UTTARANCHAL BUSINESS REVIEW

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From the Editor's Desk

It gives us immense pleasure to put the present issue of Uttaranchal Business Review to our readers. It is believed that research is an unending process and always requires improvement and update. The focus of our journal is research articles, thought provoking pieces, philosophical view about business issues and in general concerns about the changing world scenario and needs of the day. The present issue offers many thought provoking avenues to researcher and practitioner. We encourage researchers and faculty members of management institutes to use this as a platform to publish their work and express their ideas for future research.

We have a variety of articles in this issue. The digital revolution has emerged as the most valuable techniques for e-governance and its functioning. C. Lalnuntluanga & L. S. Sharma have analysed the factors affecting the access of e-governance websites by consumers of Mizoram state. Price discovery of precious metal has become the hot topic of discussion among academician as well as industry. Ms Pooja Vyas has analysed volatility of precious metal future and spot prices with specific reference to gold and silver.

Dr. Sonal Sharma & Dr. D.S. Chaubey has carried out the Perceptual mapping of ICT in higher education. Dr. Amit Sharma & Rupal Ramawat tried to analyse the relationship of leadership style and its effectiveness with age, gender and level of a leader.

The evolution of marketing has been phenomenal in the last one decade or so. Every day, a new concept or a new approach is tested or validated. From the day of the Product concept and subsequent marketing and business orientation of marketing, it has come around a full circle, and now marketing trends indicate a customer focus and more recently more customer-centric in its format and execution. Dr. K R Subramanian has studied the Customer-centricity in corporate marketing. Vijay Prakash Gupta & Dr. Rajesh Manchanada have carried out an analytical study on Service quality gap and its impact on customer satisfaction towards online banking services in India.

The saving and investments have become two most important means for a secure life and a better future. Savita Pandey & Dr. Durgesh Mani Tripathi have analysed the Impact of demographic characteristics on investors decision in an empirical study.

Chette Srinivas Yadav has analysed Governance failure-causes and prevention through a case study.

We are looking forward to the readers' response, suggestions and feedback. I must thank our advisory board members and editorial board members for their help and guidance.

Sincerely,

Prof (Dr.) D.S. Chaubey
Editor-in-Chief

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FACTORS AFFECTING THE ACCESS OF E-GOVERNANCE WEBSITES: A CASE-STUDY OF MIZORAM

Abstract

Information and Communication Technology (ICT) has become an indispensable tool in all kinds of government and business processes. It provides easy and effective mechanism to deliver various types of government services to the citizens and the business firms. Most of the problems that a citizen faces in interacting with the Government is related to complexity of the procedures, lack of transparency in the process, uncertainty about processing time and delayed communication to the stakeholders. This model uses the conjecture that access to government websites is dependent on variables of gender, age, education, possession of mobile phones, the frequency of using of computer and internet usage index. The study finds that access to government websites is impacted by age, user internet index and frequency in use of computer. The model finds that gender and education plays a negligible factor in deciding the access to government websites. Since mobile phones play an important role in accessing the internet, it improves the use of internet index therefore priority should be allocated to this factor.

Keywords: Information and Communication Technology, internet index, National Informatics Centre, e-Governance.

Introduction

Setting up of National Informatics Centre (NIC) in 1977 was considered as the first major step taken towards e-Governance in India and launching of NICNET (National Satellite-based Computer Network) in 1987 has ushered the country into e-Governance era, (Yadav and Singh, 2012). The first major e-Governance project in India was 'Akshaya Kerala' which was started as a pilot project in 2002. The project involved setting up around 5000 multipurpose community technology centres called Akshaya e-Kendra's across Kerala. Since then, numerous projects were taken up at central, state, districts and even at block levels.

Definitions of e-Governance

e-Governance is the use of information and communication technology (ICT) to deliver government services to the citizens in efficient ways. It reduces processing time of official work by automating the jobs with the help of computers and delivers the services to its people through internet. Although ,there are several definitions of e-Governance, there is no standard definition for e-Governance as of December, 2016. Depending on the aims and

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objectives, different organisations have defined it in diverse ways. Some of the widely cited definitions are given below. UNESCO (www.unesco.org) defines e-Governance as , "the public sector's use of information and communication technologies with the aim of improving information and service delivery, encouraging citizen participation in the decision-making process and making Government more accountable, transparent and effective". World Bank (www.worldbank.org) defines e-Government as, "the use by government agencies of information technologies (such as Wide Area Networks, the internet, and mobile computing) that have the ability to transform relations with citizens, businesses, and other arms of the Government".

Commonwealth Network of Information Technology for Development (COMNET-IT) defines e-Governance as, "the delivery of government services and information to the public and of public input to the process of government". International Institute for Communication and Development (IICD) identifies e-Governance as, "the application of electronic means in (a) the interaction between the government and citizens and the government and businesses, as well as (b) in internal government operations to simplify and improve democratic, government and business aspects of governance (Backus 2001)". Bhatnagar (2004), characterised e-Governance as "the use of Information and Communications Technology (ICT) at all levels of the Government in order to provide services to the citizens, interaction with business enterprises and communication and exchange of information between different agencies of the Government in a speedy, convenient efficient and transparent manner."

In the above cited definitions, it can be seen that focus of various definitions is slightly different depending on the objective of the subject. As e-Governance encompasses a wide range of activities, it is almost impossible to give a comprehensive definition in a few words. It has been defined differently in several contexts.

Literature Review

Saxena (2005) has classified various constraints which need to be removed in order to achieve good governance through e-Governance. Those constraints are administrative constraints, social constraints and political constraints. He mentioned that disparities in government initiatives, rigidity of bureaucracy, digital divide between urban and rural citizen, gender divide, lack of political will, etc., are the main obstacles to the success of e-Governance initiatives in India.

According to Barthwal (2003), the old model of e-Governance was use of information technology to automate the internal workings of government by processing data. But, the new model comprises of   information and communication technologies (ICTs)   for

supporting and transforming the external workings of governance by processing and communicating data. Prasad (2012) studied challenges faced by National e-Government Plan (NeGP), a comprehensive programme of Government of India for e-Governance. He found that (i) investments in and access to ICTs, (ii) capacity building to utilize e-Governance services, and (iii) promoting people's participation in e-democracy are the three key challenges in stepping up e-Governance in India. He opined that improved access to information and services will provide economic and social development opportunities, facilitate participation and communication in policy and decision-making processes, and promote the empowerment of the marginalized groups.

In his study of e-Governance initiatives in Punjab state, Mahajan(2009) highlighted major projects undertaken by the state government. He observed that concept of e-Governance is gaining popularity among the people and appreciated efforts of government agencies to revolutionise every village of the state by providing IT-enabled service centres. He expressed his concern over sustainability of already started initiatives and he also felt that compulsory computer education need to be introduced from class 6th to 12th in government schools. He emphasize use of local language i.e., Punjabi in IT implementation processes in order to enhance participation of rural masses.

Bhatnagar and Singh (2010) evaluated 8 mature e-Government projects in India and found that the respondents (citizens and businesses) who had used both the manual and computerized systems indicated an overwhelming preference for computerized service delivery in most projects. Their research findings showed that there are no job losses among the citizens due to implementation of e-Government projects as opposed to a common belief in most developing countries. The study also revealed that in most cases, the cost of accessing services was reduced because the number of trips required to make to the concerned offices saw a significant reduction, and the waiting time came down by nearly 50 percent.

In evaluating Friends and Akshaya projects of Kerala state, Madon (2004) used a framework with (i) range of ICT-generated applications, (ii) the enabled functioning, (iii) use of the opportunities by the people and (iv) barriers to achieving functioning, as the main elements. They found that initial function of Akshaya was mainly for imparting e-literacy and later a wide range of applications such as bill payments and bank transactions were also added. Their survey also revealed that after the implementation, citizens' attitude towards government has changed as a result of increased sense of trust on the government. Web Portal or Internet Portal is a single window to multiple services. Verma *et.al*., (2005) looked into National Portal of India (http://india.gov.in), which is one of the Mission Mode Projects under NeGP. The portal is designed, developed and hosted by NIC and the first version was formally launched on 10th November, 2005. It acts as a common gateway to over 5,000 Indian government websites and it becomes a one-stop source of all information for the citizens. It has a comprehensive content providing all information about central and state governments extending up to local bodies. It is designed from user's perspective and it has a huge repository containing valuable data on various subjects. The fact that it experienced over 90 million hits within a short span of time indicates its usability and popularity. The investigator felt that the project has exceeded the expectations by far in terms of achieving its intended objectives. And the services are benefitting all the stakeholders, from government to the common citizens.

Statement of the Problem

A major step towards e-Governance in India was started in 1977 by establishing National Informatics Centre. Since the launch of National e-Governance Plan (NeGP) in 2006, all the government departments in centre and states and union territories have seriously worked to implement e-Government projects which are defined as Mission Mode Projects in NeGP. At the same time, many states have initiated their own projects alongside those Mission Mode Projects (MMPs).

In spite of concerted efforts of government agencies at all level, e-Government development in India is still very low as compare to other countries. In United Nations' e-Government Survey 2012, India was ranked 125th among the UN member nations with EGDI (e-Government Development Index) score of 0.3829. But, the hard work of all stakeholders had paid dividend and India has climbed up to 107th rank with EDGI score of 0.4637in the same kind of survey carried out in 2016. Dataquest, a reputed IT Magazine in India made a survey in 2013 to give ranking to the States of India based on e-Government development in the state. States are categorised into two – Large States (with population more than 2.5 crores) and Small States (with population less than 2.5 crores). Rankings given to the states are as below:

Table 1 : e-Government Rankings in India

Rankings for Large States			Rankings for Small States		
Name of state	Score (out of 500)	Rank	Name of state	Score (out of 500)	Rank
Kerala	323.06	1	Delhi	335.41	1
Gujarat	300.16	2	Goa	310.10	2
Andhra Pradesh	298.64	3	Himachal Pradesh	277.67	3
Tamil Nadu	290.00	4	Tripura	249.69	4
Maharashtra	282.05	5	Mizoram	223.22	5

Source : *Dataquest, 2013*

Considering all kinds of constraints faced by the states, it is remarkable to see Tripura and Mizoram among the top five in the small state category. These states are young and still developing basic infrastructure for industrial development. Establishment of ICT Department to look after and monitor e-Government projects as nodal department is also a recent one in Miozram. Since Mizoram is situated at the far corner of the country with inadequate facilities, the government faces multifarious obstacles and problems in e-Governance implementation. Successful implementation of e-Governance depends on a number of factors like infrastructural e-Readiness of the government, rate of e-literacy among the people, political will of the elected people representatives, availability of service providers, etc. Therefore, exploring the possibilities for access to the e-Governance websites plays an important role in functioning of e-Governance in Mizoram. Ascertaining level of awareness of the people about the government initiatives will also help decision

makers in planning awareness programme to popularise the services available for the public.

Objectives of the study

- To explore the relationship between the likelihood of accessing government website with demographic factors, and use of mobile phones and the computer

Hypothesis

In order to find a model for accessing government website, the following hypothesis is developed. i.e., the relationship between the likelihood of accessing the government website is possible with gender, age, education, having mobile phones, how often the computer is used and internet usage index.

Methodology

Primary and secondary data were used in this study. Secondary data were mainly collected from the implementing agencies such as Department of Information and Communication Technology (DICT), National Informatics Centre (NIC), Zoram Electronics Development Corporation Limited (ZENICS), etc. Reports and presentation materials of seminar/workshops also provided useful information for the study. Publications of various departments were also referred.

To collect primary data, pre-tested questionnaire was used for the respondents (common citizens). Citizen in the study means an individual or a native of naturalized member of a state or nation who owes allegiance to its government and is entitled to its protection. As regard to the common citizens, the questionnaires were administered on 800 samples, purposively selecting 100 each from 8 District Headquarters viz., Aizawl, Lunglei, Saiha, Champhai, Kolasib, Serchhip, Lawngtlai and Mamit. Out of the 800 respondents, 676 were found to be usable. While selecting the samples, educated youths are mainly targeted because the preliminary study on the subject indicates that the services which are currently available under e-initiatives are mostly required by students and young job-seekers. The hypothesis is tested by using logistic regression through SPSS to develop a model for assessing Governmental websites by citizens.

Data analysis

8.1 Profile of the Respondents (Citizen)

Under the heading, the study explores the sample size, educational background, occupation and age profiles of the respondents (citizens).

8.1.1 Sample Size

Questionnaires were distributed in all district headquarters of the state, 100 questionnaires in each district totalling 800 altogether. As shown in Table 3.1, 676 responses were received, which is 84.50% of the total sample. Aizawl and Saiha have the highest number of respondents (14.50% each) while Lunglei district constitute the smallest portion with 9.61% of the total respondents. From the table, it can be seen that the percentage of response is fairly high in all districts. Except for Lunglei District, the percentage of responses from each district is above 70%. This indicates that the target samples were keen to participate in the study and willing to express their views.

Table 2: District-wise Respondents

District	No. of respondents
Aizawl	98 (14.50)
Lunglei	65 (9.61)
Saiha	98 (14.50)
Serchhip	96 (14.20)
Kolasib	70 (10.36)
Lawngtlai	96 (14.20)
Champhai	76 (11.24)
Mamit	77 (11.39)
Total	**676 (100.00)**

Source: *Field survey Figure in parenthesis represents percentage*

8.1.2. Educational Background of the Respondents

The present survey mainly focuses on the impact of e-Governance initiatives among educated youths and accordingly, most of selected samples are expected to have formal educational background. The reason for targeting the above group is that most of the e-district services available presently are education-related such as issue of SC/ST certificates, income certificate, etc., which are normally required by students for their educational pursuits. In order to evaluate the success of e-Governance project, it is important to gauge the awareness level of the targeted beneficiary group on the services provided by the project.

