as a whole. This study focuses on the impact of technology such as personal computers, telecommunication technologies, and other aspects of Information and Communication Technology (ICT) on employees' and leaders' work expectations and how these impact on work life balance, specifically within the multinational companies (MNC's) .Therefore the study is to explore the impact of technology on the Work Life balance.

Keywords: *Quality of Work Life, Stress, Multinational Companies*

Introduction

The concept of "work life balance" was first used in the late 1970's to describe the balance between an individual's work and personal life. Work life balance can be defined as "the perfect integration between work and life both not interfering with each other. "According to Julie Morgenstern "Work life balance is not about the amount of time you spend working vs. not working".

The concept of work-life balance (WLB) is not new but with the changing pace of life and increase in stress levels, negatively affecting the quality of work, has made many organizations think about the strategies for maintaining a work life balance. A group of workforces that is greatly affected by the quality of work life as a result of dynamic changes in work life balance of employees is specifically women employees working in an organized sector.

WORK LIFE BALANCE

What is work?

"Work can be defined as the application of discretion within limits in order to produce a result".

What is work life?

Work life does not merely means the facilities provided to the employees during office hours. It comprises of all the collective feelings, which reside in the mind of the employee while he works in the organization, he is in the office or away from it.

Meaning

According to Julie Morgenstern "Work life balance is not about the amount of time you spend working vs. not working. It's more about how you spend your time working and relaxing, recognizing that what you do in one fuels' your energy for the other."

Definition

Work Life Balance is a person's control over the responsibilities between her/his workplace, family, friends and self. It is recognized that technology has an impact on the control an employee may or may not have with such responsibilities. Not all

employees use the same technology nor do they all their equivalent.

COMPANY PROFILE

Deloitte Touche Tohmatsu Limited commonly referred to as **Deloitte**, is a British multinational professional services firm headquartered in New York City in the United States.

Deloitte is one of the "Big Four" and the largest professional services network in the world by revenue in FY2014 and the largest by the number of professionals. Deloitte provides audit, tax, consulting, enterprise risk and financial advisory services with more than 225,400 professionals in over 150 countries. The company currently has a total of 46 global member firms and in FY 2015, earned a record $35.2 billion USD in revenues.

CGI Group

CGI Group Inc., Conseillers en gestion et informatique more commonly known as **CGI,** is a global information technology (IT) consulting, systems integration, outsourcing, and solutions company headquartered in Montreal, Canada. Founded in 1976 by Serge Godin and André Imbeau as an IT consulting firm, the company soon began branching into new markets and acquiring other companies. CGI went public in 1986 with a primary listing on the Toronto Stock Exchange.

Services provided by CGI as of 2015 include application services, business consulting, business process services, IT infrastructure services, IT outsourcing services, and systems integration services, among others.

Objectives of the Study

The purpose of the study is to examine the following:

- To know the impact of new technology on work-life balance
- To understand the link between work demands and levels of stress and
- To examine the boundaries between work and home

Definition of Work Life Balance

According to Julie Morgenstern "Work life balance is not about the amount of time you spend working vs. not working. It's more about how you spend your time working and relaxing, recognizing that what you do in one fuels' your energy for the other."

Scope of the Study

The scope of the project was limited to the team members of the Multinational companies. This population was sampled with a response rate of 100%, although the sampling size of thirty participants was small. Nevertheless, data and information have provided important insights on how each are affected by technology. Limitations in the project included variances such as employees' perception of work responsibilities, fluctuation of duties, and other influences. The data captured was only as accurate as the employees' account of them as the author relied solely on self-reporting measures. Employees may feel somewhat apprehensive in sharing factual information for fear of divulging exactly how much time they spend on work-related issues, therefore the data can be either over-inflated or under-inflated.

RESEARCH METHODOLOGY

Type of Research

This study is primarily a qualitative research study with the exception of questions based on the objectives. The questionnaires consisted of 15 questions and were distributed to the respondents. The two Multi National Companies was selected DELOITTE and CGI, where as respondents selected on random basis. The questionnaires were distributed through E-mail and a week time was given to them to revert back the form. And the collected data was analyzed and tabulated to find the responses given by the respondents.

Sampling size:

The sampling size consisted of employees of DELOITTE and CGI. The sample of 30 employees has been drawn working in different teams.

Sampling method

The study requires probability method therefore the sample was chosen at random. Hence this study was done with simple random tool which is one of the most popular methods of sampling.

Data Collection Procedure

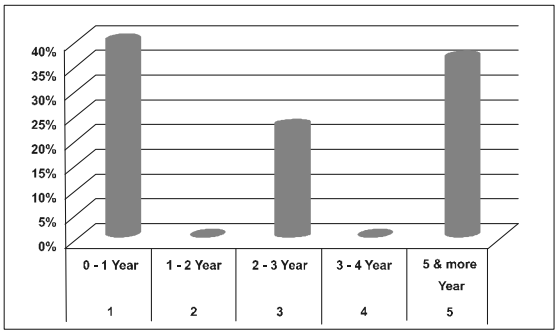
Primary data: Questionnaires were used to collect the primary data by mailing the questionnaire to the respondents of the organization. The data collected from the respondents were tabulated and interpreted to draw conclusion.

Data Analysis

Table showing the employee's number of years of association with the company

Sl. No.	Particulars	% of Respondents
1	0-1 Year	40%
2	1-2 year	0
3	2-3 year	23%
4	3-4 year	0
5	5 & more years	36.3%
	Total	100%

Graph showing the employee's number of years of association with the company

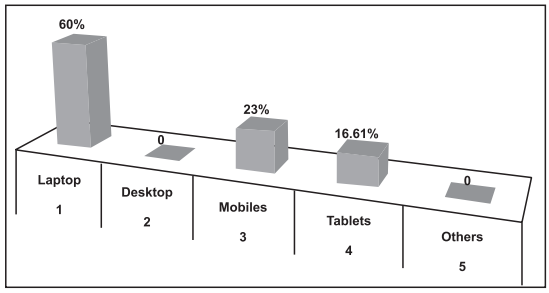


Interpretation: The above table shows that 40% of respondents are working from 1 year and 23% of them are working from 2 years and 36.3% of them are working from past 5 years.

Table showing the technological devices provided by the company to its workers

Sl. No.	Particulars	% of Respondents
1	Laptops	60%
2	Desktop	0
3	Mobile	23%
4	Tablets	16.6%
5	Others	0
	Total	100%

Graph Table showing the technological devices provided by the company to its workers

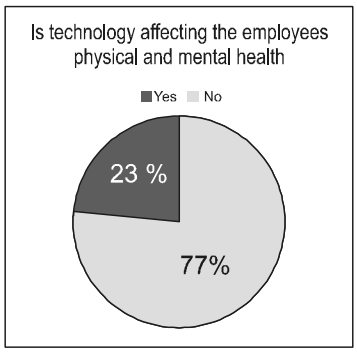


Interpretation: The maximum number of respondents are working in the organization by using Laptop.

Table showing the affect of use of technology on mental and physical health

Sl. No.	Particulars	% of Respondents
1	Yes	76.6%
2	No	23.3.%
	Total	**100%**

Graph showing the affect of use of technology on mental and physical health

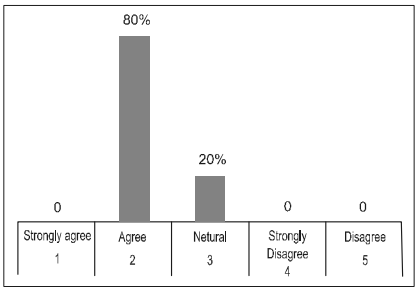


Interpretation: The above table shows that 77% of respondents feel that the mental and physical health of the respondents has been affected by using the technology at their work and 23% of them disagree with the above statement.

Table showing the response of the respondents towards the usage of technology and its contribution in reducing stress.

Sl. No.	Particulars	% of Respondents
1	Strongly agree	0
2	Agree	80%
3	Neutral	20%
4	Strongly disagree	0
5	Disagree	0
	TOTAL	100

Graph showing the response of the respondents towards the usage of technology and its contribution in reducing stress.



Interpretation: The employees undergo stress due to their work load. The technology they use in their work reduces the level of strees.

Findings:

- Majority of the employees are working from 1 year and 23% of them are working from 2 years and 36.3% of them are working from past 5 years.
- Maximum number of employees agree that technology has a direct impact on work-life balance.
- The employees are of opinion that the usage of technology in their work life has affected their mental and physical life. They undergo with severe health issues like headache, viral infections, eye sight problems, back pain etc,.
- Many companies now a days are depended on technology where the addiction has increased to that extent where now they cant even imagine their work without it. Most of the companies provide some of the technological devices like laptop, desktop, mobiles, tablets.
- Employees continue their work even after their working hours. There are some companies which expect the employees to work even after their working hours, to support this they use the modern technologies.
- Work from home benefit is utilized by many employees in the current scenario. Many employees, that are around 60% of them select this option because of self – illness or family member's illness.
- 90% of respondents undergo stress because of their work demands from the organization.
- 83% of the respondents check their company mail on a daily basis after their working hours through the devices given by the companies. And any emergency work has to be completed by employees even after their working hours that make them more stress and here they fail to balance their work and personal life.

- Meditation, yoga, travelling are some of the strategies the employees follow to reduce their work stress.
- Majority (80%) of respondents find more advantages by using technology in work life.
- Many respondents agree that the organization or management ask them to review and respond to their e-mail and attachments send to them even after working hours.
- The employees agree that very often they browse some of the e-marketing sites and social networking sites during their work hours.
- The respondents are of view that they find both pros and cons of using technology in their work life.

Recommendations and Suggestions

The study speaks about the affect of employees by use of technology in their work life and identified both advantages and disadvantages of technology in work life balance.

Advantages

- The difference is that they now do not stay at work until 9 p.m. but continue working from home.
- Some individuals commented that they enjoy working.
- One commented that the Internet has supported a wave of work that did not exist 20 years ago. Much of the correspondence back and forth is not as effective. Rather than meeting face-to-face and dealing with issues, staff are often commenting in isolation which may not be the most productive method. There is a far greater expectation placed on employees to contribute to planning and providing feedback on documents which are not necessarily in their area of expertise.
- Technology allows for immediate and broader distribution of material for review which may not have been required in the past. Our audience must be taken into consideration.

Disadvantages

- Employees access their work e-mail account on their personal device and almost they respond to work e-mails outside of office hours.
- Employers expect employees to repeatedly check e-mails outside of office hours.
- Most say that the usage of technology in their work life has affected their mental and physical life. They undergo with severe health issues like headache, viral infections, eye sight problems, back pain etc,.

Suggestions

- The employees find difficult to extend their working hours so it would be better if companies avoid assigning the work after their regular working hours.
- It would be better if companies organize programs that help the employees to reduce their stress level. Programs like yoga classes, meditation classes, games can be conducted that helps them to reduce their stress.
- The employees are finding difficult to carry their laptop every time from work to home it would be better if company follows any other alternative for it.

Conclusion

The research found that the use of mobile technology for both work and social purposes is widespread and pervasive, and for our sample at least, the use of technology, and the flexibility it offers, is generally viewed positively in terms of work/life balance and wellbeing. Social media use at work was perceived as a stress-reliever, particularly amongst the younger age group, and employers may benefit from considering this as a potential stress management tool, given that some respondents clearly have found the advent of technology to be a cause of stress in the past. It emerged from our research that a perception of having control over technology use is a potential mediator of whether it is viewed primarily as a positive or a negative.

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6 Organization Culture and Innovation: Affect of Its Variables

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Abstract

Today the firms exist in a turbulent environment where technology changes quite often, satisfying a customer is a big challenge and competition among companies is severe within the industry. With these backgrounds it is clear that innovation is indispensable for any organization. Innovation gives a competitive advantage over other organizations. There is no doubt that for the organization to survive and flourish innovation is considered to be very important. Sustainable growth is possible due to continuous improvement through innovation. For the innovation to happen a supportive organizational culture is inevitable. The study tries to find out the favorable cultural characteristics that can introduce and prosper innovation in an organization.