Table 2: Educational Background of the Respondents

District	Under Matric	HSLC Passed	HSSLC Passed	Graduate	Post Graduate	MPhil/ PhD	Total
Aizawl	0 (0.0)	20(20.41)	30(30.61)	34(34.69)	14(14.29)	0 (0.0)	98
Lunglei	0(0.0)	2(3.07)	51(78.46)	12(18.46)	0(0.0)	0(0.0)	65
Saiha	1(1.02)	59(60.2)	14(14.29)	11(11.22)	13(13.27)	0(0.0)	98
Serchhip	0(0.0)	7(7.29)	61(63.54)	24(25.0)	4(4.17)	0(0.0)	96
Kolasib	1(1.43)	11(15.71)	33(47.14)	21(30.0)	3(4.29)	1(1.43)	70
Lawngtlai	0(0.0)	23(23.96)	29(30.21)	32(33.33)	11(11.46)	1(1.04)	96
Champhai	0(0.0)	12(15.79)	50(65.79)	14(18.42)	0(0.0)	0(0.0)	76
Mamit	0(0.0)	34(44.16)	38(49.35)	2(2.60)	3(3.9)	0(0.0)	77
Total	**2(0.3)**	**168(24.85)**	**306(45.27)**	**150(22.19)**	**48(7.1)**	**2(0.3)**	**676**

Source: *Field survey, Figure in parenthesis indicates percentage*

Table 2 shows that majority of the respondents (306 which is 45.27% of the total respondents), had passed Higher Secondary Schools while 150 (22.19%) were graduates. Respondents who are literate (who can read and write) but have not passed any board examinations constitute 0.3% only. The second highest category comes from HSLC passed with 168 respondents (24.85%). As mentioned earlier, the sample are purposively taken mostly from school and college students, majority of the respondents falls in the HSLC and HSSLC passed category, constituting 84.91%. As it is the case, most of the findings in the present study will reflect the perception of educated youths in the state.

8.1.3 Occupations of the Respondents

Occupation of the respondents may have some impact on their responses. People who are in ICT related profession will be more knowledgeable about e-Governance and will also be more proficient in utilising available services. Therefore, it is important to know the occupation of the respondents in the present study. Table 3.3 gives responses of the respondents to the question about their occupation.

Table 3: District-wise Occupation of the Respondents

District	Student	Business	Govt. employed	Unemployed	Total
Aizawl	97(98.98)	1(1.02)	0(0.00)	0(0.00)	98
Lunglei	60(92.31)	4(6.15)	1(1.54)	0(0.00)	65
Saiha	69(70.41)	5(5.10)	22(22.45)	2(2.04)	98
Serchhip	94(97.92)	1(1.04)	1(1.04)	0(0.0)	96
Kolasib	49(70.00)	3(4.29)	15(21.43)	3(4.29)	70
Lawngtlai	45(46.88)	11(11.46)	33(34.38)	7(7.29)	96
Champhai	73(96.05)	3(3.95)	0(0.00)	0(0.00)	76
Mamit	71(92.21)	2(2.60)	2(2.60)	2(2.60)	77
Total	**558(82.54)**	**30(4.44)**	**74(10.95)**	**14(2.07)**	**676**

Source: Field Survey, Figure in parenthesis represents percentage

The above table show that a high portion (82.54%) of the respondents were students (558 out of 676) while the number of respondents working in government services and private business were 74 (10.95%) and 30(4.44%) respectively. As stated earlier, the survey focused primarily to the educated youth viz., school going or college going students and therefore, it is not un-expected that the highest respondents would come from this category. Since 10.95% of the total respondents are government servants, it is considered that the findings of this study will also fairly reflect the perception of government employees in the state.

8.1.4 Age Group of the Respondents

Similar to the occupations, age of the respondents can be a factor which have some impact on their responses to the questionnaire. Age groups of the respondents are shown in Table 4.

Table 4: Age Group of the Respondents

District	Less than 18	19-25	26-30	31-40	Above 40	Total
Aizawl	40(40.82)	38(38.78)	15(15.31)	5(5.1)	0(0.0)	98(100)
Lunglei	10(15.38)	41(63.08)	14(21.54)	0(0.0)	0(0.0)	65(100)
Saiha	32(32.65)	45(45.92)	10(10.20)	7(7.14)	4(4.08)	98(100)
Serchhip	19(19.79)	60(62.5)	15(15.63)	2(2.08)	0(0.0)	96(100)
Kolasib	6(8.57)	46(65.71)	8(11.43)	7(10.0)	3(4.29)	70(100)
Lawngtlai	16(16.67)	34(35.42)	22(22.92)	16(16.67)	8(8.33)	96(100)
Champhai	15(19.74)	40(52.63)	15(19.74)	6(7.89)	0(0.0)	76(100)
Mamit	20(25.97)	37(48.05)	12(15.58)	7(9.09)	1(1.30)	77(100)
Total	**158(23.37)**	**341(50.44)**	**111(16.42)**	**50(7.40)**	**16(2.40)**	**676(100)**

Source: *Field Survey, Figure in parenthesis represents percentage*

It can be seen from Table 4 that maximum number of respondents i.e., 341 out of 676 (50.44%) belonged to the age group 19-25 years and 23.37% (158 respondents) were in the age group less than 19 years. Only few (2.40%) were older than 40 years. In Aizawl District, however, the largest numbers of respondents were in the age group below 19 years. As already mentioned, the samples were taken mainly from colleges and higher secondary schools, hence, average age of the respondents was found to be 21.56 years.

8.2 Computer Literacy

Computer literacy of the citizens is considered one of the key factors for success of citizen-centric e-Governance projects. At least one member of every household must have basic computer skills to avail online government services. It is also one important metric for determining e-readiness of the society. Accordingly, the respondents were asked to give the level of their IT skills and the responses are given in Table 5.

Table 5: Computer Proficiency of the Respondents

District	Can use very well	Can use to some extent	Cannot use	Total
Aizawl	11(11.22)	87(88.78)	0(0.0)	98(100.00)
Lunglei	7(10.77)	48(73.85)	10(15.38)	65(100.00)
Saiha	15(15.31)	69(70.40)	14(14.29)	98(100.00)
Serchhip	4(4.21)	77(81.05)	14(14.74)	95(100.00)
Kolasib	9(12.86)	49(70.0)	12(17.14)	70(100.00)
Lawngtlai	8(8.42)	68(71.58)	19(20.0)	95(100.00)

District	Can use very well	Can use to some extent	Cannot use	Total
Champhai	9(12.0)	59(78.67)	7(9.33)	75(100.00)
Mamit	4(5.26)	53(69.74)	19(25.0)	76(100.00)
Total	**67(9.97)**	**510(75.89)**	**95(14.14)**	**672(100.00)**

Source: *Field Survey,Figure in parenthesis represents percentage*

In Aizawl District, out of 98 respondents 11 (11.22%) said they can use computer very well and 87 (88.8%) said they can use it to some extent. There was no respondent in the district who was computer-illiterate. This may be attributed to the fact that Aizawl is the state capital and all the residents have opportunity to acquire computer education either from government institutes or private institutes. In Lunglei District, 7 respondents out of 65 respondents (10.77%) claimed they can use computer very well. While 48 (73.85%) respondents can use computer, the remaining 10 respondents (15.38%) cannot use it. The highest rate of computer-illiteracy was observed in Mamit District where 25% of respondents said they did not have basic knowledge to operate computers. Mamit District is followed by Lawngtlai District with 20% of the respondents saying that they cannot use computers. It is interesting to note that the two districts also have lowest literacy rates in the state. While literacy rate of the state is 91.33 %,Mamit District and Lawngtlai District have literacy rates of 84.93% and 65.88% respectively(Statistical Handbook of Mizoram-2014).

Out of all 672 respondents, only 95 (14.14%) said that they cannot use computer for their needs. While 67 respondents (10.0%) said they can use it very well, 510 respondents (75.89%) claimed they can operate the device to meet their requirements. This figure indicates that nearly 86% of the respondents are acquainted with computers.

8.3 Penetration of ICT Tools

A number of electronic devices are available for use in ICT purposes. Among those devices, the following items are selected for the present study as they are most commonly used and are affordable by the common people.

Table 6: Respondents owning Computer, Laptop, Mobile Phone and Tablets

Name of District	Owned Computer	Owned Laptop	Owned Mobile Phone	Owned	Total
Aizawl	83 (23.38)	36 (36.00)	96 (15.02)	6 (12.50)	221 (17.69)
Lunglei	38 (10.70)	16 (16.00)	62 (9.70)	4 (8.33)	120 (9.61)
Saiha	32 (9.01)	34 (34.00)	91 (14.24)	9 (18.75)	166 (13.29)
Serchhip	41 (11.55)	7 (7.00)	95 (14.87)	3 (6.25)	146 (11.69)

Name of District	Owned Computer	Owned Laptop	Owned Mobile Phone	Owned	Total
Kolasib	41 (11.55)	28 (28.00)	65 (10.17)	9 (18.75)	143 (11.45)
Lawngtlai	28 (7.89)	46 (46.00)	85 (13.30)	3 (6.25)	162 (12.97)
Champhai	53.00 (14.93)	24 (24.00)	73 (11.42)	7 (14.58)	157 (12.57)
Mamit	39 (10.99)	16 (16.00)	72 (11.27)	7 (14.58)	134 (10.73)
Total	**355 (100.00)**	**207 (100.00)**	**639 (100.00)**	**48 (100.00)**	**1249 (100.00)**

Source: *Field Survey,Figure in parenthesis represents percentage*

(a) Computers

In India Census 2011, the total number of household having computers in Mizoram was recorded 33,650, out of this 5605 had internet connection. In terms of percentage, this works out to be 15.22 %. This means that in 2011, computer was still a rare commodity for people of Mizoram. Contrary to this, it is interesting to note that 55% of household, both rural and urban, had televisions at that time.

However, Table 6 indicates a significant increase in the number of households and individuals possessing computers in 2014. The above table shows that 355 out of 667 respondents claimed possession of computers. This means more than half of the respondents (53.22%) had their own computers which was an encouraging fact. Among the districts, as one may have expected, Aizawl has the highest rate (23.38%), which is followed by Champhai district with 14.93%. However, in Saiha, and Lawngtlai districts, ownership pattern is less than 10.00%, which is considered as the most important ICT tool.

(b) Laptop

Till the recent past years, laptops were more expensive than desktop computers with the same configurations or capacity. Therefore, many people considered it as more like a luxury item. But, the prices are now affordable and also because of its portability, it has been becoming more accessible for the middle income people. Table 6 indicates laptop possession among the respondents.

The above table shows that the number of laptop owners is 207 which is 31.08% of the total respondents. Among districts, Lawngtlai District has the highest percentage of laptop owners with the figure 46.00%, followed by Kolasib District (28.00%). It is interesting to note that Lawngtlai and Saiha districts have higher percentages of laptop owner than that of desktop computer owners. From Table 6, it can be seen that the number of laptop owners is much less than the number of computer (desktop) owners. It can also be derived that percentage of respondents who owned either desktop computer or laptop is high as total number of respondents is 676 meaning that 52.51% own computer and 30.62% of the respondents own laptop. This indicates that computer penetration is fairly high in the state.

(c) Mobile Phones

With increasing number of affordable smart phones, mobile phones have become one of the main ICT tool for communication and also for availing e-services in India and across the world. This is supported by the fact that India has the second largest number of mobile users in the world with 943.97 million users as on December 2014 .Out of this, 10.26 million users are from the North East states. Knowing its ever expanding spread among the people, many state and central governments departments are re-engineering their software application to run on mobile platforms. One good example is "Karnataka Mobile One", which provide G2C services through mobile phones. Because of low price, availability, ease of use and portability of the device, mobile phones will become the essential tool for e-Government services.

In order to access the mobile phone penetration, the respondents were asked whether they have mobile phones. From the table, it is seen that 95.95 % of the respondents claimed that they have mobile phones. Though no mention was made regarding the type of the mobile phone, considering market trend, it may be assumed that majority of the phones will be smartphone supporting internet access. As it can be seen from the table, mobile phone penetration is very high in all the districts.

(f) Tablets

Tablets are relatively new kind of ICT device, which have hit the markets in the recent past. Due to increasing usage and preference for tablets in various sectors, tablet market in India is growing rapidly with the overall tablet sales touching 2.66 million units in the year 2013. However, tablet PCs are not as popular in Mizoram as seen from the responses in the Table 6.

From the above table, it can be seen that only 7.21% of the respondents (48 out of 676) claimed possession of this lightweight computing device. Kolasib district has the highest figure (18.75%) while Serchhip and Lawngtlai districts are lowest in terms of tablet possessions (6.25% each). The low penetration may be attributed to the fact that 95.95% have mobile phones which have almost the same functionalities as tablets.

8.4 Web Presence and Internet Usage

Websites have become the main mechanism of providing information to the citizens by government agencies, and with the introduction of Web 2.0 websites, it gives a two-way information flow between government and the citizens. Thousands of new websites are appearing on internet every day. In this situation, government websites need to standout among personal and commercial websites, which are not governed by any standard norms.

In order to standardise government websites, Department of Electronic and Information Technology (DEITY), Government of India, has formulated guidelines for government websites. Guidelines are divided into three categories - Mandatory, Advisory and Voluntary. Mandatory contain a set of guidelines which must be complied by all Indian Government websites. Under Mandatory categories, 115 matrices are listed which are to be checked against while auditing the website for quality certifications.

Mizoram Government State Portal (www.mizoram.gov.in) has listed website URLs of 161 government departments, various government agencies and state-run institutions. Majority of the websites have sub-domain name under mizoram.gov.in and the rest have

nic.in as top level domain name. The present study found that most of the websites having mizoram.gov.in domain were created by using the same CMS template and hence, the look and feels and the kinds of contents are more or less similar. The template was developed by ZENICS with a vision to facilitate the departments in updating their respective websites. Those websites with nic.in are developed by the concerned departments themselves with technical assistance from NIC, Mizoram Unit and therefore, there are large variations in the design and kinds of contents. The researcher visited all the websites listed in Web Directory and found that all URLs are valid and the sites are functional. A cursory glance at those department websites listed on the State Portal, however, reveals that many sites are not regularly updated. All websites have primary content which are of long term values such as information about the department, acts and rules, programme and schemes, department's reports, forms, etc. But, most of the departments failed to provide short term values like department news, press release, etc. In order to assess popularity of department's websites among the people, the respondents were asked how frequently visit department websites. The responses are shown in the Table 7.

Table 7: Internet Usage to Visit Government Websites Among the Citizen

Name of	Use Internet to visit website of Mizoram Govt.					Total
District	Never	Rarely	Occasionally	Often	Always	
Aizawl	59	16	14	2	0	91
	(64.84)	(17.58)	(15.38)	(2.20)	(0.00)	(100.0)
Lunglei	40	12	2	1	0	55
	(72.73)	(21.82)	(3.64)	(1.82)	(0.00)	(100.0)
Saiha	48	11	15	6	4	84
	(57.14)	(13.10)	(17.86)	(7.14)	(4.76)	(100.0)
Serchhip	59	16	14	3	0	92
	(64.13)	(17.39)	(15.22)	(3.26)	(0.00)	(100.0)
Kolasib	29	13	9	5	1	57
	(50.88)	(22.81)	(15.79)	(8.77	(1.75)	(100.0)
Lawngtlai	44	20	9	6	7	86
	(51.16)	(23.26)	(10.47)	(6.98)	(8.14)	(100.0)
Champhai	31	18	13	5	1	68
	(45.59)	(26.47)	(19.12)	(7.35)	(1.47)	(100.0)
Mamit	43	7	7	4	1	62
	(69.35)	(11.29)	(11.29	(6.45)	(1.61)	(100.0)
Total	**353**	**113**	**83**	**32**	**14**	**595**
	(59.33)	**(18.99)**	**(13.95**	**(5.38)**	**(2.35)**	**(100.0)**

Source: *Field survey,Figure in parenthesis indicates percentage*

As shown in the above table, 353 out of 595 respondents admitted that they never visit government websites. This means 59.3% of the respondents never visit websites of any departments for getting information about the department. Lunglei (72.4%), Mamit (69.4%) and Aizawl (64.8%) have the highest percentage among the districts. While 19% of the respondents said they rarely visit the websites, 13.9 % claimed they occasionally browse department websites. Only 5.4 % of the respondents said they often visit the website whereas 2.4% claimed they are regular visitors. From the above analysis, it is clear that a vast majority are not visiting department websites regularly.

8.5 Testing of Hypothesis

The hypothesis is tested with a view to develop a model whereby accessing the government websites is dependent on variables of gender, age, education, having mobile phones, the frequency of use of computer and internet usage index. The analysis is carried through SPSS Ver. 20, using Logistic Regression.

The Table 8 just shows the sample size consisting of 653 cases and there are no missing values. The number of respondents was reduced to 653 after sorting outliers in their responses by using Mahanolobis Distance. The data obtained has been analysed through logistic regression model as the dependent variable is binomial in nature in terms of Responses of "Yes" or "No" in terms of accessing the government websites for interaction and services.

Table 8: Case Processing Summary

Unweighted Cases^a		N	Percent
Selected Cases	Included in Analysis	653	100.0
	Missing Cases	0	.0
	Total	653	100.0
Unselected Cases		0	.0
Total		**653**	**100.0**

a. If weight is in effect, see classification table for the total number of cases.

The next 3 tables are the results for the intercept model. That is the Maximum Likelihood model if only the intercept is included without any of the dependent variables in the analysis. This is basically only interesting to calculate the Pseudo R^2 that describes the goodness of fit for the logistic model. This table is the beginning block where the system does not consider any independent variable and the dependent variable is analysed.

Table 9: Classification Table

Observed			Predicted		
			Website_Visit_New		Percentage
			No	Yes	Correct
Step 0	Website_Visit_New	No	4720	100.0	
		Yes	181	0	.0
	Overall Percentage				72.3

a. Constant is included in the model.

b. The cut value is .500

The above classification table shows whether the respondents access the government websites. The table displays the observed and predicted values and the overall percentage correct predicted is found to be 72.3 percent without introducing any independent variables.

Table 10:Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 0	Constant	-.958	.087	120.192	1.000		.383

Table 11:Variables not in the Equation

			Score	**df**	**Sig.**
Step 0	Variables	Education	40.428	5	.000
		Education(1)	.769	1	.380
		Education(2)	10.290	1	.001
		Education(3)	.801	1	.371
		Education(4)	8.041	1	.005
		Education(5)	20.318	1	.000
		Gender(1)	4.767	1	.029
		Age	9.559	1	.002
		Mobile(1)	.000	1	.993
		Useinternetindex	62.446	1	.000
		Frq_Use_Comp	50.619	1	.000
	Overall Statistics		107.185	10	.000

The above tables show that it has the null hypothesis that intercept and all coefficients are zero. So, we can reject this null hypothesis. Moving to the block 1 of the model, where firstly, the Hosmer and Lemeshow Test is checked. Hosmer and Lemeshow test the null hypothesis that the model adequately fits the data. If the significant value is <0.05, then the null hypothesis is rejected. Thus, in step 1 the analysis is leading to rejecting the adequacy of the model. But in step 2 and 3 the significance is more than 0.05, therefore by accepting the null hypothesis that step 2 and 3 are adequately fitting the data.

Table 12: Hosmer and Lemeshow Test

Step	Chi-square	Df	Sig.
1	62.982	8	.000
2	11.963	8	.153
3	6.121	8	.634

Now for the second test, the model summary is analysed; for linear equations the model is tested through R square but in terms of logistic regression, the model needs to consider Pseudo R Square statistics. More the Pseudo R square better the variation is explained meaning the number which lies between 0 and 1. As the number increases in every step its variance is explained better as in Cox & Snell R Square and Nagelkerke R Square. Since the r square are increasing, it can be said that model 3 is showing better variance than step 1 and 2 as shown in table of Model Summary.

Table 13: Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	701.947a	.100	.145
2	682.881a	.126	.182
3	673.334a	.139	.200

a. Estimation terminated at iteration number 5 because parameter estimates changed by less than .001.

The third step is selecting the right model. The classification table displays step 1, 2, and 3 (models) and in every step, the system is adding the independent variables. In step 1, it is giving only 74.4 percent, in step 2increaing to 77.2 percent and in step 3 showing 77.6 percent. It means that step 3 has more percent (77.6%) correct for explaining the data than the other two steps.

Table 14: Classification Table

Models	Observed		Predicted		
			Website_Visit		Percentage Correct
			No	Yes	
Step 1	Website_Visit	No	452	20	95.8
		Yes	147	34	18.8
	Overall Percentage				74.4
Step 2	Website_Visit	No	447	25	94.7
		Yes	124	57	31.5
	Overall Percentage			77.2	
Step 3	Website_Visit	No	443	29	93.9
		Yes	117	64	35.4
	Overall Percentage				77.6

a. The cut value is .500

Now let us see in which step what variable is added and analysed. In step1, the Use of Internet Index is added. In step 2, apart from of Use of Internet Index, Frequent use of computer is also added. Lastly in step 3, the system also adds Age. So step 3 contains 3 independent variables viz., age, frequent use of computer and Internet user index.

Table 15: Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1[a]	Useinternetindex	.098	.013	56.120	1	.000	1.103
	Constant	-3.118	.317	96.592	1	.000	.044
Step 2[b]	Useinternetindex	.077	.014	32.434	1	.000	1.080
	Frq_Use_Comp_Rec	.279	.064	18.954	1	.000	1.321
	Constant	-3.509	.331	112.192	1	.000	.030
Step 3[c]	Age	.048	.015	10.285	1	.001	1.049
	Useinternetindex	.079	.014	34.017	1	.000	1.082
	Frq_Use_Comp	.266	.064	17.098	1	.000	1.305
	Constant	-4.556	.484	88.544	1	.000	.011

a. Variable(s) entered on step 1: Useinternetindex.

b. Variable(s) entered on step 2: Frq_Use_Comp

c. Variable(s) entered on step 3: Age.

Now let us analyse the variables that has been dropped. The variables not in the equation shows the variables not considered in the model. In Step 1, the variables Education, Gender, Age and Mobile phone and Frequent Use of Computer are not considered. InStep2, Education, Gender, Age and Mobile phone are not taken. In Step 3, Education, Gender, and Mobile phone are not considered. So, the system has removed the variables of Education, Gender and Mobile Phones. Thus, when the system adds one variable in every step, its significance is shown in the above table, e.g., in step 1 Use of Internet Index when added shows a significance of .000 which is less than 0.05 similarly in step2, Frequent Use of Computer showing significance .000 and finally in step 3, Age being added showing significance of .000 are added one after another. But the system has not added Education, Gender and Mobile Phone. It means that these variables are not having adequate data to make an impact on the model. It also means the variables Gender, Education and mobile phones have nothing to do with website access to government websites but the variables of Age, Use of internet Index and Frequent Use of Computers are the variables which can predict the access to government websites.

Table 16: Variables not in the Equation

			Score	**df**	**Sig.**
Step 1	Variables	Education	24.313	5	.000
		Education(1)	.237	1	.626
		Education(2)	5.488	1	.019
		Education(3)	1.195	1	.274
		Education(4)	6.256	1	.012
		Education(5)	11.143	1	.001
		Gender(1)	2.580	1	.108
		Age	13.015	1	.000
		Mobile (1)	.973	1	.324
		Frq_Use_Comp	19.392	1	.000
	Overall Statistics		40.453	9	.000
Step 2	Variables	Education	16.923	5	.005
		Education(1)	.206	1	.650
		Education(2)	3.452	1	.063
		Education(3)	.925	1	.336
		Education(4)	3.315	1	.069
		Education(5)	8.559	1	.003
		Gender(1)	1.883	1	.170
		Age	11.017	1	.001
		Mobile (1)	.944	1	.331
	Overall Statistics		21.606	8	.006

			Score	df	Sig.
Step 3	Variables	Education	9.193	5	.102
		Education(1)	.268	1	.605
		Education(2)	1.572	1	.210
		Education(3)	.241	1	.623
		Education(4)	.646	1	.421
		Education(5)	4.872	1	.027
		Gender(1)	1.250	1	.264
		Mobile (1)	.667	1	.414
	Overall Statistics		11.768	7	.108

It also means that step 3 has the possibility of predicting better percentage of correctness of 77.6 and the model fit is also significant as Nagerleke r square is more than 0.05 and is increasing slowly from step 1 to step3. So this is the model (step 3) which finds that access to government websites are impacted by age, user internet index and frequency use of computer.

The model derived and the variables in the equation table contain the coefficients for the (fitted) line and other relative information about the coefficients. The equation of the line found from the output is

$\ln \left(\frac{\Box(x)}{1-p(x)} \right)$- 4.556 + 0.048$x_1$+ 0. 079$x_2$ + 0.266x_3

where, x_1 = age, x_2 = Use Internet Index, x_3 = Frequency of Computer Use and

$\ln \left(\frac{\Box(x)}{1-p(x)} \right)$ = probability of accessing government websites

9. Findings and Conclusion

The study finds that ICT tools penetration in the state is fairly high and there is no significant digital divide among the respondents from different districts. Mobile phones, in particular, are the most common devices used by the respondents for accessing internet. The model uses the conjecture that access to government websites are dependent on variables of gender, age, education, possessing mobile phones, the frequency of use of computer and internet usage index. The study finds that access to government websites is impacted by age, user internet index and frequency in use of computers. The model finds that gender and education play a negligible factor in deciding the access to government websites. Since mobile phones play an important role in accessing the internet in improving the use of internet index, the priority should be given to this factor. Therefore, providing government services through mobile apps may be a good choice for the policy makers. Majority of the respondents used to access internet through their mobile data connection indicating that private telecom vendors have big contributions in providing internet access in the state. High downtime and slow speed of the internet are the two major issues faced by the state.

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ANALYSIS OF VOLATILITY OF PRECIOUS METAL FUTURE AND SPOT PRICES WITH SPECIFIC REFERENCE TO GOLD AND SILVER

Abstract

The commodity market in India has witnessed phenomenal growth since the establishment of Commodity Futures Exchanges, both in terms of volume and value of trade. Present study examines the nature of relationship in the prices movement and volatility prices and lead-lag relationship between the spot and futures returns of the precious metal (Gold and Silver) commodities. In a five year data of prices of gold and silver spot and future prices it is observed that the price movement of gold and silver is significantly different. It is also found that the future and spot prices of both the metals affect each other. Further the trend of mean and standard deviation of gold and silver prices were moving significantly different from each other.