For the study a small sample of 30 responses are collected from the individuals who are working in three different companies where innovations are encouraged. Companies are in existence for three or more than three years. Study may throw light on the importance of culture on innovation. Other independent variables considered for the study are age of the company and years of experience of the respondents in the same company.

Key words: *Innovation, Culture, Organization, Strategy, Leadership.*

Introduction

There is no doubt that innovation is a driving force for the growth of a company. Those companies realized this factor encourage for more novelty. It is clear beyond doubt that innovation is the key to the success of many organizations. Imitation always takes the back seat and customer satisfaction and appreciation will be less for such products. Defining innovation is not as easy as it is expected. It is highly intricate and complicated. It is a multidimensional phenomenon where thorough knowledge and skill and out of the box thinking contribute for the new idea to born, develop and implement. Other important factors include infrastructure, teamwork and supportive supervisor or management. High level of motivation, opportunities, flat structure and flexibility will provide an environment for new ideas to generate. An idea generated has to be nurtured well in the organization, for that an encouraging and supportive work culture is important. Culture influences the innovation to design with novelty, to take risk and make use of opportunities appropriately. It is the behavior and faith that persuades or dissuades the ideas that are created. The development and implementation of the created ideas is based on the trust, cooperation and support from fellow workers and superiors. Convincing the new idea and later executing is challenging.

Many a time the fear of failure and loss of money deter employees from supporting it. But studies show that companies that conduct business in high

technology industries must "innovate or die" (Angel, 2006; p.1) and the presence of an innovation culture serves as a critical success factor. Such companies do not give importance to failure. They try continuously till success is achieved. This paper tries to understand the importance of culture for innovation to happen. Four important characteristics considered for culture include dominant characteristics, management of employees, organizational glue and criteria of success. These characteristics are based on the adhocracy and hierarchical culture. Innovation is defined based on the components like resource, capability and leadership.

Defining Innovation

An increasing number of professionals and researchers define innovation as any idea, practice, or object that the individual or organization adopt and regard as new (Damanpour, 1991). According to Drucker (1974), innovation can be generally defined as the process of equipping in new improved capabilities or increased utility (i.e. innovation is not a science or technology but a value). Inputs are transformed to outputs using technology. Sophisticated machines, systematic process, complicated techniques and appropriate layout make the technology innovative. The focus on strategies, values and methods makes technology purposeful for those who use it. Rogers (1995) defines innovation as an 'idea, practice or object that is perceived to be new by an individual or other unit of adoption'. It is not correct that complicated and sophisticated invention is only innovation. Any innovation that adds value to the end user and adds profit to the creator is accepted. Innovation always gives a competitive advantage to the companies. For the companies to continue in the growth phase of the life cycle, innovation is a must. Novelty is the ultimate word to satisfy the existing customers and can create new clients. So innovation can be defined as creation of new products and services that can serve the society with ease and with comfortableness. Identifying the needs and modifying the existing products or creating totally a new one that satisfy the needs of customers gives stability and continuous growth for the company. Keeny and Reedy (2007) point out that innovation involves the adoption of new products and/or processes to increase competitiveness and overall profitability and it involves new ways of identifying the needs of new and existing clients. For the innovation strategies to be initiated and to encourage this motive an ideal culture that supports innovation is required.

Understanding Culture

Culture is generally defined as a set of values, norms and beliefs within a company. An apt definition by Schein (1992) explains culture as 'a pattern of basic assumptions that was learned by a group as it solved its problems of external adaptation and internal integration, that has worked well enough to be considered valid and therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to these problems.' Culture can encourage and mold behavior and attitude of the employees. Adapting to the new culture may take time but once adapted it will continue for long time. It is important to create a healthy and progressive culture to be developed in the organization for the employees to be positive and energetic towards the job. According to Gaynor (2002) innovation is depicted as a cultural element of an organization which should be instilled by managers in order to communicate to employees the organization's mission, drive them to search for unique opportunities, ensure that those opportunities align with the organization's strategic direction, and both define the measurements needed to evaluate those opportunities success and to continually reassess that opportunity in the future so as to ensure that it remains relevant and beneficial. Culture explains the shared values, ideologies, beliefs and traditions that is passed year to year and is shared among all the employees. This culture reflects in their job and behavior. The metamorphosis that happens in the new entry employees related to the culture of the organization will lead to better performance and advantage.

Culture and Innovation

A culture that motivates innovation focus to update with latest technology, capable employees who get motivated by themselves related to novelty and exhibit sheer interest in implementing new ideas that leads to creativity. In this kind of culture, support from the superiors can be considered as an advantage to this direction. Organizations that concentrate to develop new technology or improve the existing one are possible with a strong organizational culture. A culture that sustains innovation is in the road of success. A favorable environment that focuses on trust, mutual understanding, cohesiveness, supportive superiors and structure, flexibility and openness encourage innovation. Organizational culture can persuade or dissuade the behaviors related to innovation. The relationship between innovation and culture to understand is not easy as there are many variables to be considered. It is impossible to consider all the variables in a study. Also some variables are difficult to measure and evaluate. Some studies show that there is a relationship between innovation and culture but identifying the characteristic factors of culture that influence innovation is important. Researchers also argue that organizational culture does not produce innovation per se (Covin and Slevin, 1991). In majority of the situations culture acts as a mitigating factor for the innovation to flourish well, even though there are other resources required. It helps the organization to achieve innovative competency within the organization. Some of the concepts related to cultural aspects apart from innovation are organizational change and growth. Any organization planning to grow innovatively should be prepared for continuous change and is linked to risk. This risk gives the result of continuous improvement that is essential for innovation. Another important feature of innovation support culture is the rewarding system. Rewards encourage innovation, leads to more creativity and continuous learning.

A culture that cultivate autonomy, open and informal communication, flexible structure and teamwork among the employees result in innovation to thrive well. The results of the study by Wang et al. (2010) indicate that firms with high orientation for the team were able to make better use of financial investments and human capital to produce innovations than firms with low orientation for the team. An effective team with mutual trust and cohesiveness is possible to achieve the best with good leadership. Leadership style also influences innovation (Amabile, 1998). As an enviranment of explained, for the creativity to developan environment of more flexibility, openness and with less stringed rules and regulation are required. Along with this, leadership style to follow is also important. For the creativity to penetrate into the minds of the employees participatory or democratic leadership is perfect. Such kind of a leader motivates the employees to work along with him and is clear about the outcome to be attained.

Objectives:

- To find out the influence of culture on innovation.
- To find out ideal culture (adhocracy or hierarchy) for innovation to flourish.
- To find out whether age of the company has relation with innovation components like resources, capabilities and leadership.

Hypothesis

H1: There is a relationship between adhocracy culture and innovation.

H2: There is a relationship between age of the company and components of innovation.

Creation of Framework

In this study, cultural characteristics like dominant characteristics, management of employees, organizational glue and criteria of success are considered. The items selected for these dimensions help to score the culture as adhocracy or hierarchical. Muller et al.(2003) have developed a framework to understand the innovative capacity within a firm. He has considered resource,

capability and leadership as the dimensions of innovation. Framework prepared by him combines resource view, capability view and leadership view on innovation. Resource view addresses the allocation of capital, labor and time resources to achieve the return on investment in strategic innovation. Capability view assesses the extent to which the company's skills, tools, and values are adapted to innovation. Leadership view assesses the degree to which a company's leadership supports innovation. The competing values framework, as developed by Cameron, Quinn and Robert (1999) has been used in constructing an organizational culture profile. In this respect the overall culture profile of an organization is identified as clan, hierarchy, adhocracy and market. For the study only hierarchy and adhocracy is considered. Hierarchy in an organization focuses on internal maintenance with a need for stability and control. Adhocracy concentrates on external positioning with a high degree of flexibility and individuality. The six characteristics developed from it are dominant characteristics, organizational leadership, management of employees, organizational glue, strategic emphases and criteria of success. In this only four characteristics are considered for the study. They are dominant characteristics, management of employees, organizational glue, and criteria of success.

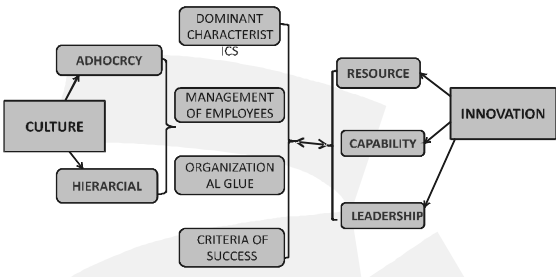

Fig. Framework of Culture and Innovation

Methodology

In the demographic aspects age of the company and the sector is considered. Another factor was the years of experience of the individuals from whom sample was collected. This was not included for the study but considered only those respondents who has worked in the same company for minimum of five years. Employees with more years of experience can respond well to questions related to culture and innovation. The data for the study is collected from employees working in three different sectors. They are manufacturing, IT and publishing companies. A total of thirty samples are collected including all the three sectors. Other samples with less years of experience has been eliminated for the study. From the four cultural profiles according to Cameron, Quinn and Robert (1999) only hierarchy and adhocracy are considered for the study. The four characteristics of culture considered are dominant characteristics, organizational leadership, management of employees, organizational glue and criteria of success are developed by Julia, Daniel and Raquel (2011). From innovation side the framework developed by Muller et al (2003) that explains the dimensions of innovation like resource view, capability view and leadership view are considered. The study tries to find out the favorable cultural characteristics that can introduce and prosper innovation in an organization.

From the descriptive statistics it is found that out of the 30 samples collected, 12 companies are aged less than 5 yrs, 11 are more than 5 years and less than 10 years, about 7 companies are aged more than 10 years of age. While collecting the sample, companies more than 3 years are considered. Sectors taken into account were manufacturing, software companies and publishing. Out of which 50% were manufacturing, 20% were software companies and the rest 30% are publishing.

Age of Company

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	less than 5yrs	12	40.0	40.0	40.0
	more than 5yrs but less than 10yrs	11	36.7	36.7	76.7
	more than 10yrs	7	23.3	23.3	100.0
	Total	30	100.0	100.0	

Three sectors considered for the study are manufacturing, software and printing press. More samples are collected from manufacturing (50%), then publishing (30%) and software sector (20%).

Sector that company belong

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Manufacturing	15	50.0	50.0	50.0
	Software	6	20.0	20.0	70.0
	Publishing	9	30.0	30.0	100.0
	Total	30	100.0	100.0	

Analysis is conducted using regression to find the cause and effect of the characteristics of culture with innovation. For this items related to adhocracy and hierarchy is taken to find the culture suitable to innovation.

The first characteristic considered is organization-dominant characteristic. In that one item is adhocracy culture related and the other one is hierarchical culture related.

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.200	.822		3.893	.000
	Organization-dominant characteristics (adhocracy)	3.243	.249	.123	.304	.000
	Organization-dominant characteristics (hierarchy)	2.989	.218	.145	.291	.000

a.Dependent Variable: innovation

The two items considered to understand the characteristics of culture, organization-dominant characteristics are –

a. Dynamic and entrepreneurial place – people are willing to stick their necks out and take risks.

b. Controlled and structured place – formal procedures generally govern what people do. In this former was related to adhocracy culture and later to hierarchical culture. From the analysis it is found that both are positively significant.

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.676	.856		4.294	.000
	Management of employees (adhocracy)	-.133	.230	-.112	.579	.027
	Management of employees (hierarchy)	-.038	.205	-.036	-.186	.051

a. Dependent Variable: innovation

Two items considered for management of employees are

a) Individual risk-taking, innovation, freedom, and uniqueness.

b) Security of employment, conformity, predictability, and stability in relationships. The former is related to adhocracy and the later is hierarchy. There is a significant relation for both. But the significance is more for adhocracy while hierarchy. For hierarchy the significance is weak as the value slightly higher than 0.05.