Key Words: SPOT Price, Future Prices, Commodity Market, Lead –Leg Relationship, Price Volatility, etc.

Introduction

The commodity market in India has witnessed phenomenal growth since the establishment of Commodity Futures Exchanges, both in terms of volume and value of trade. At present there are five national exchanges (Multi Commodity Exchange of India Limited, National Commodity & Derivatives Exchange Limited, National Multi-Commodity Exchange of India Limited, Indian Commodity Exchange Limited and ACE Derivatives and Commodity Exchange Limited) and sixteen commodity specific regional exchanges that allows trading of futures and spot contracts on commodities. Multi Commodity Exchange started its operation in 2003 is the largest commodity exchange in the country offers many commodities in the categories of bullion, ferrous metals, non-ferrous metals, energy, and agriculture.

Macroeconomic changes has posed many challenges before financial and commodity markets. In the last few years financial and commodity market has become very volatile. Volatility brings risk and opportunity to traders and investors. There are many reasons for volatility to occur in commodity markets. Political unrest or extreme weather conditions in commodity producing countries can cause supply disruptions which can create volatility in commodity prices. Introduction of new financial innovations, such as futures, options, exchange-traded funds (ETFs), and use of precious metal as collateral for trading can affect precious metals volatility. Selling and buying of gold by the International Monetary Fund (IMF) and central banks can also change volatility. Changes in demand for the product of an industry that uses commodities as an input may lead to fluctuations in prices

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of commodities. Market participants form different expectations of profitable opportunities, perform cross-market hedging across different asset classes, process information at different speeds, and build and draw inventories at different levels. These factors contribute to volatility of commodities over time and across markets.

From the investor point of view, commodities matter to investors in term of their market size and also for their diversification potential in portfolio management. For financial researchers, commodities are also of interest for their potential role in asset allocation decisions. In this regard, research work of Abanomey and Mathur (2001), Georgiev (2001), and Chan and Young (2006) explains that commodities provide risk reduction in portfolios along with stocks and bonds. Researcher like Cagayan and Edwards (2001), Chow et al. (1999) suggest that commodities become more attractive when the general financial climate is negative. These findings are confirmed in more recent work by Boido (2013), Cumming, Hals, and Schweizer (2013), Nijman and Swinkels (2011) and Skiadopoulos (2012). Commodity markets have an important role in the price stabilisation of commodities and contribute immensely to the economic development of the country. Commodity derivatives trading in India has an old history. Historical evidences indicate that India is a pioneer in using various forms of derivatives in commodities. Starting from the cotton futures in 1875, it has grown significantly over the years. Later on commodity derivatives market expanded so as to include other commodities like oil seeds (1900), raw jute and jute goods (1912), wheat (1913), and bullions (1920). Few studies have discussed the causalities between spot and futures of oil prices with nonlinear methods (Bekiros and Diks, 2008). Huang et al. (2009) have examined the efficiency of crude oil markets conditional on some episodes of extreme volatility. Chan et al. (2004) examined the daily volatility of selected futures contracts on Chinese Futures Exchanges and found that the returns have asymmetric effects of volatility. Volume is found to be positively related to volatility; open interest was found to be negatively related to volatility and the impact of large trader's participation in the market was also found to be positively related to volatility. With the growth in the volume and activity in the commodity market, an associated issue that came up for a wider debate in the financial press relates to volatility. The futures market witnessed an increased volatility in prices, which direct to an increase in the volumes. As more stakeholders require the price risk management and the participants take short term positions by entering and exiting the market repeatedly, it causes excessive volatility. The increase in the volume of trades does not lead to price rise only but may also increase even in the fluctuating market. Furthermore, it makes the price discovery more efficient by increased participation and consequential liquidity. Further active and increased market participation can lead to the reduction in price volatility. It is argued that the derivatives

market provides a platform for hedgers such as farmers, industrial units, exporters and importers who have price risk exposure. From their point of view, commodity futures trading is looked upon as a risk management activity. Futures market provide a platform for hedging the risks. However, critics argue that derivatives are detrimental to the healthy functioning of the spot market for the underlying commodities. In this background, the present research study looks at the linkages between spot and futures market, volatility in the derivative instruments, the cause and effect relationships, and the lead-lag relationships in a specific segment of the Indian commodities market.

Review of Related Literature

Commodities are important economically since fluctuations in their prices tend to impact on the viability of both the existing and future production and investment decisions made by governments and corporations. Gold futures trading have given India second ranking in the world. Srinivasan K., Deo M. (2009) examined Gold trading for 2005-08 and found unidirectional causality from spot to futures market with spot market acting as the centre for price discovery. However, in another study, due to sufficient trading volume, futures market was the centre of price discovery and the information convergence was instantaneous in the expiry week. Therefore, it is a useful hedging instrument (Iyer & Pillai, 2010).

Study by Chaihetphon & Pavabutr (2010) on Gold Standard and Mini contracts from 2003-07 found futures market to be efficient. Gold Mini contracts (100 grams) contributed to over 30% of price discovery though they accounted for only 2% of trading value on MCX. Therefore, findings on Gold market have been consistent. Silver India's number one metal in terms of futures trading volume, silver is a much sought after metal for being both a precious metal and industrial commodity. Silver futures contract was a useful for hedging as price discovery was taking place in the futures market (Iyer & Pillai, 2010) Srinivasan (2012) tested the price discovery process and volatility spillovers in Indian spot futures commodity markets through the Johansen cointegration test, Vector Error Correction Model and the bivariate EGARCH model. The study used four futures and spot indices of the Multi Commodity Exchange of India, representing relevant sectors like agriculture, energy, metal, and the composite index of metals, energy and agro-commodities. The presence of long-term equilibrium relationships between the futures price and its underlying spot price of the commodity markets was confirmed from the Johansen cointegration test.

The commodity futures market efficiency in India and inflationary impacts were analyzed by Gupta and Ravi (2013). The authors explored whether the efficiency exists between commodity futures and spot markets using the data derives for three commodity exchanges MCX, NMCE and NCDEX. The study further examined the association between the spot price of commodities and WPI. The evidences of efficiency in most of the sample commodities, though it may depart in some time periods and establish that the huge volatility of spot prices and other market imperfections and irregularities were responsible for lifting WPI was found.

A competitive and liquid market is an important prerequisite for the price discovery process. Given that price discovery depends on how new information is incorporated into commodity prices, futures market liquidity is assumed to affect the contribution of the futures market to the price discovery process and market efficiency. For instance, Figuerola-Ferretti and Gonzalo (2010) document that the futures market plays a more

decisive role in the price discovery process in more liquid metal markets such as   14 aluminum and copper, whereas the contribution of the futures market to the price discovery process is substantially lower in the less liquid lead market. Similarly, Garbade and Silber (1983) confirm the importance of liquidity of the futures market for the price discovery process for agricultural commodities. Similar results can be observed for Canadian and Brazilian agricultural commodities (Brockman and Tse, 1995; Mattos and Garcia, 2004). However, the more recent evidence of Adämmer et al. (2015) suggests that efficient price discovery takes even place in thinly traded futures markets. In general, open interest as a proxy for market liquidity, is supposed to be positively related to the contribution of the futures market to the price discovery process and should increase the speed of convergence. Our cross-sectional analysis would capture not only the time-series changes in market liquidity in an individual commodity market, but also the liquidity differences across a wide range of 16 commodity markets. However, if a minimum threshold of trading activity is already sufficient for the efficient price discovery in the futures market, as suggested by Adämmer et al. (2015), we may not find any effect of market liquidity on the contribution of the futures market to the price discovery. Similar reasoning applies to the speed of convergence between spot and futures markets. However, the more recent evidence of Adämmer et al. (2015) suggests that efficient price discovery takes even place in thinly traded futures markets. In general, open interest as a proxy for market liquidity, is supposed to be positively related to the contribution of the futures market to the price discovery process and should increase the speed of convergence.

Statement of the Problem

An increasing number of research studies have emerged over the past few decades on the commodity derivatives market and most of these studies have focused primarily on the volatility of spot and futures markets for agricultural products, currencies and stocks. Pindyck (2004), for example, examined the short-run dynamics, commodity prices and inventories, focusing on the behavior and the role of volatility. Chen et al. (2005) examined the relationship between spot and futures prices of energy commodities and found that futures prices are unbiased predictors of future spot prices. Several studies have dealt with the lead-lag relationship of spot and futures prices of commodities with the objectives of examining the issues of market efficiency. Garbade and Silber (1983) first presented a model to examine the price discovery role of futures prices and the effect of arbitrage on price changes in spot and futures market. An issue often raised in the discussions on the market behaviour is whether price formation in one market is aided by the other market of spot and futures market for commodities. It is essential to examine whether prices are formed independently or there is a dependency of one market on the other. Similarly the issue of cointegration between markets has to be verified in the study. In a fairly efficient stock market, it is always observed that the spot and futures market are cointegrated. In the same way, the cointegration that exists between the spot and futures market commodities has to be checked and reported. Though a number of research studies have been conducted in studying the volatility of spot and futures market for commodities in India, yet these studies yielded mixed results. Volumes and open interest positions of the futures market and their impact on futures returns have not been critically examined in different studies. Hence, an attempt has been made in this study to investigate the issues of stationarity, co-movement, lead-lag relationship, impact of trading volume, open interest, etc., on futures returns, and the volatility of selected non-agricultural commodities in the

Indian commodities market. The performance of spot market and futures market for selected commodities of energy, base metals and precious metals in the derivative segment of the market has also been examined.

Research Questions

The background of the research problem described above has raised the following research questions for examination.

(i) What are the time series properties of the returns of selected precious metal in the spot and futures markets?

(ii) How do the spot returns and futures returns behave over a period of time in the case of selected precious metal commodities? And

(iii) Degree of volatility in the futures returns for selected commodities?

Objectives

Based on the research questions stated in the previous section, the objectives of the study have been framed as follows:

1) To examine the nature of relationship in the prices movement of selected precious metal(Gold and Silver) in the Indian spot and futures market.

2) To study the lead-lag relationship between the spot and futures returns of the precious metal (Gold and Silver) commodities.

3) To analyze the volatility of prices in spot and futures market for the selected Precious metal (Gold and Silver) commodities.

Research Methodology

In the light of purpose of research, the present study will be mainly of applied nature as the researcher has tried to test the assumptions and applications of the problem in a given set of conditions. The research will be based on secondary data derived from various sources such as financial book, journals, magazines, newspaper, and government and non-governmental sources. The price movement of the gold future contract is collected from various journals, prospectus, books, Internet, magazines, reports, working paper series etc. Besides this, the websites of SEBI, NSE, BSE, RBI and a number of other agencies were searched for getting the latest data and information related to the study. The data will be collected and analyzed for the period of Jan2011 to December 2015 (05 years). For analyzing the data, both simple and advanced statistical tools are used. In some cases simple statistics like average, percentage, weightage average and mean score were applied. Hypotheses will be tested using independent t-test statistics. The stated hypothesis will be tested at 0.05 level of significance.

Objective 1

To examine the nature of relationship in the prices of gold and silver, correlation analysis was conducted on the spot prices for the period 1 January 2011 to 31 December 2015.

The result of the analysis is as follows:
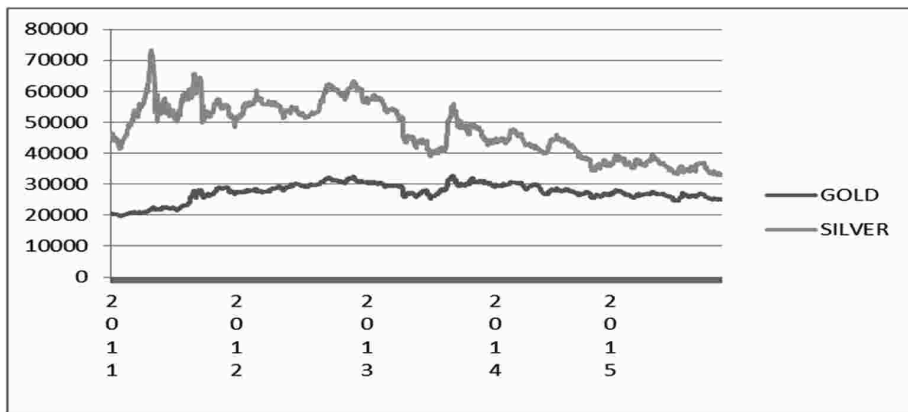
Figure -1 Year wise gold and silver spot price

From the above table it can be seen that silver spot prices have fallen significantly since 2011, whereas gold spot prices are moving in a range between Rs 20,000 and Rs 30,000.

Table 1 Correlation analysis of gold and silver prices:

	GOLD	*SILVER*
GOLD	1	
SILVER	0.197078	1

Correlation analysis is the process of studying the strength of that relationship with available statistical data. From the table it can be seen that gold and silver prices are positively correlated but the strength of correlation is very weak.