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.200	.822		3.893	.000
	Orgnization-dominant Characteristics (adhocracy)	3.243	.249	.123	.304	.000
	Orgnization-dominant Characteristics (hierarchy)	2.989	.218	.145	.291	.000

Coefficients a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.570	.615		5.804	.000
	Organization glue (adhocracy)	-.280	.196	-.313	-1.427	.016
	Organization glue (hierarchy)	.195	.206	.208	.949	.032

a.Dependent Variable: innovation

The items considered under adhocracy and hierarchy for the characteristics organizational glue is

a) Commitment to innovation and an emphasis on being on the cutting edge.

b) Formal rules and policies-maintenance, and hierarchy importance.For both the items p value is less than 0.05 and it is significant.

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.676	.826		2.029	.052
	Criteria of success (adhocracy)	.892	.455	.361	1.961	.050
	Criteria of success (hierarchy)	.020	.253	.014	.077	.939

a. Dependent Variable: innovation

The last characteristic considered in the study is criteria of success. In this items considered in adhocracy and hierarchy are

a) Having the most unique or newest products. It is a product leader and innovator.

b) Efficient-dependable delivery, smooth scheduling, and low-cost production are critical.

There is a significant relation for both the items.

The study tries to find out whether innovation parameters are true with the age. First innovation related to resources is taken into consideration. ANOVA is carried out to find out the allocation of resources for strategic innovation is related to the age of the company. The test finds that as the age of company advances strategic allocation of resources will be well versed by the company. This help in innovation and thus age is related to resources that leads to innovation.

Tests of Between-Subjects Effects

Dependent Variable: innovation-resources

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	3.124[a]	2	1.562	1.353	.016
Intercept	153.714	1	153.714	133.123	.000
Age	3.124	2	1.562	1.353	.016
Error	31.176	27	1.155		
Total	193.000	30			
Corrected Total	34.300	29			

a. R Squared = .091 (Adjusted R Squared = .024)

There is no significant relation between age and innovation related to capabilities. It is found that innovation due to the capabilities has no significant relation to age of the company.

Dependent Variable: innovation-capabilities

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	3.073[a]	2	1.536	1.027	.372
Intercept	183.169	1	183.169	122.433	.000
age	3.073	2	1.536	1.027	.372
Error	40.394	27	1.496		
Total	226.000	30			
Corrected Total	43.467	29			

a. R Squared = .071 (Adjusted R Squared = .002)

In the case of innovation related to leadership, the study finds that leadership is not significantly related to age.

Tests of Between-Subjects Effects

Dependent Variable: innovation-leadership

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.
Corrected Model	1.124[a]	2	.562	2.114	.240
Intercept	50.923	1	50.923	191.587	.000
age	1.124	2	.562	2.114	.240
Error	7.176	27	.266		
Total	59.000	30			
Corrected Total	8.300	29			

a. R Squared = .135 (Adjusted R Squared = .071)

Discussion

This study focuses on culture and innovation. In order to study the culture the characteristics considered are organization-dominant characteristics, management of employees, organizational glue and critical success. The items considered in these dimensions are categorized as adhocracy and hierarchy. This has helped to understand which type of culture is suitable for innovation. From the study it is found that organization-dominant characteristics related to hierarchy and adhocracy culture are significantly related to innovation. From the analysis it is clear that innovation happens in a dynamic and entrepreneurial environment and also in controlled structure where policies and procedures govern the organization. Even though some other studies prove that entrepreneurial climate is ideal for innovation, here it is proved that hierarchical culture also initiate innovation. This is found in some manufacturing and few printing organization. But not found in the software companies. Next characteristics considered is management of employees, here in adhocracy culture individuals are keen in taking risk, freedom and uniqueness. But in hierarchical culture security, stability in relation and less interest to take risk is found. The study proves that adhocracy culture is suitable for innovation. But hierarchical culture

cannot be eliminated totally. It is not significant as compared to the adhocracy culture. Hypothesis is proved correct for innovation to nurture, adhocracy culture is significant. A culture where risk –taking initiatives are encouraged, novelty and freedom is given to test and develop new ideas is the ideal environment for innovation. This is proved through this study. In organization glue, adhocracy and hierarchical culture proved true and significant. Both the cultures are proved to be good for innovation. Hierarchical culture emphasis on rules and policies but study proves that innovation initiatives can happen in such a climate also. Such initiatives are seen more in manufacturing and printing companies compared to software companies. While considering the criteria of success, the adhocracy culture item included is about the uniqueness of the products. It is proved significant that such things are part of innovation. But hierarchical culture related to criteria of success that includes smooth scheduling and low cost production is not significant. Apart from this for the innovation to happen some of the components that contribute to innovation is compared to age of the company to find out whether there is any relation between the company with experience and innovation. This study concludes that leadership and capability as innovation components has no influence on age of the company. It shows that optimal resource allocation improves with experience and is related to innovation.

Conclusion:

The study tries to emphasize the importance of culture for innovation. A culture that is flexible, open and with fewer formalities is good for innovation is proved beyond doubt from this study. But interestingly a culture with formal, hierarchical, stable and that rule with policies and procedure can also nurture innovation is clear in this study. The study did not try to understand in- depth about the sector that encourages hierarchical culture. But interaction with the employees after the analysis revealed that manufacturing environment in most cases is rigid and still innovation happens. So the view that adhocracy culture alone encourages innovation is proved wrong through this study. From the analysis it is clear that innovation with resource view is managed well as the age advances. Optimal use of resources for the innovation is possible in an effective manner as the experience of the company increases. But capabilities and leadership varies from time to time in the organization. It depends on the incoming or outgoing of the employees and leaders in the organization, innovations prosper. So age of the company is not related to the capability view and leadership view of innovation. The study can be extended to find out the influence of other cultures like clan and market culture to find out how innovation do well in these cultures. Another area of interest can be to probe the innovation sting in the sectors that is not included in this study.

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7

"Application of ICT in Rural Colleges: A Study With Reference To Commerce and Management Education Offered by Bangalore Rural Colleges"

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Abstract

This is an empirical research study which investigates the application of ICT in rural Colleges, Bengaluru. Two hundred and twenty-five (225) teachers were selected as the sample for the study. A self-developed instrument on the availability and use of ICT was used for data collection. The instrument contained 25 items. The reliability co-efficient of the instrument stood at 0.88. The data collected were analyzed using mean percentages. The findings revealed: acute shortage of learning materials such as on-line/ internet-connected computers, e-mail facilities, multimedia television, multimedia computer and digital library. It was also revealed that the few available ones such as off-line/ordinary computers, scanner, printer and ready-made courseware are not utilized because the teachers lack the knowledge and skills of computer application. The only material identified as available and in use is the telephone. It was recommended the authorities should embark on a massive computer training program for teachers. Teachers should be trained and retrained through in–service training, seminars, workshops and conferences for acquisition of the knowledge and skills needed for ICT application in Colleges.

Key words: *ICT (Information Communication Technology), RC (Rural Colleges)*

Introduction:

Over the last two decades, the use of ICT has been an important topic in education and studies have shown that ICT can enhance teaching and learning outcomes. As a result, most of the curriculum documents state the importance of ICT and encourage teachers to use them. However, teachers need to be specifically trained in order to integrate ICT in their teaching process. ICT proficiency is not a straightforward process, but is the one that asks for a careful, multilayered approach. First, a need assessment is important to find out what ICT skills and knowledge teachers need at management institutions. Second, designers of teacher education programs should know the teacher's perceptions of ICT and their attitudes toward ICT integration into curriculum as these attitudes and perceptions are instrumental in how future teachers will use ICT in their teaching.

Although there is a great deal of research on technology and teacher education, because of specifics of various teacher education programs, changes in population trends, and rapid technology advancements, there is a constant need for more research about the role of ICT in teacher education programs in this specific context. We are at the threshold of a beautiful and eventful phase in the area of education. The mind of a learner wanders as and when it is bored and it's the responsibility of the facilitator to keep it on the right track. So the teacher should realize that in the right set of circumstances, the use of ICT can lead to profound learning gains. However, rather than falling into

the trap of arguing whether ICT is "good" or "bad", we need to move the debate into a much sounder intellectual basis.

In this age of Information and Communication Technology (ICT), there is growing concern for the use of ICT resources such as the computer, scanner, printer, Intranet, Internet, e-mail, videophone systems, teleconferencing devices, wireless application protocols (WAP), radio and microwaves, television and satellites, multimedia computer and multimedia projector in curriculum implementation. In e-learning, curriculum content in the form of texts, visuals, e.g. pictures, posters, videos, audio/sound, multicolor images, maps, and graphics, can be simultaneously presented online to students in both immediate locations (classroom model of e-learning) and various geographical distances (Distance Education model of e-learning).

E-learning in education is the wholesome integration of modern telecommunications equipment and ICT resources, particularly the internet, into the education system. Tracy (1995) defines the internet as the international network of communications in which computers in the Wide Area Network (WAN) talk to each other. *Shavinina (2001)* defines ICT as all the digital technologies, including: computer, scanner, printer, telephone, internet, digital satellite system (DSS), direct broadcast satellite (DBS), pocket-switching, fiber optic cables, laserdisc, microwaves, and multi-media systems for collection, processing, storage and dissemination of information all-over the world. E-learning as an aspect of ICT is relatively new in educational system. It is a departure from the conventional approach in curriculum implementation. The main purpose of e-learning is to transform the old methods and approaches to curriculum implementation and not to silence the curriculum or to extinguish or erase the contents of curriculum. E-learning is driven by the curriculum. It should follow the curriculum and should not rob the curriculum of its essence.

E-learning should ensure effective pedagogy and curriculum implementation in the computer age.

According to *Nicholls and Nicholls (1980), Mkpa (1987), and Offorma (2002),* curriculum implementation is the planning and execution of the contents of curriculum in order to bring about certain changes in the behavior of the learners and the assessment of the extent to which the changes take place.

Presentation, demonstration and the implementation of data using productivity tools

Use of curriculum – specific applications such as educational games, drills and practice, simulations, tutorials, virtual laboratory visualizations and graphics, representations of abstract concepts, musical composition and expert systems.

Use of information and resources on CD-Rom, online encyclopedia, interactive maps and atlases, electronic journals and other references

Similarly, the role of ICT in curriculum implementation is recognized by the Indian National Policy on Education, where it is stated that, "the government shall provide facilities and necessary infrastructures for the promotion of ICT and e-learning." It is against this background that the researcher intends to find out the extent of availability and use of e-learning materials by teachers in rural colleges.

Statement of Problem

The call for application of ICT in colleges is to infuse and inject efficiency and effectiveness in curriculum implementation. However, in India, ICT is challenged with the problem of material devices such as computer, computer laboratories, internet and e-mail facilities, videophone systems and teleconferencing devices, fax and wireless applications, digital library, digital classrooms, multimedia systems and also there is dearth of trained teachers for ICT. The problem is that ICT in colleges is challenged by the new technologies in terms of availability and use. It is against this background that the present study is carried out to find the answers to the following questions:

1. To know the various ICT materials available to teachers for curriculum implementation.

2. To what extent are the available ICT materials currently used by the teachers?
3. To understand the strategies for improving the use of ICT materials in secondary schools.

Methodology

The study employed a survey research design. The sample for the study was comprised of 225 teachers who were randomly selected from different colleges. Structured questionnaire on a four-point scale was prepared. The content validation of the instrument was established by ten experts. The reliability of the instrument was determined using the Pearson Product Moment Correlation. A reliability coefficient of 0.88 was obtained, an indication that the instrument was reliable for data collection. The copies of the questionnaire that were administered by the researcher were returned and used for computation. The data collected were analyzed using frequency distribution and mean. Since the items were structured on a four-point rating scale, the decision rule was based on the mid-point of the scale, 2.50. Therefore, items with mean scores of 2.50 and above were regarded as agreed or positive responses while items with below 2.50 were regarded as disagreed or negative responses.