Growth rate analysis

To compare the performance of the prices of gold and silver, the growth rates of both the metals were calculated using the formula:

$G\_gold = Gold_t / Gold_{t-1}$

$G\_silver = Silver_t / Silver_{t-1}$

Table 2 Correlation between growth rates of Gold and Silver prices

	G_GOLD	*G_SILVER*
G_GOLD	1	
G_SILVER	0.731109	1

From the table it can be seen that the growth rates of the metals are positively correlated and the strength of correlation is also strong.

Objective 2: To study the lead-lag relationship between the spot and futures returns of the precious metal (Gold and Silver) commodities.

Lead lag relationship can be found by using granger causality test. For gold the granger causality test result were as follows:

Table 3: Granger Causality Tests

Lags: 2

Null Hypothesis:	Obs	F-Statistic	Probability
SPOT does not Granger Cause FUTURE	1371	9.26273	0.00010
FUTURE does not Granger Cause SPOT	260.203	1.8E-96	

Interpretation: Grager casuality was carried out to test Lead lag relationship between the spot and futures returns of the precious metal (Gold and Silver) commodities. The information presented in the table 4 indicates that the probabilities for both the null hypothesis are less than 0.05. Thus there is bidirectional relationship between the spot and future prices of gold. That means spot prices of gold affects future prices and future prices affect spot prices.

To check the causality between spot and future price of silver granger causality test was applied. The result is as follows:

Table 4: Pairwise Granger Causality Tests

Lags: 2

Null Hypothesis:	Obs	F-Statistic	Probability
SPOT does not Granger Cause FUTURE	1371	3.01642	0.04930
FUTURE does not Granger Cause SPOT		483.317	2.E-159

Interpretation: from the table it can be seen that for both the null hypothesis the probabilities are less than 0.05. It means null hypothesis is rejected. There is bidirectional relationship between spot and future prices of silver.

Objective 3: To analyze the volatility of prices in spot and futures market for the selected Precious metal (Gold and Silver) commodities.

To check the volatility of gold and silver prices, first the means of gold and silver prices for the period 2011 to 2015 were taken. It can be seen from the table below:

Table 5: the means of gold and silver prices for the period 2011 to 2015

	YEAR	GOLD	SILVER
MEAN	2011	23696.8	54346.5
	2012	29570.9	56324.9
	2013	29185.2	48292.6
	2014	28190.2	41702.4
	2015	26330	35987.7

Table 6: Statistical Analysis (t-test) of mean and Variances of Gold and Silver Prices

	GOLD	SILVER
Mean	27394.6	47330.81
Variance	5845612	72846342
Observations	5	5
Pooled Variance	39345977	
Hypothesized Mean Difference	0	
df	8	
t Stat	-5.02531	
P(T<=t) one-tail	0.00051	
t Critical one-tail	1.859548	
P(T<=t) two-tail	0.00102	
t Critical two-tail	2.306004	

Interpretation: from the table it can be seen that the significant value is 0.00 less than 0.05. it means null hypothesis is rejected. Thus there is significant difference in the means of gold and silver prices.

Table 7: Standard Deviation of Gold and Silver Prices

	YEAR	GOLD	SILVER
STD DEV	2011	3044.58	5921.13
	2012	1454.27	3292.83
	2013	1751.15	5645.7
	2014	1429.67	3408.54
	2015	775.257	1637.11

Table 8: Statistical Analysis (T TEST) of the standard deviations of gold and silver prices.

	GOLD	SILVER
Mean	1690.984	3981.062
Variance	699679.9	3207620
Observations	5	5
Pooled Variance	1953650	
Hypothesized Mean Difference	0	
df	8	
t Stat	-2.59058	
P(T<=t) one-tail	0.016042	
t Critical one-tail	1.859548	
P(T<=t) two-tail	0.032084	
t Critical two-tail	2.306004	

Interpretation: Statistical analysis was used to check the differences in the standard deviations of gold and silver prices. From the table above it can be seen that the significance value for the t test between standard deviation of gold and future price is 0.03 which is less than 0.05. Thus null hypothesis is rejected. There is significant difference in the standard deviation of the two metals.

Conclusion

From the study it can be concluded that the price movement of gold and silver is significantly different. The price of gold has shown stable performance for the period of study but silver has first risen and then fallen significantly. Also it was found in the study that the future and spot prices of both the metals affect each other. That is, future price of gold affects spot price of gold and spot price of gold affects future price of gold. Similarly future price of silver affects spot price of silver and spot price of silver affects future price of silver. Further the trend of mean of gold and silver prices were moving significantly different from each other. Also the standard deviation in the prices of gold and silver were found to be significantly different from each other.

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PERCEPTUAL MAPPING OF INFORMATION AND COMMUNICATION TECHNOLOGY IN HIGHER EDUCATION

Abstract

In today's society, it is the general view that the usage of Information and Communication Technology. (ICT) enhances the quality of teaching learning process. With the progress of new technology being applied in every sphere of life, it is expected that the higher education would also be transformed with the usage of ICT. Here it becomes essential, to establish the fact that does the involvement of technology in learning process really enhance the quality or not, How much technology should be used, Can the usage of ICT replace teacher, Does ICT provide more ease in expressiveness, Does the ICT involve learner actively, Can we rely on the information available on the internet, These are a few of the questions, which need to be answered, before we could rate the impact of mediating role of ICT in higher education. In this research survey authors have interviewed somewhere around 288 stakeholders of ICT from varied domains, gender, and occupations, in order to find their perception on the mediating role of ICT in transforming higher education.

Keywords: Information and Communication Technology. (ICT), Higher Education

Introduction

Higher education is one of the vital sectors in any economy. In the developing country like India, the socio-economic development could be enhanced by improving the quality of higher education. It is expected that the knowledgeable students would easily by converted into employable candidate. Hence the authorities take keen interest in improvising the quality of higher education. In today's digitization era, where no domain is without involvement of technology, it is expected that Information and Communication Technology. (ICT) can also play a vital and mediating role in transforming higher education. Indian government has come up with various policies to focus on quality education. National Mission in Education through ICT (NMEICT) is centrally sponsored scheme of government of India which is focusing to provide connectivity to all colleges and universities of the country to share high quality e-content free of cost. In a country like India, with so much of diversity in terms of cultural values, socio-economic status, and gender bias can ICT act as powerful tool which can be used to effectively and efficiently train them, This research survey has been conducted in preview of understanding the perceptual mapping of ICT in higher education, its limitations, challenges that are posed in its implementation and to evaluate the mediating role of ICT in improving quality of higher education.

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Review of Literature

Today's society strongly vuches for a change in our education system. The traditional chalk and board teaching pedagogy is must be integrated with the transforming technological establishments. There is no more the requirement of preparing the students as a content base, rather today is the world of knowledge application. Hence, classrooms must be integrated with Information, Communication and technology to enhance more general skills such as critical and analytical thinking and learning which sustains till life. Effective use of ICT in education can transform a person from content base to knowledgebase. A Lot of research has been conducted in recent past to investigate the linkage between usage of ICT and quality learning. Neeru Snehi (2009), commented that national government, industries, NGO's and society as whole should come together to encourage integration of ICT in higher education and coordinate for devising good quality programs. Fully equipped classrooms/Labs, well trained teachers, active learner participation would enhance high quality education. Kisla T (2011), reported the usage of ICT strengthen the communication between teachers and students. Singh and Sharma (2013), concluded ICT as a fundamental requirement for the economical growth. They emphasized on the involvement of all stakeholders in a systematic manner. They stressed on empowering teaching community with technological advancements rather than purchasing computers and software. Robert and Fadi (2003), in there research work on the attitude of undergraduate students to ICT, found that the group of respondents who scored better success had a better attitude towards ICT usage in education. They also found that male respondents readily accepted the involvement of ICT, as they had ease in using technology as compared to female respondents. Venkatesh , Croteau, A.M et.al (2014), in their research with students on measuring the effect of blending ICT in learning, found that the student's had overwhelming positive response for inculcating ICT. Peeraer and Petegem (2015), in their survey on Vietnamese teachers found that ICT skills of teacher and computer confidence influence the usage of technology in teaching learning process.

Chelladurai and Pitchammal (2016), emphasized that ICT can improve the memory retention, explain complex theory and instructions to the students in comprehensive manner, improve student attendance as well as can make the classrooms interesting. They further concluded that ICT would make teaching community to reach remote areas and thus ensure the qualitative learning environment for one and all. Jayabharthi and Santhanalakshmi (2016), conducted a survey in Tamilnadu to study 3rd year student's perceptive on usage of ICT in teaching and learning. Their significant findings were that 51% students possess good ability to engage themselves in online discussion forums,

60% students agreed that ICT involvement improves quality of their learning and majority of students do not want traditional teaching learning pedagogy any more.

Objective

The literature review predicted that the ICT should be integrated with the current teaching learning process. It could act as a pivot to improve learning abilities. This research work is carried forward to investigate the impact of ICT in higher education keeping following objectives in view:

1. Identification of factors influencing the usage of ICT in higher education.
2. The impact of demographical characteristics on acceptability of technology.
3. To access the impact of ICT usage in improving the quality of higher education.
4. Reliability of information/content and its impact on learning.
5. To assess the capabilities of ICT to substitute class room teaching.

Research Methodology

Descriptive Analysis has been done to meet the objectives. Primary data were collected from respondents possessing different demographical characteristics. Keeping objectives in view, various parameters were identified through literature survey. A questionnaire consisting of open ended and closed questions was designed to evaluate the intensity of identified parameters. Manually and through mail the questionnaire was distributed to 300 respondents, out of which 288 responded, resulting to the responding rate of 96%. The set of parameters were tested for reliability using Cronbach's alpha.

Table 1: Reliability Statistics

Cronbach's Alpha	N of Items
.934	30

Before inferring any postulate, it is highly required to validate the questionnaire. Hence, KMO test was conducted on the sample data. Table 2 depicts the KMO value for sample adequacy depicting that the questionnaire is suitable for further analysis. It is expected that the desired objectives would be fulfilled through the data collected on the basis of this questionnaire.

Table 2: KMO and Bartlett's Test[a]

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.781
Bartlett's Test of Sphericity	Approx. Chi-Square	7674.789
	df	435
	Sig.	.000

a. Based on correlations

Results and Discussion

The data, as represented in table 3, depicts that the sample has the dominance of people belonging to the age group of 25-35 years. 61% respondents were male, 59.6% were married whereas 58.3% respondents were professionally qualified. The fact related to income infers that the same percentage of respondents belong to two different income groups i.e. 27.2% of sample belong to the income group of below Rs.15000 and Rs. 40,000 to Rs. 60,000 PM. Majority (53.9%) of respondents were working in their current occupation for almost 5 years.

Table 3: Demographic Characteristics of Respondents (N = 228)

		Frequency	**Percent**
Age	Less than 25 Years	62	27.2
	25 to 35 Years	84	36.8
	35 to 45 Years	49	21.5
	45-55 years	18	7.9
	45-55 years	15	6.6
Gender	Male	139	61.0
	Female	89	39.0
Marital Status	Married	136	59.6
	Unmarried	92	40.4
Educational Qualification	Under-Graduate	5	2.2
	Graduate	45	19.7
	Post-Graduate	45	19.7
	Professional qualification,	133	58.3
Income	Below Rs.15000 PM	62	27.2
	Rs15001to Rs.25000 PM	36	15.8
	Rs.40, 000 To Rs60000PM	62	27.2
	Rs 60000 and above	30	13.2
	600000	38	16.7
Occupational Experience	0-5 Years	123	53.9
	5-10 Years	55	24.1
	10 to 15 Years	23	10.1
	15 Years above	27	11.8

The factors depicting various aspects of ICT that were found to be reliable (as the value for each aspect is higher than 0.5, Table 4) after applying SPSS tool were:

1. **Usefulness:** The statistics revealed that the information available on internet is correct and reliable. Hence that information can be used further. The easy availability of information has proven the usefulness of ICT.

2. **Learning Enhancement:** The ICT involvement has improved the scope for knowledge sharing. It has also supported in the improvement of quality teaching and learning process. The respondents have found that ICT is quite effective for self study, as the pace of learning varies from one person to other. As a consequence, a slow learner can spend more time on the concepts, he can schedule the learning process at his own grasping limits, whereas the fast learner can skip some basic introductory sessions and can very easily shift to the advance modules. This has improved the self learning capacity of the stakeholders. The statistics also support the same. The mean value for this variable is the highest among all other contributing variables (4.08). Hence the self motivated, regulated students gain a lot from the involvement of ICT. The standard deviation value for the variable, "ICT is more powerful tool of learning than books", is highest (1.104) among all. This signifies that the respondents have extreme response towards this variable. It's highly expected that many of the respondents considers ICT has more powerful than books whereas others considered it has not at all a powerful tool than books.

3. **Problem Solving:** One of the major features of ICT, as found after thorough analysis, was its capabilities in Problem Solving. ICT has more ease of expressiveness and it quickly provides solution to the problem. Decision making process is one of the most critical and challenging phenomena. The statements like, "The advent of technology can support its users", " The capabilities of people in using technology as a medium for decision making process" defines the problem solving capabilities of ICT. Table 5, reveals that ICT has supported (always or sometimes) almost 69% respondents, for solving their problems as well as in decision making process.

4. **Potential Treats:** As information is readily available on the net, hence it was found in the study that the usage of ICT has reduced the retention power. Thus it hinders the intellectual growth. It is expected that the advent of ICT would substitute the teacher, who now would have to play the role of a facilitator. The most important variable as a potential threat due to usage of ICT is the reduction in retention power, as the mean value is highest (3.57) among other contributing threats. The probability of ICT's capabilities of replacing classroom teaching has been marked on extremes, as the standard deviation value for this factor is 1.188. This depicts, some respondents strongly agree to this fact. On the contrary, others strongly disagree.

5. **Ease of Control and Monitoring:** As a role of teacher would be transformed to a facilitator, it would be required for them to stay updated. The usage of ICT would ensure the effectiveness of teaching learning process and would ensure the appropriate learning outcomes. The mean value of 3.88, highest among all variables contributing to this factor, signifies that the monitoring of teaching process would be easier due to the spontaneous feedback. The continuous feedback in teaching process supports the trainer to assess the efficacy of learning process and thus if required, the right changes in the pedagogy could be done.

Table 4: Factors Influencing the Usage of ICT

|	Reliability (α)	Mean	Std. Deviation
Usefulness	.680	3.795	0.7615
The information available on internet is useful		4.12	.747
The information available on internet is correct/ accurate		3.47	.776
Learning Enhancement	0.800	3.734286	0.950429
ICT involvement has improved the self learning capacity		4.08	.809
ICT increases the knowledge sharing		3.93	.868
ICT is more powerful tool of learning than books		3.39	1.104
ICT tools are more effective for individual study than group work		3.35	1.066
ICT tools can only be useful for self motivated students		3.64	1.059
ICT tools for E learning improve the quality of teaching and learning		3.89	.866
Self regulated students can gain through ICT tool involvement		3.86	.881
Potential Threats	.399	2.8275	1.06325
ICT hinder the intellectual growth		3.11	1.182
ICT can replace classroom teaching		2.56	1.188
ICT can substitute teachers		2.07	1.023
ICT usage has reduced the retention power		3.57	.860
Ease of Control and Monitoring	.786	3.6475	0.79325
This new approach of teaching and learning guarantees effectiveness		3.51	.765
ICT tools ensure appropriate learning outcomes		3.70	.790
ICT has the opportunities for spontaneous feedback		3.88	.882
ICT has translated the role of a teacher to facilitator		3.50	.736
Problem Solving	.762	3.6375	0.92675
ICT has more ease in expressiveness		3.56	.920
ICT provides communication facilitation		3.60	.977
ICT provides quick resolution of the doubt		3.66	.918
ICT has introduced challenges to the facilitators to have update		3.73	.892

Table 5: How far ICT supports people in decision making and problem solving

		Frequency	Percent	Valid Percent	Cumulative	Percent
Valid	Never	18	7.9	7.9	7.9	
	Rarely	11	4.8	4.8	12.7	
	Occasionally	40	17.5	17.5	30.3	
	Sometimes	101	44.3	44.3	74.6	
	Always	58	25.4	25.4	100.0	
	Total	**228**	**100.0**	**100.0**		

The descriptive statistics study finds that the most important factors among all are the usefulness of the information available through net and the learning outcomes, (Table 6). On the other hand, Problem Solving capabilities of ICT, has been evaluated at extremities. There exists skewing behavior in respondent's response.

Table 6: Perceptual Mapping of ICT in Higher Education: A Descriptive Statistics

	Mean	Std. Deviation
Learning Outcome	3.7781	.60136
Usefulness	3.7961	.66295
Learning Enhancement	3.7343	.64514
Potential Threat	2.8279	.64026
Control	3.6480	.62065
Problem Solving	3.6360	.72945
Valid N (List Wise)	288	
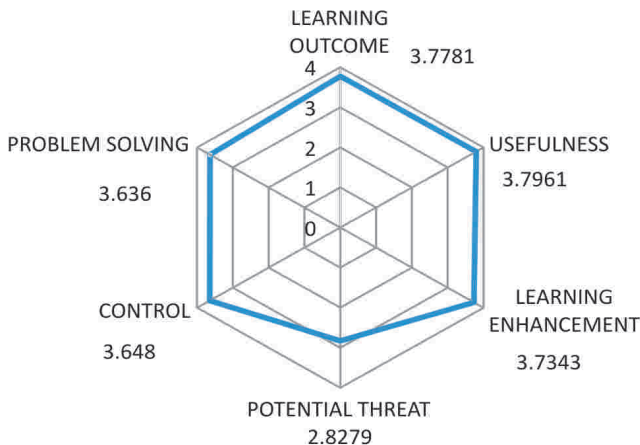
Figure 1: Perpetual Mapping of ICT in Higher Education.

Conclusion and Suggestions

ICT is being used extensively in various areas. It has been observed through this research that the advent of ICT in higher education has improved the learning process. This study has found five different factors influencing the usage of ICT in higher education viz. Usefulness, Learning Outcomes, Problem Solving, Ease of Control and Monitoring, Potential Threats. The information is accurate, reliable and easily available on the internet. This ensures that the information would add value to the stakeholders learning. They can enhance learning which in turn improves the quality of education. A well trained teacher now is equipped to play the role of a facilitator. While keeping themselves updated they can engage the students in interactive manner and thus can improvise on the quality of their lecture delivery. The ICT involvement gives learner the flexibility to learn at their own pace. Hence the understanding and clarity of basic concepts would improve. The ICT tools involve students individually as well as in collaborative groups they can participate at various discussion forums and thus can share their knowledge. ICT has also bridge the gaps between remote areas. It is now possible for the learners of remote locations to learn new technologies very swiftly that too without the role of any mediator. ICT supports almost 69% of times in decision making process. The demographical characteristics depicted that the male respondents and youngsters were more technology savvy and found the ICT tool usages comparatively easier. Along with numerous advantages of implementing ICT there are few challenges and drawbacks of using ICT. Firstly, in the developing countries the cost of laying the ICT infrastructure is little high and many a times it is not even feasible. This poses a big challenge on the success of ICT mission. The quality of learning process has undoubtedly improved but at the same time high dependency on technology has reduced the retention power. This in result hinders the intellectual growth. This study figures hindrance in intellectual growth as the most dangerous potential threat. Though not much significant but it was found through this research that the extensive usage of ICT and ease of information availability may replace classroom teaching and thus substitute the teachers. The role of teacher would now transform from knowledge providers to information facilitators. ICT can be constructively used in teaching learning process for active learning, which would also require the continuous up gradation of faculty members. Those faculty members who inculcate ICT tools in their classroom would achieve better

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A STUDY ON LEADERSHIP IN DEFENCE ORGANIZATION IN RELATION WITH THE DEMOGRAPHIC CHARACTERISTICS OF LEADERS

Abstract

Purpose: There are many factors influencing the leadership effectiveness and style of the leaders like age, gender, position in the organization, region and experience etc. Here, the study concentrates on few factors like age, gender and position held by a leader and its effect on leaders' leadership style and effectiveness of leadership by taking sample of defence personnel with the help of questionnaire survey. The paper finds that there is a significant relation between leadership style and effectiveness with the leaders' age, gender and level.

Keywords: Leadership style, leadership effectiveness.

Introduction

Leadership was considered as a quality that was possessed by people sitting on high positions of a state or a country. Acc. to George R Terry "Leadership is the activity of influencing people to strive willingly for group objectives." Robert Tannenbaun, Irving R W eschler and Fred Massarik defines Leadership as "Interpersonal impact employed in a situation and directed through the communication process towards attaining particular goals."

Leadership is a repetitive process and should have a purpose. It is an art as well as a science. People become leaders by internalizing a leadership identity. A person assures leadership by taking a useful action. As a person's leadership capabilities grow with the opportunities, challenging assignments become more likely. Such situations give the person the opportunity to step outside a comfort zone and experiment with unfamiliar behaviors and new ways of exercising leadership. Women are also emerging as efficient leaders in every industry.

Review of Related Literature

Many writers have propounded many theories on Leadership, Centered Leadership, Executive Leadership, Revisions of theories, surveyed on Leadership traits, Leadership challenges, Leadership models, interviewed both women and men and found many great women leaders too. Empirical, meta-analytic, and theoretical studies have been conducted on various types of leadership. The Ohio State Leadership Studies focused on satisfying common group needs. It states that the two most important factors in leadership are "initiating structure" and "consideration". Both could be either high or low

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and were independent of one another. The research was based on questionnaires to leaders and subordinates. These questionnaires are known as the Leader Behavior Description Questionnaire (LBDQ) and the Supervisor Behavior Description Questionnaire (SBDQ).

The Michigan Studies of Leadership indicated that leaders could be classified as either "employee centered," or "job centered." These studies identified three critical characteristics of effective leaders: task oriented behavior, relationship-oriented behavior, and participative leadership. Centre for Creative Leadership (CCL) conducted World Leadership Survey: - This project provides information on trends in leadership, as well as issues that leaders have to deal with every day such as what employees want in their leaders, trust and ethics in effective organizations, employee engagement and retention, generational differences, and attitudes towards work. This survey proved useful to identify important personal strengths of a leader as well as areas where improvement is needed.

Jonathan Haidt, 2006 - "If a meeting goes badly, for example, you should limit your thoughts about it to its temporary and specific impact and keep them impersonal. It helps to talk with trusted colleagues about the reasons for the poor meeting and ways to do better next time. These discussions should take place quickly enough for you to make a specific plan and act on it. You should also undertake some activity that will restore both your energy and your faith in yourself—perhaps having a hard workout, going out with friends, or spending time with your children." Barbara L.K. Pillsbury - " *Executive leadership is about mobilizing, managing, inspiring, and empowering others to achieve goals greater than what can be accomplished through individual works. Leadership is more than management and administration. Leadership can be learned—and typically is learned over time.* "

Warren Bennis Worked on "Crucibles of leadership". He believed that great leaders possess four essential skills, First is the Ability to engage others for a mutual goal. Second is a Differentiated and Compelling voice**.** Third is a Sense of integrity (including a strong set of values) and the most critical skill of the four is **Adaptive capacity** i.e. an almost magical ability to convert adversity, with all its stresses and to emerge stronger than before. It's composed of two primary qualities: **the ability to grasp context, and hardiness.** The ability to grasp the atmosphere and other conditions implies an ability to weigh the factors, ranging from how very different groups of people will interpret a gesture to understand a situation. Hardiness is ability to survive in difficult situations.

Stephen R. **Covey** Worked on how to build trust to be a good leader. Acc. to him the first job of any leader is to build trust. Trust is confidence built from two factors- **Character** and **Competence**. Character includes leader's integrity, motive, and intentions with people.

Competence includes leader's capabilities, skills, results, and track record. He has identified 13 common behaviors of trusted leaders around the world- Talk Straight, Demonstrate Respect, Create Transparency, Right Wrongs, Show Loyalty, Deliver Results, Get Better, Confront Reality, Clarify Expectation, Practice Accountability, Listen First, Keep Commitments, and Extend Trust. These13 Behaviors always need to be balanced by each others.

Peter F Drucker explored how humans are organized in all sectors of society i.e. in business, government and the nonprofit world. He said "Successful leaders don't start out asking and What do I want to do? They ask-What needs to be done? Effective leaders check their performances. They are mission driven." **Ronald Heifitz** focuses on how to build adaptive capacity in societies, businesses, and nonprofit organizations. His most recent book-The Practice of Adaptive Leadership: Tools and Tactics for Changing Your Organization- A sequel to "Leadership On The Line" provides a more useful approach to identify personal and organizational practices related to mobilizing organizations with adaptive challenges.

Barry Z. Posner developed the Leadership Practices Inventory (LPI) a 360-degree questionnaire for assessing leadership behavior which is one of the most widely used leadership assessment instruments in the world along with The Student LPI. More than five hundred doctoral dissertations and academic research projects have been based on their model.

Victor Vroom researched on the Expectancy Theory of Motivation, which attempts to explain why individuals choose to follow certain courses of action in organizations-particularly in decision-making and leadership. His most well-known books are Work and Motivation, Leadership and Decision Making, and The New Leadership. Making good decisions is one of the main leadership tasks. Vroom-Yago-Jago Decision model was originally described by Victor Vroom and Philip Yetton in their 1973 book titled *Leadership and Decision Making*. Later in 1988 ,Vroom and Arthur Jago replaced the decision tree system of the original model with an expert system based on mathematics. Now it is called Vroom-Yetton, Vroom-Jago, and Vroom-Yetton-Jago model. Dr. Hersey Blanchard identified three leadership competencies that formed the basis of Situational Leadership (Diagnosing, Adapting, Communicating). In the process of re-validating this framework in October of 2011, a fourth (Advancing) was also identified. The Leadership Culture Survey by Leadership circle provides a powerful "MRI" - Myers Brigs type indicator of organization's leadership culture. Used for entire organization, or just a leadership team, the Leadership Culture Survey reveals valuable data, tells how people view their current leadership culture, and compares that reality to the optimal culture they desire. The "gap" between the current culture and desired culture, instantly reveals key opportunities for leadership development. The Leadership Culture Survey also compares different organizational cultures.

Research Methodology

A. Nature And Sample

The Present study is exploratory in nature. The sample involved 42 leaders from Indian Defense Services is taken to evaluate the effectiveness of leader and their task oriented and people oriented styles of leadership. Literatures indicate that mostly leaders adopt task oriented style. To study the leader's style and their effectiveness were obtained using

questionnaire survey from respondents. The survey includes 35 men and 7 women ranging in age from 30s to 60s. The sample is conveniently drawn.

B. The Questionnaire And Scoring Method

As the present work is questionnaire based study, the collection of requisite data was done with the help of a printed questionnaire consisting of two separate sections. **Part I** :- consists of general information about the respondents such as their age, designations, educational qualifications, gender and experience.