Results

Table 1

Table showing the *mean responses on the availability of ICT materials for curriculum implementation*
N = 225

S/N	Items: Availability of Materials	SA	A	D	SD	X	Decision
1	Off-line/ordinary computers	52	138	23	11	3.03	AV
2	Telephone/wireless Applications	191	32	02	0	3.84	AV
3	On-line/Internet Computers	0	0	04	221	1.02	NA
4	Scanner	43	119	40	23	2.81	AV
5	Printers	46	152	19	08	3.05	AV
6	E-mail facilities	0	0	10	215	1.04	NA
7	Multimedia Television	0	0	03	222	1.01	NA
8	Multimedia Projectors	0	0	0	225	1.00	NA
9	Digital Library	0	0	0	225	1.00	NA
10	Ready-made courseware: CD-Rom, etc	35	116	57	17	2.75	AV

Table 1 shows that items 1,2,4,5 and 10 with mean ratings of 3.03, 3.84, 2.81, 3.05 and 2.75 are available. They include: off-line or ordinary computers, telephone and/or wireless applications, scanners, printers and ready-made courseware. The Respondents affirmed that items 3,6,7,8 and 9 with mean ratings of 1.02, 1.4, 1.01, 1.00 and 1.00 are not available. They include: on-line or internet connected computers, e-mail facilities, multimedia television, multimedia projectors, and digital library.

Table 2
Table showing the mean Responses on the Use of Available Materials

N = 225

S/N	Items: Use of Available Materials	SA	A	D	SD	X	Decision
11	Off-line/ordinary computers	0	04	08	213	1.07	NIU
12	Telephone/wireless Applications	193	30	2	0	3.85	IU
13	Scanner	0	0	5	220	1.02	NIU
14	Printers	0	04	06	215	1.06	NIU
15	Ready-Made courseware: CD-Rom, etc	0	0	0	225	1.00	NIU

Table 2 indicates that items 11, 13, 14 and 15 are available but not in use. They have mean ratings of 1.07, 1.02, 1.06 and 1.00. However, the only material available and in use is item 12 that is telephone and/or wireless applications with mean rating of 3.85.

Table 3

Table showing the mean *Responses on the Strategies for Improving ICT learning Applications*

N = 225

S/N	Items: Strategies for Improvement	X	Decision
16	Massive computer literacy program for teachers.	3.81	Agree
17	Adequate provision of online computers/e-mail.	4.00	Agree
18	Connection of classrooms/Auditorium to the internet.	3.91	Agree
19	Procurement of multimedia systems.	3.75	Agree
20	Provision of incentives for courseware development.	4.00	Agree
21	Provision of digital libraries.	3.97	Agree
22	Employment of computer technicians for routine repairs.	3.70	Agree
23	Provision of standby generators for regular power supply.	3.88	Agree
24	Provision of security for safeguarding e-learning materials.	3.67	Agree
35	Training & retraining of teachers through seminars, workshops, and/or conferences.	3.94	Agree

The table 3 shows that all the respondents agreed that adequate provision of online computers and e-mail, and provision of incentives for courseware development, with mean ratings of 4.00 and 4.00 respectively will promote ICT applications in curriculum implementation in colleges. The table also shows that all respondents somewhat agreed that items16, 18, 19, 21, 22, 23, 24, and 25 with mean ratings of 3.81, 3.91 3.75, 3.97, 3.70, 3.88, 3.67 and 3.94 respectively will promote ICT applications in curriculum implementation in colleges.

Discussion

Research question 1, indicates the availability of five out of the ten items listed for ICT applications. The five that are available are: off-line or ordinary computers, telephone or/and wireless applications, scanner, printers and ready-made courseware. This supports the findings of *Akinola (2005)* in which only five out of the twelve ICT tools needed for Business Education were available. This study is also consistent with the findings of *Ikemenjima (2005) and Jegede and Owolabi (2008)* that there are

infrastructural deficiencies and shortage of facilities, including: computers, computer laboratories and online-classroom for the study of Computer Education in colleges.

Research question 2, addresses the use of the available ICT materials for curriculum implementation. The respondents affirmed those items 11, off-line or ordinary computers; 13, scanners; 14, printers; and 15, ready-made courseware: CD-Rom, etc., were available but not in use as indicated in the mean ratings of 1.00 for each of them. The respondents indicated that the only material available and in use is item 12, telephone or wireless applications with mean rating of 3.85. This confirms the results of *Effiong (2005) and Jegede and Owolabi (2008)* that ICT materials such as computers, computer labs, printers, scanners, e-books, textbooks, workbooks and books on ICT are not available and not in use in colleges.

Research question 3, indicates that the vast majority of respondents agreed with items 16 through 25 as measures to take to improve ICT application in curriculum implementation in colleges. Providing a massive computer literacy program for teachers had a mean score of 3.81. Adequate provision of online computers and e-mail facilities had a mean score of 4.00. Connection of classrooms and auditoriums to the internet had a mean score of 3.91. Procurement of multimedia systems had a mean score of 3.75. Provision of incentives for courseware development had a mean score of 4.00. Provision of digital libraries had a mean score of 3.97. Employment of computer technicians for routine repair had a mean score of 3.70. Provision of standby generators for regular power supply had a mean score of 3.88. Provision of security for e-learning materials had a mean score of 3.67. Training and retraining of teachers through seminars, workshops, and conferences had a mean score of 3.94. The findings agree with *Sundarajan (2005), Evoh (2007), and Nwana (2008)* that teachers should have adequate training for computer education.

Recommendations for Prospective and Effective E-learning

In view of the problems hindering ICT in colleges, the following recommendations are offered for prospective and effective ICT learning:

- The government should embark on a massive computer literacy training program nation-wide particularly for teachers and learners at all levels. This should be accomplished through in-service training of teachers, workshops, seminars, and conferences. For students computer education should be a compulsory subject at all levels.
- All classrooms and auditoriums in colleges should be connected to the internet in order to enhance web-based instruction. The government should do this by paying internet connection fees to Internet Service Providers (ISP) to provide internet services.
- Videophone, teleconferencing and multimedia systems e.g. multimedia computers and multimedia projectors should be provided in adequate quantities by the government for effective ICT learning.
- Teachers in colleges should be motivated and encouraged to develop and use multimedia courseware and software relevant to teaching and learning. The government should motivate teachers through provision of adequate funds for courseware development.
- The government should provide digital libraries in every educational institution. The library is the highest reservoir of knowledge and no educational institution can do without it. Ensure that each digital library has a server for storage, retrieval, uploading and downloading of information.
- The government should employ technologists and technicians to take care of internet facilities and equipment and to carry out routine repairs within education facilities.
- The government should set up standby generators and uninterruptable power supplies

(UPS devices) to tackle the problem of epileptic or inconsistent power supply in order to support the use of electronic equipment for e-learning.

Implications of the study

ICT is a computerized and digital type of education in which texts, audio or sound, pictures, images, graphics and videos can be simultaneously presented online to students. Two models of e-learning are the classroom and distance education models. ICT enhances curriculum implementation through the development and use of multimedia courseware relevant to teaching-learning situations. Some multimedia course wares include Learning Activity Package (LAP), power point slides, and diskettes. Software may be ready-made or teacher developed instructional software. Problems hindering e-learning were identified as follows: a dearth of videophone and teleconferencing systems, massive computer illiteracy, difficulties in the internet application and use, difficulties in the use of World Wide Web (www), and problems associated with e-mail. Other factors include the opportunities for development and use of courseware, the high cost of digital libraries, cost of internet connection, cost of computer and its accessories, lack of multimedia systems, epileptic or inconsistent power supply, techno-phobia and resistance. In conclusion, the government should mount an intensive e-learning training program for teachers, as well as adequately provide all the materials needed for e-learning application in curriculum implementation.

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8

A Conceptual Framework of Usage of Technology In HRD

Student Corner

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ABSTRACT

In the information age, technology is rapidly becoming an integral part of organizational life. Ever increasing technology applications have significantly reshaped the day-to-day practices of Human Resource Development (HRD). Technology, including the information revolution and globalization continue to exert major effects on HRD. It encompasses a wide range of subjects such as health care, nutrition, population control, education and training. A HRD strategy requires a sharing of responsibilities among the government, employers and employees which is based on investment in social infrastructure and investment in education & training. The fruits of HRD are evident in the much publicized rapid development achieved over a short period of time by Singapore, Hong Kong, the Republic of Korea, Taiwan, China, and earlier by Japan. HRD enhances employee competence in their jobs by increasing knowledge, abilities, and skills. The objectives of this paper are to find the reason for the increased importance of HRD in achieving socioeconomic development. This study also explores the role of technology in HRD, especially about three issues. First, it identifies the challenges that technology has brought to HRD in the twenty-first century. Second, it analyzes the impact of technology on HRD practices with a focus on emerging HRD practices in virtual environments. Third, it provides insights into the future of virtual HRD in training and development, organizational development, and career development. This chapter presents a conceptual framework for thinking about the role of technology in the digital workplace and highlights the challenges faced by HRD professionals in promoting individual and organizational learning and performance improvement.

Keywords: *Human Resource Development (HRD), Technology, Globalization, Socio-Economic Development, Strategy, Information.*

INTRODUCTION

Technology, globalization, and the changing demographics have created new workplaces that are dynamic in nature requiring effective and strategic Human Resource Development (HRD) for organizations to stay competitive. Human resource development is conducted in a wide range of organizations for a variety reasons and in turn focuses on an array of content. Within human resource development, Swanson and Holton (2001) state the "two core threads of HRD are individual and organizational learning and individual and organizational performance." The literature in HRD does not view the areas of learning and performance the same. However, the overall goal is to improve the individual and/or organization in a specific area. Similarly, instructional technologies are being used with a variety of content in a number of disciplines with the overarching goal to improve learning. Learning and performance are two major paradigms within the field of human resource development (Kuchinke, 2000). Instructional technology can be used to impact both learning and performance. The purpose of this paper is to provide an overview

of instructional technologies that can be used in the HRD process and, specifically, in training and development.

HUMAN RESOURCE DEVELOPMENT

Human Resource Development (HRD) is an emergent field that builds upon multiple disciplines including psychology, business, and education (Kuchinke, 2001). The HRD field is well established in practice, however has had only a brief formal existence in academia in comparison to many other disciplines (Swanson and Holton, 2001). When examining the theories of HRD, Weinberger (1998) reported definitions in the field as early 1970. Only recently has HRD been identified as a field in academia. According to the National Centre for Education Statistics the Classification of Instructional Programs: 2000 Edition identified HRD as a new academic discipline and provided a specific code in 2000.

The literature has provided many definitions of HRD. The definitions of HRD key components demonstrate the multi-disciplinary nature of the field and include behavioural change, adult learning (formal and informal), performance (human, organizational, individuals level, work process), performance improvement, organizational and personal goals, development (career and organizational), training and development, learning, learning climate, and learning organizations. Key definitions have a variety of underlying theories including psychological, systems, economic, philosophical, human performance, organizational performance, and performance system. While a wide variety of perspectives in the field of HRD can provide a view that is not limiting, it can also create too broad a field of study that is hard to define. For the purpose of this paper, HRD will be defined as the "…process for developing and unleashing human expertise through organization development, and personnel training and development, for the purpose of improving performance" (Swanson & Holton, 2001, p. 4). Swanson and Holton (2001) include system, psychological, and economic as underlying theories in the framework for HRD.

THEORETICAL FRAMEWORK OF HRD

The Human resource development as a function has evolved in India very indigenously from the year 1975 when Larsen & Toubro company conceptualized HRD as an integrated system and decided to separate it from personnel. Since then, in the last 25 years most organizations have started new HR departments or re-designated their personnel and other departments as HRD departments. Today there are high expectations from HRD. Good HRD requires well structured function and appropriately identified HRD systems, and competent staff to implement and facilitate the change process.

The consultants differentiated the HRD from other components of HRF and also integrated structurally and system-wise. Structurally the HRD is to be a subsystem of HRD and integration of this with the other two subsystems (Personnel Administration and Worker Affairs) to be done by the director level person (for example Vice-President Personnel & HRD), through task forces and sub-system linkages. Inter system linkages were outlined between various HRD subsystems to have an integrated system

Changing Role of The HRD Professional

It has been quite obvious how instructional technologies have impacted the process of training and development. Furst-Bowe (1996) stated that the HRD professional does not need to concentrate on the development as much as the use and evaluation of instructional technologies. The changing technologies have offered a variety of methods to deliver training, reduce costs, and provide many options for training. How this impacted the HRD professional is not the question. The question is how much it has impacted the role of the HRD professional. First, technology is changing many of the solutions available for the HRD professional in the areas of learning and performance in addition to changing many of the traditional administrative tasks. However, the role of the HRD professional is still to help improve the organization and individual. The traditional trainer

is identified as a coach or facilitator, not someone that stands up in front of classroom and delivers training. He or she needs to be skilled in instructional design, organizational change, and organizational behaviour. Since HRD is defined broadly, the implementation of technology and the use of instructional technology are impacting the role of the HRD professional. While the overarching theories are similar and the models are still appropriate, the areas of design and develop have been impacted the most.

Globalization

Globalization is a term in business that refers to the integration of an organization's operations, processes and strategies into diverse cultures, products, services and ideas. Because of its emphasis on diversity, globalization also has a deep impact on the way companies manage their employees. Understanding the effects of globalization on human resources can help managers to better equip their organizations for the increasingly global business environment.

Push For Professional Development

A further effect of globalization on HR management is a push for professional development. Professional development is concerned with providing employees opportunities to achieve their career-related goals. Some organizations provide resources for their employees to earn a university degree; others send their employees to conferences or networking events and training days. Professional development is important to globalization because it creates a win-win situation. The employees feel as though the organization is concerned with providing a range of skills and competencies for their employees. Likewise, the organization benefits from the added skills and connections that the employees who take advantage of professional development programs acquire.

Diversity Recruitment

With the rise of globalization, companies of all sizes are now interacting with customers and stakeholders from diverse cultures, languages and social backgrounds. In response, many human resources managers seek to hire employees from equally diverse backgrounds. Companies engaging in this diversity recruitment recognize the value of having people on staff that their customers can relate to, and they know that having a team of diverse people contributes to the range of ideas and influences within the organization.

Management of Laws Across Jurisdiction

A final effect of globalization on human resources management is the need for businesses to understand and apply the laws of many different jurisdictions to the particular business. The federal government sets out a number of tax and labour laws that businesses operating in the United States must comply with, but there may also be local and regional laws that apply to companies that operate in different states or different countries. Selling products in Europe, for example, might mean that a company has to impose a Value-Added Tax on its goods. Hiring employees at branch locations in different locations might change the requirements on minimum wage, tax allowances or working hours. Understanding these laws is vitally essential to the organization because any breach of them will have a serious impact not only on the business's financial well-being but also on its reputation.

Socio-Economic Development

Socio-economic development is a process that seeks to identify both the social and the economic needs within a community, and seek to create strategies that will address those needs in ways that are practical and in the best interests of the community over the long run. The general idea is to find ways to improve the standard of living within the area while also making sure the local economy is healthy and capable of sustaining the population present in the area. Socio-economic development occurs in neighbourhoods in metropolitan areas, sections of smaller cities and towns, and even in rural settings.

There are a number of factors that must be considered as part of any socio-economic development effort. Understanding the current circumstances that prevail in the area is the first step toward regional development. By assessing the potential of human capital in the area, allowing for the current unemployment rate and when laws and regulations are currently in place that may be impeding the introduction of new industry into the area, it is possible to begin developing a plan that will ultimately mean more jobs, stable employment for more households, and more money flowing through the local economy.

Greater Emphasis on Training

Similar to professional development, a greater emphasis on training has resulted because of globalization in human resources management. Training, however, tends to be focused on the needs and professional competencies of groups of employees within the organization. The company might, for instance, host language classes to give its call centre staff an edge in telephone sales. It might also teach its employees how to use a new global software platform. This emphasis on training seeks to give the company a competitive edge in the global marketplace by honing the employees' diversity emphasis.

EDUCATION AND TRAINING

A national drug policy requires a wide range of skills. Staff at all levels needs to be familiar with key policy issues that affect the quality, supply and use of drugs, and should understand the key objectives of the drug policy. For each category of personnel, the nature and extent of their involvement in the policy should be clearly defined. This will make it possible to decide on the orientation and level of training required for each category. There should be a number of minimum educational and training requirements for each category. For example, personnel and staff involved in specific activities to ensure the quality of drugs should be given adequate training in specific areas of quality assurance. Those involved in the drug supply system should receive training in management, supervision and certain administrative skills that they require.

Formal Training

While all levels of education have been impacted by instructional technology, technology has specifically impacted how vocational, postsecondary, and higher education develops the workforce. While human resource development encompasses many areas including performance improvement, organizational analysis, employee relationship management, evaluation, leadership, and organizational change management; a large role of human resource development is viewed in terms of training and employee development. Within HRD, training and development has had the greatest impact from instructional technologies. According to Marsick and Watkins "Formal learning is typically institutionally sponsored, classroom-based, and highly structured". Formal learning can be mediated by technology and is becoming an ever increasingly used technique in the workplace (Benson, Johnson, and Kuchinke, 2002). This section will highlight web-based instructional technologies such as learning management software, synchronous learning tools, and asynchronous instructional technologies for formal training and employee development.

Informal Training

Informal training is defined in contrast to formal learning. "Informal learning is usually intentional but not highly structured…When people learn incidentally, their learning may be taken for granted, tacit, or unconscious" (Marsick and Watkins, 2001). Examples of informal learning can include "self-directed learning, networking, coaching, mentoring, and performance planning that includes opportunities to review learning needs" (Marsick and Watkins, 2001).

Many of the technologies that have been described above for formal training can also be used in informal training settings. Having a course designed and available without an instructor

provides a setting that supports self-directed learning. Learning management software can be used to design this type of course and make it available to employees. Instant messenger can be used to help individuals in work teams learn in informal settings. This technology can be used to see answers to questions on an 'as needed' basis. An example of informal training using a Blog can be seen at the University of South Carolina. The Technology Support and Training Management Department implements a blog with their current students to share information on classes and special announcements. This type of forum can also be used in a formal business setting.

Strategies for Human Resource Development

The government should take responsibility for planning and overseeing the development of the necessary human resources. The strategies chosen should realistically reflect the needs and capacity of the country, and an adequate budget should be allocated. Consideration of the following aspects will help to ensure the development of a human resources policy that is supportive of national drug policy implementation.

It is necessary to plan from an early stage and to do so for short-, medium- and longer-term needs. A quantitative analysis of the human resources needed (including a realistic estimate of the attrition rate) may help to set priorities. Financial planning should match the financial resources with priority needs. Good planning and appropriate lead times will help to ensure that a sufficient number of trained people are available. Plans should include a career development policy and measures to retain staff in the service.

HRD strategies include:

- Management / Supervisory Training
- Team building Training
- Customer Service Training
- Harassment Training
- Tuition Reimbursement Program
- Performance Management
- 360 degree / multi-rater feedback system
- Career Coaching

Career Development and Team Building

Long-term plans are essential for ensuring a balance between training activities and human resources needs. Continuing education programmes and opportunities to collaborate with others can motivate staff, and help to keep them up to date. In addition, attention must be given to the payment of adequate wages and other incentives to retain staff.

The goals of the drug policy and the importance of the various components must be communicated to all concerned. Staff should be given clear responsibilities and targets, and should be informed of successes and failures through monitoring and evaluation. If they feel that they are part of a team, this will help to maintain a sense of involvement, purpose and motivation.

Collaboration with National Institutions

Activities that require specialist expertise - for example, drug evaluation and drug information services - can often be carried out more effectively within universities, training institutions or professional societies than within the health ministries. Collaboration between drug regulatory authorities and universities, research institutions, professional societies and individuals maximizes the use of national expertise and resources. It also builds up a network of people who are knowledgeable and involved in the development and implementation of the drug policy. Outside specialists can fill gaps where national expertise is lacking and can be used in national training programmes to pass on their expertise. When appropriate, professionals can be sent for short training programmes abroad.

Information

A Human Capital Management Solution, Human Resources Management System (HRMS), or Human Resources Information System (HRIS), as it is commonly called, is the crossing of HR systems

and processes with information technology. The wave of technological advancement has revolutionized each and every space of life today, and HR in its entirety was not left untouched. Early systems were narrow in scope, typically focused on a single task, such as improving the payroll process or tracking employees' work hours. Today's systems cover the full spectrum of tasks associated with Human Resources departments, including tracking & improving process efficiency, managing organizational hierarchy, and simplifying financial transactions of all types. In short, as the role of Human Resources departments expanded in complexity, HR technology systems evolved to fit these needs. The function of Human Resources (HR) departments is administrative and common to all organizations. Organizations may have formalized selection, evaluation, and payroll processes. Management of "human capital" progressed to an imperative and complex process. The HR function consists of tracking existing employee data which traditionally includes personal histories, skills, capabilities, accomplishments and salary. To reduce the manual workload of these administrative activities, organizations began to electronically automate many of these processes by introducing specialized human resource management systems. HR executives rely on internal or external IT professionals to develop and maintain an integrated HRMS. Before client–server architectures evolved in the late 1980s, many HR automation processes were relegated to mainframe computers that could handle large amounts of data transactions. In consequence of the high capital investment necessary to buy or program proprietary software, these internally developed HRMS were limited to organizations that possessed a large amount of capital. The advent of client–server, application service provider, and software as a service (SaaS) or human resource management systems enabled higher administrative control of such systems. Currently human resource management systems encompass:

1. Payroll
2. Time and attendance
3. Performance appraisal
4. Benefits administration
5. HR management information system
6. Recruiting/Learning management
7. Performance record
8. Employee self-service
9. Scheduling
10. Absence management
11. Analytics

Future Trends and Impact on HRD

The future of instructional technologies in HRD is hard to predict. It is apparent that HRD and instructional technology have grown out of the instructional media field (Rosenberg, 1982). The fields have begun to merge: while the instructional technology field focuses more on learning and the HRD focuses more on business and performance, both work jointly to improve performance.

With the increase in bandwidth when using Internet technology and the growing number of individuals with computer access, the possibilities are endless. With the push to open source learning management systems, it is possible for many organizations to afford instructional technologies for training. The use of strong evaluation to demonstrate what is working will provide a positive impact on HRD. HRD professionals collecting and providing evidence of success in terms of strategic business areas will additionally help the profession strengthen. Instructional technologies are creating many opportunities for informal learning. Additionally, many of the instructional technologies mimic a business environment that is today calling for global collaboration, continuous learning, and knowledge management. If used strategically, the instructional technologies can be used to create a learning culture and help keep competitive advantage. This can help in the creation of an organization that has the ability to foster learning.