Part II :- determines the leadership effectiveness and leader behavior using situational model developed by Paul Hersey and K Blanchard.

Scoring Method:- Leadership Effectiveness of respondents is measured by, if his/her score lies between +24 and -24.

Table 1 Leadership Effectiveness Score

S.No	Score Between +24 And -24	Effectiveness Of Leader
1	+24 to +12	Highly Effective
2	+11 to 0	Effective
3	-1 to -12	Ineffective
4	-11 to -24	Highly ineffective

C. Objectives Of The Study

1. To explore the relationship between demographic characteristics of a leader and leadership effectiveness.

2. To examine that whether the effective leaders are either more task oriented or people oriented.

3. To explore the relationship between demographic characteristics of a leader and leadership styles.

D. Variables

Data analysis work has been carried out considering the following variables:-

Table 2 List of Variables

Independent variables	Dependent Variables
Leaders' gender	Leadership style
Leaders' age	Leadership effectiveness
Leaders' position	Leadership Style Range

Control Variable

There are many other variables which may influence leadership effectiveness other than gender, age and position viz. income, organization, follower, nature of work, superiors and many other but in present study we assume that they have no influence on effectiveness of leader. So, all these variables are control variables.

E. Hypothesis

Following Hypothesis were formulated for testing in the present research work:

H01: Gender does not determine leadership style.

H02: There is no association between leadership effectiveness and Gender of a leader.

H03: Age does not determine leadership style.

H04: There is no association between leadership effectiveness and age of leader.

H05: Position does not determine leadership style.

H06: There is no association between leadership effectiveness and position of a leader.

Results and Discussion : Testing of Hypotheses

This part of research deals with testing of hypotheses. On the basis of formulated research hypothesis in all 6 statistical hypotheses/ null hypotheses have been created and tested using **Chi- Square** test for the purpose of analysis and discussion. The Presentation has been given in a sequence of created hypotheses numbered **H01, H02, H03, H04, H05 and H06.**

H01: Leader's Gender and Leadership Style (Hypothesis 1)

Statement of Hypothesis

Gender does not determine leadership style (H0)

Table -3: Leader's Gender and Leadership style

Gender vs Dominant Style	S1	S2	S3	S4	S1,S2	S2,S3	S1,S2,S3	Total
Male	25	4	0	0	3	1	2	35
Female	5	1	1	0	0	0	0	7
Total	30	5	1	0	3	1	2	42

Testing of Hypothesis at 99% level of confidence.

The degree of freedom is 6

Calculated value of chi square $= 6.24$

Critical value of chi square $= 16.812$

Calculated value of Chi Square is less than the critical value, therefore the difference between observed and expected frequency is considered to be not significant. Since the difference is considered significant. The null hypothesis cannot be rejected. This leads us

to conclude that Leader's Gender and Leadership style are independent and there stands no association between them.

H02: Leader's Gender and Leadership Effectiveness (Hypothesis 2)

Statement of Hypothesis

Gender does not determine leadership effectiveness (H0)

Table -4: Leader's Gender and Leadership Effectiveness

Gender vs Leadership Effectiveness	Effective	Ineffective	Total
Male	25	10	35
Female	7	0	7
Total	**32**	**10**	**42**

Testing of Hypothesis at 97.5% level of confidence.

The degree of freedom is 1

Calculated value of chi square =2.625

Critical Value of Chi square = 5.023886

Critical value of Chi Square is more than the calculated value of Chi square, it is therefore the difference between observed and expected frequency is not significant. Since the difference is not considered significant the null hypothesis is not rejected. This leads us to conclude that Leader's Gender and Leadership effectiveness are independent and there stands no association between them.

H03: Leader's Age and Leadership style (Hypothesis 3)

Statement of Hypothesis

Age does not determine leadership style (H0)

Table -5: Leader's Age and Leadership Style

Age vs Leadership Style	S1	S2	S3	S4	S1, S2	S1,S2,S3	Total
30-40	11	1	0	0	1	1	14
41-50	9	4	1	0	1	0	15
51-60	11	0	0	0	1	1	13
Total	**31**	**5**	**1**	**0**	**3**	**2**	**42**

Testing of Hypothesis at 99% level of confidence.

The degree of freedom is 10

Calculated value of chi square =8.122

Critical Value of chi square = 23.20925

Critical value of Chi Square is more than the calculated value of Chi square, it is therefore the difference between observed and expected frequency is not considered significant.

Since the difference is not considered significant, the null hypothesis is not rejected. This leads us to conclude that Leader's Age and Leadership Style are independent and there stands no association between them.

H04 Leader's Age and Leadership effectiveness (Hypothesis 4)

Statement of Hypothesis

Age does not determine leadership effectiveness (H0)

Table -6: Leader's Age and Leadership Effectiveness

Age vs Leadership Effectiveness	Effective	Ineffective	Total
30-40	9	5	14
41-50	10	4	14
51-60	12	2	14
Total	**31**	**11**	**42**

Testing pf Hypothesis at 99% level of confidence.

The degree of freedom is 2

Calculated value of chi square $= 1.7243$

Critical Value of chi square $= 9.21034$

Critical Value of Chi Square is more than the calculated value of Chi square, it is therefore the difference between observed and expected frequency is not considered to be significant. Since the difference is not considered significant, the null hypothesis cannot be rejected. The acceptance of null hypothesis leads us to conclude that Leader's Age and Leadership Effectiveness are independent and there stands no association between them.

H05 Leader's Position and Leadership Style (Hypothesis 5)

Statement of Hypothesis

Position does not determine leadership Style (H0)

Table -7: Leader's Position and Leadership Style

Position vs Leadership Style	S1	S2	S3	S4	S1, S2	S1,S2,S3	Total
AE/EE/Others	3	4	2	0	1	1	11
Major	15	0	0	0	2	1	18
Captain	12	1	0	0	0	0	13
Total	**30**	**5**	**2**	**0**	**3**	**2**	**42**

Testing of Hypothesis at 99% level of confidence.

The degree of freedom is 10

Calculated value of chi square =20.1134

Critical Value of chi square = 23.20925

Critical Value of Chi Square is more than the calculated value of Chi square, it is therefore the difference between observed and expected frequency is not considered to be significant. Since the difference is not considered significant the null hypothesis is not rejected. The acceptance of null hypothesis leads us to conclude that Leader's Position and Leadership Style are independent and there stands no association between them.

H06: Leader's Position and Leadership Effectiveness (Hypothesis 6)

Statement of Hypothesis

Position does not determine leadership Effectiveness (H0)

Table -8 : Leader's Position and Leadership Effectiveness

Position vs Leadership Effectiveness	Effective	Ineffective	Total
AE/EE/Others	9	2	11
Major	12	6	18
Captain	11	2	13
Total	32	10	42

Testing of Hypothesis at 99% level of confidence.

The degree of freedom is 2

Calculated value of chi square =1.6007

Critical Value of chi square = 9.21034

Critical Value of Chi Square is more than the calculated value of Chi square, it is therefore the difference between observed and expected frequency is not considered to be significant. Since the difference is not considered significant, the null hypothesis is not rejected. The acceptance of null hypothesis leads us to conclude that Leader's Position and Leadership Effectiveness are independent and there stands no association between them.

Conclusion

The present study investigated the constructs of leadership qualities as perceived by female and male leaders. It is reported that the leadership and its effectiveness do not change according to the gender of the leaders. Also, in this research male and female leaders of all age groups (30-60) and different levels are using Style1 more (High task low relationship) and style 4 (low task low relationship) is least practiced. In past era females were less effective but in this era females are more capable and found to be equally effective in the Indian defence system.

Future avenues of Research and limitations

If we take different sample size and another organization then the result may be different. But there are certainly some limitations to this study. The relative small sample size from leaders in Defense may not represent the general population. Also better sampling technique would minimize the sampling errors and composition of the sample would improve. This may provide substantially better results in this regard. More women in the sample and with variables of different aspects of psychological state and other leadership qualities may provide new insights to our understanding in this context. The present study reveals the leadership effectiveness of both male and females do not vary significantly. The result offers practical implications to focus organizational efforts on improving opportunities for women, particular in recruiting, promoting and retaining talented women in the organization which seem to be prevalent in defense organization in India. Given that females can now obtain equal opportunities in Defense and more traditionally male dominated occupations are increasingly opening up to females.

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CUSTOMER-CENTRICITY IN CORPORATE MARKETING

Abstract

The evolution of marketing has been phenomenal in the last one decade or so. Everyday, a new concept or a new approach is tested or validated. From the day of the Product concept and subsequent marketing and business orientation of marketing, it has come around a full circle, and now marketing trends indicate a customer focus and more recently more customer-centric in its format and execution. Corporate marketing as a concept is nothing new since all the corporations are more closely involved in marketing having realized that it is centric for success! Since media has also been evolving over a period of time and advertising has taken a center stage, corporate companies and product marketers are designing and testing new formats to attract and retain customers. The inescapable conclusion that one can derive from a recent study of all the research studies in this area is that marketing is progressively becoming customer centric in its format and execution. The shift towards becoming a truly customer centric organization is both complex and long. But, do not be put off by this as even the smallest changes to policy and processes can have a significant benefit for both employee and your customer.

Key Words: *Evolution of marketing, validation of new concepts, business orientation, proliferation of e-marketing formats, towards more customer centric formats.*

Introduction

A study of the evolution of marketing is very interesting and informative. Marketing started perhaps as customer centric, by making specific products on demand for a group of customers. After a lot of evolution in context and formats, it is becoming more customer-centric than ever before! The present research paper considers the growth and development of marketing in its various formats leading to the current day concepts.

Customer-centric is a way of doing business with your customer in a way that provides a positive customer experience before and after the sale, in order to drive repeat business, customer loyalty and profit. Customer-centric marketing is a strategy that places the individual customer at the center of marketing design and delivery. It starts from the realization that there is no "average" customer. Customers have different behaviors and preferences – and this presents rich opportunities to move past a "one-size-fits-all" marketing approach. Customer-centric marketing teams think of their customer base as their greatest long-term investment. Similarly, your loyal weekly customer who loves engaging with your brand on social media is different from your casual holiday shopper

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who only buys items on steep discount. And as a customer-centric marketer, you have an opportunity to communicate to these customers in fundamentally different ways. Customer-centric marketing stands in contrast to other common marketing approaches, including the following: channel-centric marketing, Product-centric marketing and event-based marketing.

The limitation of each of these approaches in isolation is that they miss out on opportunities to synthesize rich insights about individual customers. Customer-centricity empowers the marketing team to target the right customer with the right channel and right message – at the right time. It also helps teams align around a strategy that will drive long-term value to the business: acquiring high-value customers, and keeping them coming back.

As more and more brands are vying for a slice of the consumer's attention, businesses need to restructure themselves and become more customer-centric to stay ahead in the race. While most companies today claim to put their customers first, a surprisingly small number are actually doing it right. So, where are they going wrong? The fact is: some businesses are treating customer-centricity as a set of strategies meant solely for the customer-facing units of a business. They often forget that a customized or one-on-one approach is more than just a marketing goal for customer service reps and sales people. In fact, it is actually part of an "evolved" marketing department that builds around a customer-centered approach. It is making customer-centricity the responsibility of the entire organization and not just a few departments. Customer-centricity can't be captured in a solo marketing environment, and a company should concentrate on building a marketing ecosystem to emerge as a fully functioning customer-centric entity.

It's crucial to focus on strategies, operations and activities on the people who are ultimately responsible for a company's success: loyal customers.

Objectives & Methodology

Marketing is dynamic and evolves continuously to cater to new demands and requirements of customers. As we are all aware, marketing is more concerned with customer expectations from products and corporations. Companies are also trying to uplift themselves to serve the customer in the best possible way. This process will continue as long as there are customers and marketers! The present research is to identify the role and impact of customer-centric formats in marketing. Since customer -centricity is a very involved and much researched and talked about topic we have selected the following specific objectives to be addressed for the purpose of this research paper:

1. A brief review of developments in marketing in the digital era.
2. How social media developments have impacted marketing formats.
3. Role and development of customer-centric formats in marketing.
4. Customer perceptions on centricity
5. Future trends and possible developments in this format
6. Suggestions and recommendations to marketers in the digital era.

While there is a lot of published literature (as will be seen from the bibliography and references), the paper has been inspired by writings on the web pages and a lot of conceptual thinking from new and emerging marketing concepts and consultants. An attempt has been made to consolidate the various research views and publications in this area for the purpose of the objectives mentioned above. Desk research is a very underestimated and under-used method in research. It is found that there is no gain in finding something from a field survey which has already been done and what is needed, is an effort to consolidate the findings. This has been attempted in this research paper.

Review of Literature

What are the benefits of customer-centric marketing ? Customer-centric marketing is not just about building "better" relationships with your customers (although longer-term customer satisfaction is certainly a likely outcome). It's also a source of lasting competitive advantage for marketing teams. Customer centricity is not just about offering great customer service, it means offering a great experience from the awareness stage, through the purchase process and finally through the post-purchase process. It's a strategy that's based on putting your customer first, and at the core of your business.