Latest trends in HR Technology are:

- There will be a move from Quantity to Quality.
- The number of so-called Breakthrough HR technologies will diminish.
- It's all about implementation.
- Analytics is the special sauce.
- Social media and Continuous Learning continue to grow in significance

Conclusion

In conclusion, HRD initiatives are implementing instructional technology widely. While there is a great deal of literature on the use of instructional technology in human resource development, there is not as much research on the effectiveness of the instructional technology. More research is needed to evaluate the impact of instructional technology and specifically how the instructional technology impacts the strategic goals of organizations. Metrics are needed to assess the impact of instructional technology. Since instructional technology in HRD is used in such a wide variety of settings, providing scientific methods to view effectiveness would be useful. Additional research on informal learning would strengthen the case for its use in HRD.

Further development is needed in research and theoretical foundations in the area of HRD instructional technology use. Since instructional technologies are changing the role of the HRD professional, it would be useful to examine the traditional frameworks to see the impact of instructional technology. For example, does the traditional andragogy model fit with the use of instructional technology in HRD? Instructional technology will continue to be used in developing human resources in the workplace. A better understanding of how instructional technology and human resource development work together will improve the development of human expertise.

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9

Teachers' perceptions on the use of technology in teaching English - A Case study

Case Study

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English Language has been crucial to learning in a country like India, where it is multilingual and looks for a common ground to make learning across people from all linguistic backgrounds practicable. English has been the link language of the Indians across all states and was picked up instantly by Indians quite eloquently post independence era. In the ever changing scenario of business, learning English is all the more crucial and important for sustainable growth in a globalized world scenario. In this context, a study was conducted among English teachers of Visakhapatnam across various institutions to find out whether, the use of technological aids has enhanced English learning and also explores the views of English language teaching and disemmination among the English teachers.

An attempt is made to review the available literature pertaining to the subject, co-relating their importance to the Indian context in particular. There is good number of studies in this area. While most of the studies pertain to the impact of E-technology on learning in general, studies related to its impact on English Language Learning are limited in number. However the researchers reviewed have related literature on the subject. Otto Jespersen(1968, cited in Pennycook 1994:7) gives insightful approximations of the number of English speakers since the 15thcentury.In the year 1500, they were estimated to be four million, in 1600 their numbers increased to six million, in 1700 their figure moved up to twenty and forty million and in 1900 it grew between 116 to 123 million. Today, English speakers are estimated to range between 700 million and 1 billion (Crystal 2002:2).

The use of English is not uniform in the different countries where it is spoken. Kachru(1985) states that speakers of English fall into three categories that can be represented through three concentric circles. The inner circle includes countries such as the UK, the USA and Australia where English is the primary and most often the only language for a majority of the population.

Haythornthwaite and Kazmer (2004)[1], have expressed that there is a need for a holistic approach rather than concentrated one. They have gone on to suggest that today's technological advance requires more of multidisciplinary approach. They feel it is essential for understanding the complex interactive effects associated with e-learning.

Hernández-Ramos, P. (2005) has briefly explained the effects of technology[2] when faculties resorted to it. They went to explain the "students should not be merely defined asquestions of access,but instead be further regarded as questions of (a) availability in terms of appropriateness of software and technical support, and (b) integration in terms of a person's training. In other words, the effect of technology use should support teachers' productivity and students' accomplishments with regard to language learning."

[1]Haythornthwaite, C. & Wellman, B. (2002). Introduction: Internet in everyday life. In B.Wellman & C. Haythornthwaite (eds.), *The Internet in Everyday Life* (pp. 3-44). Oxford, UK:Blackwell.

Learning, in 21st century, takes place in many forms. A person is now presented with host of options to learn from. In this regard Reeves, 1998[3] has said that "Learners may have access to technology in educational settings in two distinct ways: learning from and learning with technology". His study revealed that students learn both from and with media and technology. Instructional television, computer-based instruction, and integrated learning systems have all been demonstrated to be effective and efficient tutors.

Hill, Wiley et al (2004) have opined that the use of the Internet for learning was still in nascent stage, though the growth rate is very high. Teachers are still exploring and/or have moved into this arena to reach learners. As educators are exploring and implementing Internet-based learning environments, they are also exploring how to reach their learners. They have said that "[.] internet is a technology that has the potential for enabling the creation of learning-centered distance education environments—ones in which students, teachers, and experts are working together in the learning process."[4]

Ringstaff & Kelley, 2002 have been quoted, "Learning from technology approach generally considers computers as tutors, and takes various forms to deliver the instructional material to the learner, such as computer-assisted instruction".[5]

Parthasarathy (2001) observes that 50 million people were latching on to the world-wide web just four years after it became publicly accessible while it had taken 38 years for the radio and 13 years for TV to reach that figure.

Clark and Salomon (1996) point out that there is an historical precedence related to the adoption of technology for learning:"[..]there has been a pattern of adoption by schools in response to external pressures from commercial and community special interests rather than as a result of identified and expressed need"[6].

Warschauer (1996) compared face-to-face and electronic discussion in the second language classroom on a group from advanced ESL class in Hawaii. His study revealed that students used language which is lexically and syntactically more formal and complex in electronic discussion than they did in face-to-face discussion, thus demonstrating another possible advantage of computer-mediated communication[7].

Verma and Krishnaswamy(1989) "Within the limits of human cognition languages change because of their built-in tendency to change, the inventive faculty of the users; several other human factors like modesty, confusion, sloth, etc., and the passage of time"(p 19).

Crystal (2001) says, "We can never predict language change, only recognize it once it has happened" (p 22).

Some facts of the Case to enhance the understanding

The study was conducted among faculty and consisted of more female English teachers. Most of the teachers interviewed were young in the most productive age groups. The teachers had a huge work experience. Most of the teachers were holding masters degree and only a small percentage were holding tertiary education. Majority of the teachers interviewed had an experience of 6-10yrs and also a sizeable 32% with an experience of 1-5 yrs.

The teachers opined that having more students per class will decrease their efficiency in imparting knowledge. Effective training is carried out when the class strength is not exceeding thirty students. Trainers have better reach when the size is limited. An effort has been made to understand the strength of the class so that the effectiveness can be gauged.

[2]Hernández-Ramos, P. (2005). If not here, where? Understanding teachers' use oftechnology in Silicon Valley schools.Journal of Research on Technology in Education.
[3] Reeves, T. C.," The Impact of media and technology in schools: a research reportprepared for The Bertelsmann Foundation. "The Bertelsmann Foundation, Feb 2, 1998
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[7]Warschauer, M.,"*Comparing face-to-face and electronic discussion in the second language classroom*". Calico Journal, Nov, 1996

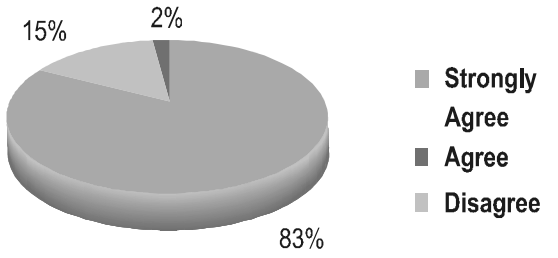
It is observed that school and college managements prefer to admit more number of students per class. There are different reasons for this.

1. Lack of space and infrastructure to accommodate more number of students per class.
2. Smaller classrooms would mean more teaching sessions for the teachers, mostly resulting in increased fixed costs.

The respondent teachers also felt that the English language learning has been relegated to the background in most institutions where they teach. They feel that this has just become a routine subject and not much importance is being given to the same.

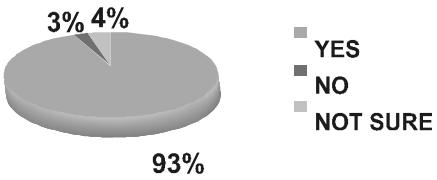
It has been observed that English as a subject is not given much importance as it only forms a tertiary subject. It is only conducted as it is included in the course and students require to pass it to clear the course. English teachers were not happy with the time given for the completion of the syllabus, the syllabus content and also the overall importance given to the subject.

REASONS FOR DETERIORATING STANDARDS OF ENGLISH LANGUAGE:



It has been observed that the manner in which English language is being used is deteriorating quite rapidly. Teachers have been asked to cite the reasons that they felt were responsible for such deterioration. This gives us further insight into the problem and enables us to understand the reasons. It is observed that the faculties have ranked texting messages as the most important reason that has perpetrated in bringing down the standard whereas second rank was given to the 'attitude of youngsters' which has changed the way English language is spoken, while 3rd rank was given to 'English prescribed for syllabus'. The teachers felt that the language used while messaging was the main reason for the deterioration of English language among students. The use of contractions in place of complete words has led to this state.

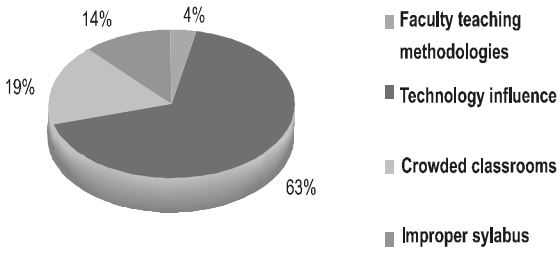
SHOULD TEACHERS UPDATE THEIR ENGLISH LANGUAGE SKILLS



Learning is a continuous process. One cannot just stop learning. Teachers are also required to constantly update themselves so that their delivery methods are effective and efficient. This question gives an insight whether the faculties are updating their knowledge frequently or not. This will be useful in further analysis of measuring effectiveness of teaching methods.

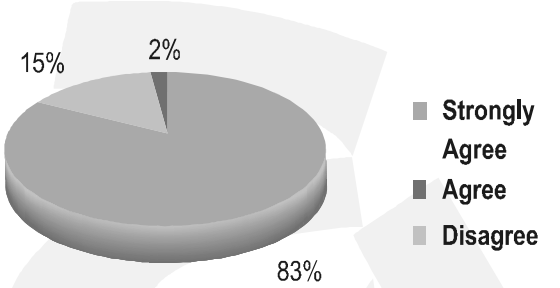
Majority of the faculty have agreed that it is imperative for teachers to constantly update their knowledge and skills. It has been observed that 4% (20) did not feel to update their skills. The reasons that have been cited were; that they lack time for such updation while few stated that they are content with their level of skills set and knowledge.

REASONS FOR POOR SPELLING, GRAMMAR



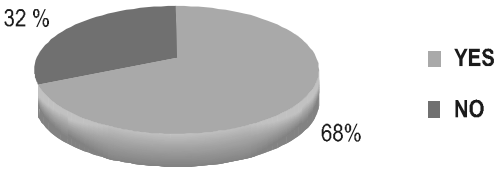
It has been observed that there are lot of spelling and grammatical mistakes committed by students, so the teachers were asked to cite out the main cause(s) which they felt were resulting in such errors. This would help in analysing the factors and their impact on deteriorating of English language usage. The faculties have ranked the factor 'technological influence' as the most influential reason while 'crowded classrooms' ranked second were the reasons for poor spelling and grammar. It can be once again observed here that technology has played its part in diminishing the quality among students of English language. Also, over-crowded classrooms also led to the diminishing standards. It was always believed that a size of 30~35 students per class is the optimal batch strength, but in most cases, as observed earlier, the size of the classroom ranged between 45~60. This has deteriorated the faculty attention towards students.

STUDENTS WRITE AS THEY SPEAK AND THIS HAS CHANGED ENGLISH LANGUAGE TO A GREAT EXTENT



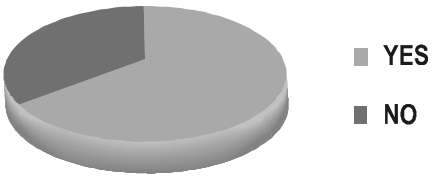
The teachers were asked whether there is any difference in the way students write their subject content to the way they speak and converse. This question's results will be helpful in establishing whether the deteriorating standards in communicating have also made its way into writing abilities. Teachers have stated that students write in the same manner as they would while using electronic messaging services. The contractions of simple words and shortening of sentences, the informal addressing have all found their way into the language while writing classroom and examination content. There seems to be a problem in delineating official and unofficial communique.

COMPUTER LITERACY



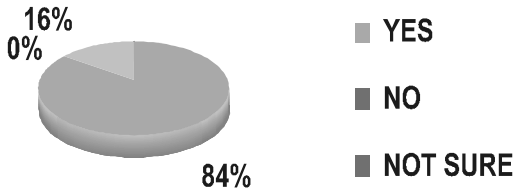
Technological advances have made their way into pedagogy. Innovative technologies and interactive software have simplified the way courses are delivered nowadays. An attempt has been made to understand the computer literacy of the faculty.It is observed that 32% of the faculty are not fully aware of the computer usability and they feel that they do not need to be. They remarked that the delivery in classroom is more than enough and that there is no need for technology in imparting English language.

EXISTENCE OF COMPUTER LABORATORY



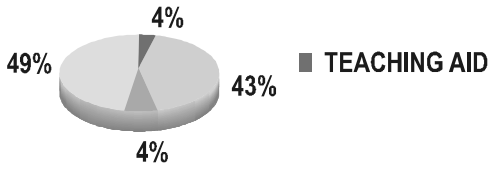
63 percent of the respondents reported that they have computer laboratory facility in their college, while 37% did not have any such facility.

ON USAGE OF TECHNOLOGY AS TEACHING AID

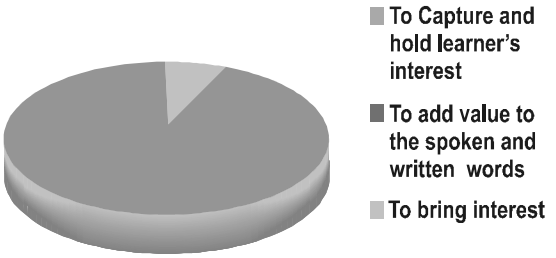


Technology, many have opined, is boon as well as a bane. It solely depends on how one utilises it and for what. Perspective of teachers is sought in this regard as to what they feel about technology making in-roads and providing aids to teaching methodology. It is found out that that 84 percent of the respondents felt that it was important to use technology as a teaching aid, while 16% of them were unsure about its importance. Majority of the faculty felt that it was important to utilise technology to enable teaching English. They opined that good visuals have an effect on learning and students are able to learn quickly.

SUGGESTED TECHNOLOGY FOR TEACHING AID

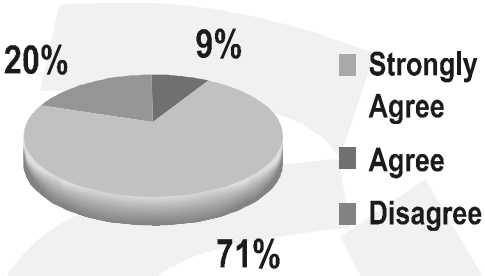


There are various technological mediums like televisions, computers etc. which can be used by faculty to impart education. It is important to know as to what are the preferred mediums of technology by the faculty as it gives an insight as to their pedagogy methods.From the analysis, it is found that the teachers have expressed that they would like to use a mix of available mediums instead of restricting to only one. While few have ranked use of computer to be a preferred medium as second. Teachers have said that they use a variety of technological aids depending upon the need. They prefer computers certain type of delivery while televisions for other.



Learning takes place through various methods. There are three ways through which learning takes place, Audio, video and kinaesthetic. There's a need to know the methods through which students best absorb the content. There are various visual representations and so are there many audio files, the objective is to know which is more effective and more popularly accepted. From the study, it is interpreted that 93 percent of the respondents suggested using e-technology to assist in English language learning to capture and hold learners interest as well as to add value to the spoken and written words in English.Teachers have reported that with the use of technology teaching has become easier as it helps in capturing the attention of the students. The students had, earlier, a tendency neglect the language class due to various reasons, but with technological aids, innovative and creative illustrations are helping the teachers to capture the attention of the students.

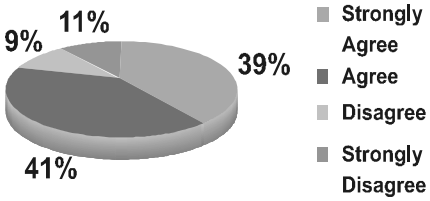
PERCEPTION ON TRADITIONAL TEACHING METHODS



It is observed that 71 percent of the respondents disagreed that traditional teaching methods were better for teaching English language when compared to using E-technological aids to assist

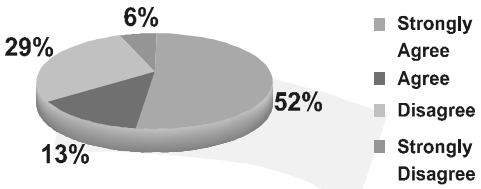
in the same, while 9 percent of the respondents agreed with the use of traditional teaching methods as being a better teaching methodology.

PROPER UTILIZATION OF TECHNOLOGICAL AIDS



It is found out that almost 80 percent of the teachers have agreed that proper utilization of technological aids helps students memorise and absorb the English language easily .Language delivery, as with any delivery of any other subject, requires the students to absorb the content and then put in to practice. One of the oldest methods has been to absorb the grammar rules and good vocabulary which is useful for the students to put language in practice correctly and devoid of errors. Teachers have felt that technological aids have helped in this regard to achieve the objective.

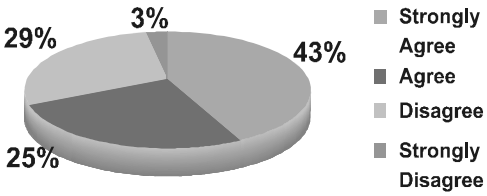
PERCEPTION ON COMPUTER ASSISTED LANGUAGE LEARNING



Technology has made its way into teaching and has been aiding in the delivery. One such program is the Computer Assisted English Language Learning. Most of the schools, colleges have installed. This question is intended to know the teachers' perception and acceptance levels of it. From the analysis, it is seen that 65 percent of the faculty have strongly agreed that computer assisted language learning is the key to help learners communicate easily while 35 percent have opined that it should not be introduced in teaching English language.Majority of the teachers have shown a positive inclination towards embracing technology in their pedagogy. Though there are still few who have agreed otherwise, which might be attributed to their resistance to acceptance change, as introduction of technology involves updating their skill sets which the faculty might have an apprehension to carry out.

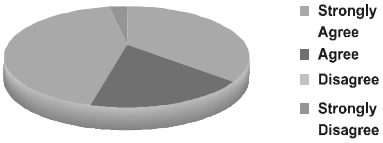
COMPUTER ASSISTED LANGUAGE LEARNING MAY NOT SATISFY ALL LEVELS OF LEARNERS:

Dissatisfaction of Assisted Language Learning



It is interpreted that 68 percent of the respondents felt that Computer Assisted English Language learning will not satisfy all levels of learners. Only 32 percent of the respondents opined that it will satisfy all levels of learners.Though the teachers have agreed largely that CALL is an effective tool in imparting the course of English language, many still feel that the human component still plays an important role. They feel that the teachers have to still to impart the basic components of language training and also monitor the progress. Corrective measures, wherever required, can only be achieved by teachers. They opined that technology can only be a aid but not substitute for a teacher

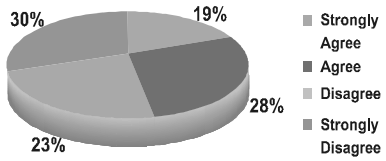
USE OF MEDIA (OHP, LCD, PPT)



From the analysis, it is clear that 46 percent of the respondents are against the use of media

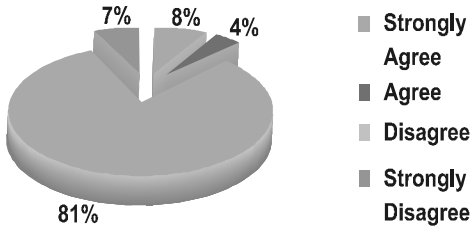
components to help language learning, while 54 percent of them felt that it was a useful tool to guide language learning.

PERCEPTION ON USAGE OF FILMS & CARTOONS TO AID LANGUAGE LEARNING



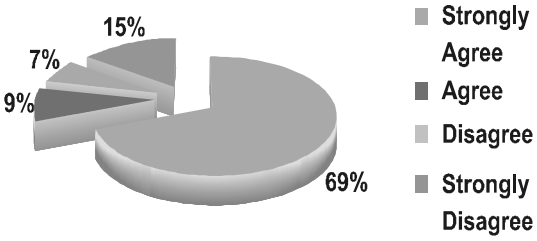
Visual representations play an important role in the learning process. They have an ability to concrete the content delivery into the learner's mind which stays for longer periods. An effort has been made to understand the teacher's perspective on this factor on using visual content during delivery. It is found that 53 percent of the respondents reported that films and cartoons will divert the learner's attention towards action rather the intended learning, while an almost matching 47 percent reported that it is likely to promote and motivate the language learning process.It is interesting to note that the teachers have expressed that sometimes visual content diverts the attention of students. The seriousness is diluted and the attention shifts to fun and relaxing mode. Although many faculties have said that good visuals helps the students grasp the content more quickly.

PERCEPTION ON SOCIAL NETWORKING IMPROVING ENGLISH LANGUAGE SKILLS



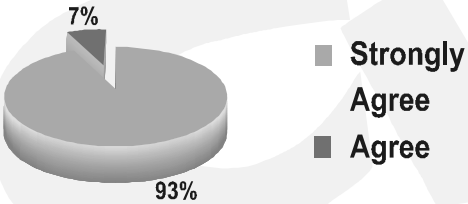
It is interpreted from the study that 87 percent of the respondents did not agree that social networking sites improve oral and written communication skill. Teachers opined that students use short-cuts during interacting over social media. The new hip-hop culture where words are shortened and new words are used by students in order to prove their 'coolness'. The objective behind such communiqué is to be socially acceptable among friends. Also students use shortened words to communicate faster and quickly to match up the speed of conversation. Teachers have also stated that most students converse in their regional language but they type in English letters.

IS LANGUAGE USED TO CHAT ON SOCIAL NETWORKING



Earlier teachers have mentioned that conversations and interaction over social media does not improve the students' language. A further effort has been made here to find out whether the language used during such interactions meets to the acceptable levels or not. It is observed that 78 percent of the respondents agreed that language used to chat on social networking sites is sub-standard and colloquial. Teachers have further asserted that the standard of language used during interaction over social media is of sub-standard nature. They felt that though the students are conversing and making an effort to speak in English but the direction is wrong as they are speaking wrong. They said that during the conversation the objective of the students is not to language skills English but rather to only converse.

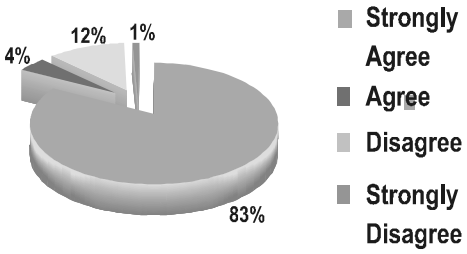
SENDING TEXT MESSAGE IS AS COMMON AS SPEAKING ON THE MOBILE PHONE



It is found that 93 percent of the respondents strongly agreed that sending text messages today is as common as speaking on the mobile phone.

OPINION THAT LANGUAGE USED IN TEXTING MESSAGES FINDS ITS WAY INTO THE ENGLISH CLASS ROOM:

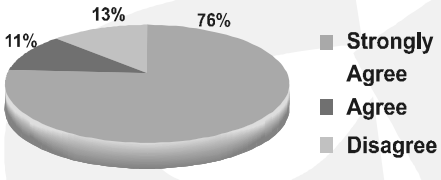
TEXT LANGUAGE USED IN SPOKEN ENGLISH



Over the last few years, with the emergence of sms services and online instant messages, various reports have shown that the use of contractions in regular words. In order to check whether students use the rules of writing in classrooms is the objective behind this question. From the study, it is interpreted that 87 percent of the respondents agreed that language used in text messages finds its way to spoken English used in the English class room.

Technology has always been looked as a dual edged sword all along. The fact that most of the people use short, contracted words during messaging and other ways of interactions these have also invariably found their way into classroom activities where these short-cuts are not appreciated.

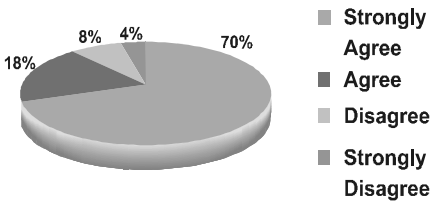
EMAILS ALTERED THE STRUCTURE OF THE LETTER AS A COMMUNICATIVE TOOL:



Letter writing has always been treated as an art and so is, now, e-mail. Of lately the e-mail writing trend has shown a drastic change, with new formats and etiquettes. Students have, it's believed, carried over their messaging language into e-mail writing. The teachers' perspective on this sought. It is observed that 87 percent of the respondents agreed that e-mails altered the structure of formal letter. Teachers expressed that even for e-mail there certain rules and structure which are important to be followed. They felt that over the years e-mail structure of letter has deviated to large extent from the conventional formats and structures.

DIGITAL COMMUNICATION DOES NOT ERADICATE TRADITIONAL MODE OF COMMUNICATION. IT ONLY ALTERS LANGUAGE USE:

DIGITAL COMMUNICATION



Though written communication has come along a long way, but still there's a belief that the process, structure and protocols never changed even though the medium through which it is carried out might change. Teachers were asked to comment on this view. It is observed that 87 percent of the respondents believed that Digital communication does not eradicate traditional modes of communication and that it only alters the way language is used. Teachers opined that no matter what the mode of communication and how much ever the advances might have taken place, but the language used and the way it is used never changes.

The salient observations of the teacher's responses are as follows:

- 46% of the teachers stated that they require about 14 to 16 hours of class in a week to finish the syllabus in scheduled time-frame. On further inquisition it was found that the current allocated hours is not sufficient for them to

finish the syllabus on time. They expressed that language is not given priority over other subjects and also the syllabus is too much.

- When the results are compared with that of results from question 6 and 7, it is clearly understood that most teachers focused mostly only on completion of university syllabus and were quite aware that the time given for completion of university prescribed syllabus was not sufficient to train students to speak English language fluently and that it required more time to do that.
- It has been observed that English as a subject is not given much importance as it only forms a tertiary subject. It is only conducted as it is included in the course and students concentrate only on passing the subject but not excelling in it.
- Majority of the faculty opined that they were not satisfied with the syllabus. They felt that it is not practical enough to enable the students learn the language.
- The teachers felt that the language used while messaging was the main reason for the deterioration of English language among students. The use of contractions in place of complete words has led to this state.
- Majority of the faculty have agreed that it is imperative for teachers to constantly update their knowledge and skills. It has been observed that 4% did not feel to update their skills. The reasons that have been cited were; that they lack time for such updation while few stated that they are content with their level of skills set and knowledge.
- It can be once again observed here that technology has played its part in diminishing the quality standards among students of English language. Also, over-crowded classrooms also led to the diminishing standards. It was always believed that a size of 30~35 students per class is the optimal batch strength, but in most cases, as observed earlier, the size of the classroom ranged between 45~60. This has deteriorated the faculty attention towards students.
- Teachers have stated that students write in the same manner as they would while using electronic messaging services. The contractions of simple words and shortening of sentences, the informal addressing have all found their way into the language while writing classroom and examination content. There seems to be a problem in delineating official and unofficial communiqué.
- It is observed that 32% of the faculty are not fully aware of the computer usability and they feel that they do not need to be. They remarked that the delivery in classroom is more than enough and that there is no need for technology in imparting English language.
- Majority of the faculty felt that it was important to utilise technology to enable teaching English. They opined that good visuals have an effect on learning and students are able to learn quickly.
- Teachers have said that they use a variety of technological aids depending upon the need. They prefer computers certain type of delivery while televisions for other.
- Teachers have reported that with the use of technology teaching has become easier as it helps in capturing the attention of the students. The students had, earlier, a tendency neglect the language class due to various reasons, but with technological aids, innovative and creative illustrations are helping the teachers to capture the attention of the students.
- Language delivery, as with any delivery of any other subject, requires the students to absorb the content and then put in to practice. One of the oldest methods has been to absorb the grammar rules and good vocabulary which is useful for the students to put language in practice correctly and devoid of errors. Teachers

have felt that technological aids have helped in this regard to achieve the objective.

- Majority of the teachers have shown a positive inclination towards embracing technology in their pedagogy. Though there are still few who have agreed otherwise, which might be attributed to their resistance to acceptance change, as introduction of technology involves updating their skill sets which the faculty might have an apprehension to carry out.
- Though the teachers have agreed largely that CALL is an effective tool in imparting the course of English language, many still feels that the human component still plays an important role. They feel that the teachers have to still to impart the basic components of language training and also monitor the progress. Corrective measures, wherever required, can only be achieved by teachers. They opined that technology can only be a aid but not substitute for a teacher.
- It is interesting to note that the teachers have expressed that sometimes visual content diverts the attention of students. The seriousness is diluted and the attention shifts to fun and relaxing mode. Though many faculties have said that good visuals helps the students grasp the content more quickly.
- Teachers opined that students use short-cuts during interacting over social media. The new hip-hop culture where words are shortened and new words are used by students in order to prove their 'coolness'. The objective behind such communiqué is to be socially acceptable among friends. Also students use shortened words to communicate faster and quickly to match up the speed of conversation. Teachers have also stated that most students converse in their regional language but they type in using English language.
- Teachers have further asserted that the standard of language used during interaction over social media is of sub-standard nature. They felt that though the students are conversing and making an effort to speak in English but the direction is wrong as they are speaking wrong. They said that during the conversation the objective of the students is not to converse in proper and correct English but rather to only converse.
- Technology has always been looked as a dual edged sword all along. The fact that most of the people use short, contracted words during messaging and other ways of interactions these have also invariably found their way into classroom activities where these short-cuts are not appreciated.
- Teachers expressed that even for e-mail there certain rules and structure which are important to be followed. They felt that over the years e-mail structure of letter has deviated to large extent from the conventional formats and structures.
- Teachers opined that no matter what the mode of communication be and how much ever the advances might have taken place, but the language used and the way it is used never alters. The rules of proper communiqué still, invariably, remains. In such contradicting messages coming in from the educators of English, the questions that plaque the new millennium is

  1) Can the younger generation be better in their English given the lacunae's addressed?
  2) Can technology with all its deterrents be capitalised to improve the English language skills of young Indians?
  3) What are the issues that educators should address to improve the quality of the English language communication among students?
  4) Can the new generation of savvy Indians hold the edge in English language as held by the post independence Indian generations?

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Title of the Book: Transforming HR through Technology

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Book Review

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Human Resource Management is evolving into a more technology-based profession. In many organizations, employees now see the face of HR as a portal rather than a person. This transformation of HR service delivery is known as "e-HR," and implementing e-HR requires a fundamental change in the way HR professionals view their roles.

Today the face of HR is often a portal, rather than a person. Almost all firms now provide universal access to HR services through technology and web-based applications, dramatically changing the practice of human resource management. These changes often result from the need to cut costs and expand or improve services. Recent research shows organizations that successfully adopt sophisticated HR technology tools outperform those that do not. But because most organizations already have automated basic HR administration, the simple automation of HR processes can no longer assure a competitive advantage. Instead, organizations must determine how to use technology to transform their HR practices and market their HR brand.

This book focuses on human resource information systems (HRIS), or the integration of hardware, software and business processes used to implement an e-HR approach. Effective services when they operate via a web portal. For employees and HR departments often provide broader and more effective services when they operate via web portal.

This book, 'Transforming HR through Technology: The Use of E-HR and HRIS' in Organizations will help you to explore both the opportunities and the potential pitfalls of HR technology. According to recent studies, organizations that successfully adopt sophisticated HR technology tools outperform those that do not. This book will help providing better leverage e-HR to transform the HR practices and market the HR brand. In 2014, the SHRM Foundation created this Effective Practice Guidelines series for busy HR professionals. It was understood that it's a challenge for practitioners with limited time to keep up with the latest research results. By integrating research findings on what works with expert opinion on how to conduct effective HR practice, they made theory and practice more accessible to all. Recent reports in this series include on boarding new employees, The Search for Executive Talent, Employment Downsizing and Its Alternatives, and Human Resource Strategy. This book and report is the 13th in the series. Subject matter experts wrote the reports, which are then reviewed by both academics and practitioners to ensure that the material is research-based, comprehensive and practical. Each report also includes a "Suggested Readings" section as a convenient reference tool. The Effective Practice Guidelines series is just one way the SHRM Foundation supports lifelong learning for HR professionals. In addition to creating educational resources, the SHRM Foundation awards more than $150,000 annually in education and certification scholarships, and is a major funder of original, rigorous HR research that expands the HR knowledge base. To encourage better learning on more aspects related to HR and Technology. one can visit www.shrm.org/foundation to find out how are can get involved with the SHRM Foundation.

Call for Papers

AMBER- ABBS Management, Business and Entrepreneurship Review (ISSN: 0976-3341).

Theme of the Forthcoming Issue "Retailing"

Retail is the process of selling goods or services to customers through multiple channels of distribution to earn a profit. Demand is created through diverse target markets and promotional tactics. Satisfying consumers' wants and needs through a lean supply chain is one of challenges to retailers. In 2000s, an increasing amount of retailing is done through internet using electronic payment or cash on delivery model. Retail industry is also one of the biggest industries in the world. This sector contributes around 22 per cent to India's GDP.

Retail sector is of immense interest to business and management researchers, with plethora of research done in this area. The articles are invited in all areas of 'Retailing'.

The important guidelines for authors are as follows:

1. The article or case study shall be original and empirical using specialized concepts, research methodology highlighting key insights and managerial implications.
2. The submission must in MS word 2003.
3. Name of the Author, Designation and Affiliation, and contract e-mail ID must be provided in the first page.
4. The second page must contain the abstract and key words. Ensure that the abstract is not more than 150 words. Abstract should be in fully justified and italicized text. The abstract should elaborate research background and methodology. Maximum 4 - 6 key words, listed alphabetically, separated by commas, and full stop at the end.
5. The third page must contain the title and the body of the article must start here.
6. The body of the article must be center – justified and the entire must be of font size 10 in Times New Roman font except for headings. The title must be boldfaced with 14 font size in title case. Each of the subheadings must be of font size 12, boldfaced and in Title case. Section headings can be font size 10 and boldfaced in title case.
7. The spacing between the lines must be 1.5 and a spacing of 10 points between paragraphs must be given. There must be no tab for the first sentence of every paragraph.
8. Foot notes must be placed on the same page of the main text to which they correspond.
9. Annexure must be numbered and must follow immediately after the body of the text.
10. The body of the text must contain references as follows (WTO,2012)i.e., last name/ surname of the author and year.
11. All references have to be arranged in alphabetical order and must be numbered except those of internal sources. The internet sources must be placed after other references and must be separately numbered.
12. The references must be presented as follows:

    For books, reports, manuscripts and unpublished volumes:

    Toffler, A. (1980). The Third wave: The Classic Study of Tomorrow, Bantam Books, New York,pp 195 – 207.

    For Journals and other periodicals:

    Venkatesha, H.R. (2008), "Dealers' performance and Customers' preference in passenger Car Marketing ", Vilakshan, VOl 5, No. 6,pp 222 – 235.

    For internet sources, web site and addresses must be alphabetically arranged and numbered at the end of the reference section.
13. Authors have to submit two hard copies and one soft copy.
14. Hard copies shall be sent to the below address.