How so ? Customer-centric marketing enables marketing teams to take the LEAD with four key benefits: Establish deeper, more meaningful connections with your customers by tailoring your messaging and offers to their needs – and keep them coming back long after their first purchase; Invest in the acquisition channels, campaigns, and partners that will help you acquire high-value customers. Avoid costly "batch and blast" discounts by using promotions only when they're needed – for the right shoppers, and at crucial moments in the customer lifecycle; Engage with customers at the right time, on the platform that's most relevant to them, with the message that's most likely to resonate at any given moment in time. Be able to react rapidly to changes in customers' behavior or preferences; Stand out in a crowded marketplace by moving past generic offers and messaging. Capture and maintain market share through a personalized approach.

Businesses across the industry are embracing the concept of customer centricity by following traditional business-driven strategies and adopting a more customer-driven strategy. Customer-centricity is sometimes used as a catch all term for talking about customer feedback or customer satisfaction results, but making people happy is only one part of the equation. To have sustained success, companies must understand current customer needs and wants, and ensure that there are the right internal and customer-facing strategies, processes and marketing initiatives to satisfy them.
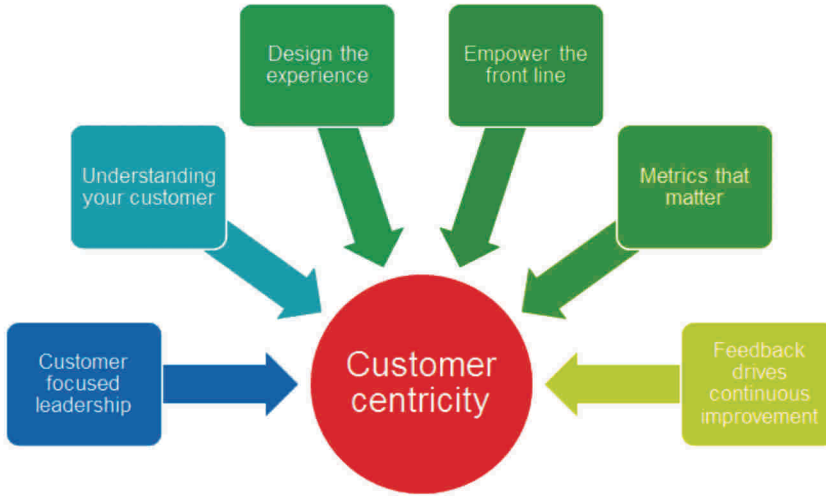
Figure 1: Customer centricity

That is where a new structure, born of data-driven customer science, comes in. The seven pillars of customer centricity provide a framework for action, giving companies the insights needed to track measure and improve in seven core areas. By analyzing customers' perceptions against these pillars, marketers have a blueprint for customer-centric activation to drive customer loyalty. Here are the seven core pillars and how they help boost customer loyalty:

1. Make the customer experience easy, enjoyable and convenient. Companies that excel in customer experience make their customers so happy that they want to share their positive interactions with your brand.

2. Loyalty: Reward and recognize customers in a consistent way that is relevant to how they want to be rewarded.

3. Communication: Personalize the messages to customers, based upon what they buy, and in a way they like. Highly communicative companies provide tailored, relevant communication based on customer preferences.

4. Assortment: Have the right products and a good variety to meet customers' needs. Companies shouldn't necessarily have the widest selection of products, but they should stock the ones their customers want.

5. Promotions: Leverage promotions on the items that are most appealing and often purchased by current customers. Companies with successful promotions programs promote the products that matter the most to customers.

6. Price: Provide prices that are perceived to be in line with what the customer is looking for on the products they purchase most often. Brands don't have to be the price leaders, but they do need to have pricing that customers perceive as fair.

7. Feedback: Hear and recognize customer concerns. Companies that rank high in customer feedback have a two-way conversation and emotional connection with their customers.

Customer-centered model puts consumer/customer experience at the center, and outlines layers of capabilities required to engage prospects and customers, creating more value both for them and your company. A customer-centric model puts the customer at the center of the marketing technology strategy. Customer- centricity isn't just about making customers like you. Recent research demonstrates that when customers perceive a company as being "right for them," it correlates to long-term revenue growth. 'Home Depot' recently increased sales to $19.7 billion by offering a varied assortment of products, many of which can be personalized to a customer's needs. Global beauty retailer 'Sephora' has focused on the pillar of experience by using interactive products, self-serve counters and soft-sell sales tactics. Since then, Sephora has grown to more than 1,400 stores in 30 countries with annual sales of about $4.4 billion. True growth—and the customer centricity that drives it—is not accomplished by a strong rallying cry or a catchy slogan. A company must understand its customers' behaviors and attitudes and have the internal processes in place to create a cultural change within the organization.

By aligning deep customer insights with communications and operational processes, and identifying gaps in performance among the seven pillars of customer-centricity, a company can drive sustainable results. Some of the benefits of customer-centricity are enumerated below:

1. Customer-centric companies are 60% more profitable compared to companies that are not focused on the customers.

2. Using data to inform decisions is at the center of customer centricity. However, executives view the flood of incoming data as part obstacle and part opportunity, with 61% of CMOs admitting they have a long way to go still in using big data properly.

3. Customer service is a key component of a customer-centric strategy. Eighty-six percent of respondents to a Harris Interactive survey said they would pay more if companies could guarantee superior service. Eighty-nine percent of respondents who had recently switched from a business to its competitor did so because of poor service by the past vendor.
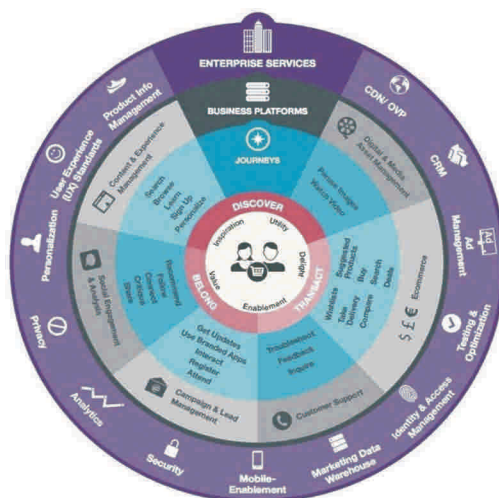

Figure 2: A Customer-Centered Reference Model

4. Enterprise brands, like multichannel retailers, are asking their customers to set their own preferences: Brands today are 62% more likely to give their subscribers the ability to set their own preferences for branded communications than they were in 2013. Further, they are 89% more likely to allow them to select the type of messages that they receive and 48% more likely to give options for how often subscribers want to receive such communication.

5. Marketers recognize data's role in customer centricity and are taking action to improve their data hygiene: Marketers are 53% more likely to execute data hygiene techniques than they were in 2013. Retailers are 13% less likely to undertake some form of data-hygiene process than non retailers. However, when they do prioritize data hygiene, retailers are 38% more likely to use a data-hygiene provider than nonretail brands.

6. For most marketers, customer-centricity is an aspirational goal but not yet a reality. Here's why: 70% have suboptimal or no ability to integrate customer data between online and offline sources; 80% don't apply customer value scores; and, 74% can't recognize customers in real time.

Technology is growing at an exponential rate, influencing consumer behavior and marketing strategies. By 2020, 80% of the global population will have access to mobile telephony and more than 60% to smart phones or low-cost tablet computers. It is anticipated there will be more than 50 billion connected globally, with mobile being the primary internet device for most individuals.

Social media and unprecedented access to information, such as peer-to-peer product and service reviews, are giving greater power to consumers, creating more informed and demanding customers. These experiences are shaping consumer expectations across all sectors, including insurance. Although the technology is changing, the way customers engage with insurers, our survey indicates that personal interaction is still highly valued. The complex nature of products and customers' need for advice mean that some level of personal interaction will ever remain an important component of overall channel strategy.

Customer Centric Marketing Trends In 2016

In addition to mobile apps, there are now countless web apps, desktop apps and even apps that run on your TV. The purpose of an app is to perform one or more tasks really well. For marketers that means apps give you the opportunity for increased leverage and productivity from your existing marketing resources. Social-media marketing can involve a lot of sharing and posting, but these one-to-many interactions often result in individual people commenting, sharing, rating and replying. From 2016, you need to make sure your social-media marketing messages are accompanied by the ability to have short in-the-moment conversations with the people you reach with your social marketing. That means using social-media monitoring tools to respond to social engagements and opening up further dialogue with customers who demonstrate a need to be serviced or sold.

The marketing funnel has changed in 2016 for business-to-business marketers for two reasons. Firstly, multiple decision-makers, influencers and stakeholders inside companies make it more difficult for marketing messages to influence a single decision-maker. Secondly, reaching multiple decision-makers with marketing content is more important than ever, because most business decisions are made online and are quite advanced before a salesperson has a chance to talk to anyone involved in a decision at a company. Account-based marketing or ABM has been around for a while but is gaining significant momentum in 2016. This marketing method involves inviting and measuring engagement and mind share at different roles and levels of authority within an organization, as opposed

to attracting leads as to who turn into customers on a linear progressive path.

Customers prefer products to be simpler and more transparent, so it is easier to make informed choices. This has implications for the role of insurance agents. In an industry where margins are coming under increasing pressure, insurers need to choose where they invest across the value chain to avoid adding extra cost while still paying agents for services customers may prefer to do by themselves. These changes are forcing a dramatic change in the business operating model, as insurers need to focus on where their sales channels add value to the end customer. This will be helped by greater transparency in the sales process and in product design. Overall, customers are looking for value to be clearly demonstrated, reflecting a balance of price, product features and service tailored to their needs. They prefer to buy more products from companies they trust. Once they have made their choice and established a relationship with an insurance provider, they expect the provider's products and services to meet their expectations — and through their channel of choice.

A new marketing paradigm—human-centric marketing is emerging, which is an evolution of our current customer-centric approach. The consumer-centric approach to marketing is falling short in three ways as pointed out by some researchers:

1.   It views people as somewhat passive participants.

2.   It measures success by how much merchandise a consumer moves.

3.   Rising paradoxes have led consumers to seek more meaningful relations with brands.

The consumer-centric approach to marketing is a result of the information age, which has information technology at its core. It was an economic shift, a move away from older corporate-centered systems defined by large companies to a more people-driven one. Websites, social networks, blogs, micro-blogging platforms, and mobile apps now allow people to have a voice. As a result, that shift has driven transparency and global access to products and services in the market. It has changed the dynamics of individual and corporate communications, which have becoming more active, micro, and portable; live, informational, improvisational, and personal.

In his *Marketing 3.0*, Philip Kotler, author of some 20 marketing books, suggests we have been going through a process of social adaptation, organizational readjustment, and changing personal expectations. At first glance, these recent changes seem centered on new forms of informational resources, much as the Industrial Revolution seemed to be powered by new machines and new forms of energy. But a closer examination reveals that the transformation we are undergoing is broader. The deep and enduring changes of our age are not technological but social and cultural—indeed, human.

Human-centric marketing represents a broader evolution in marketing and embodies many cultural, societal, economic, and technological changes that have occurred over the last decade. Kotler offers a concise definition of this emerging marketing paradigm: "Human-centric marketing is defined by brands [that] approach engaging their current and prospective customers via advertising and marketing tactics as whole human beings with hearts, minds, and spirits." The Integral Institute's Robb Smith adds to Kotler's definition, claiming that the companies that will succeed in this next era of marketing will be those that build their brands and entire companies around a serious, deep purpose—an ultimate concern—and then effectively translate that purpose to people with different worldviews and perspectives. In his book *The Rise of the Creative Class, Richard* Florida highlights the rise of human creativity in the last decade as being a key factor in our evolving economy

and society. Both at work and in other spheres of our lives, we value creativity more highly than ever and cultivate it more intensely.

This emerging trend is not about creating more artists. It's about fostering and embracing those generations that care about and can solve 21st century problems.

Figure 3: Human centric approach to marketing

According to research by Omer Minkara of Aberdeen, however, adopting customer-centric tactics isn't just something good that businesses are doing for the heck of it; clear cut performance metrics show that focusing on the customer is also just good business. For marketing, in particular, customer-centric tactics such as collecting and utilizing multi-channel customer insights can correlate to a wider capacity for marketing best practices, and a bigger leg up against the competition.

Just taking the time to listen to, and understand, your customer can pay rich dividends in marketing results. Good Technology already had an annual customer advisory council, but decided to take understanding its customers to the next level. Taking a customer-centric approach to marketing offers many benefits for marketers. Understanding how and why a prospect buys from you allows for more precise, targeted and relevant marketing. And, the results of taking the customer into account when executing marketing campaigns should show up on the bottom line. Good Technology, a B2B mobile solutions company, already listened to its customers at an annual face-to-face customer advisory council, where it learned about specific business issues facing its clients in the rapidly shifting mobile enterprise landscape. Good Technology decided to bring in a third-party vendor to help undertake a much more comprehensive look into its customers.

Findings and Conclusion

As the consumer continues to become more independent and technology-savvy, the onus is increasing on the organization to establish the best balance of marketing techniques – advertising, digital, interactive and direct marketing – in order to achieve the twin objectives of providing a distinct and compelling experience for the customer while making the best use of available marketing resources and funding. In doing so, the organization faces substantially higher volumes of data – both structured and unstructured – emanating from

a range of existing and emerging customer touch points; a requirement to respond with increased speed, accuracy and consistency; and an increasing expectation that the organization will at once treat the consumer as an individual and respect the individual's privacy. To be able to achieve these key tasks, the organization is required to build a "DNA Profile" of the individual customer, to understand and predict their preferences and habits, and then to initiate marketing programs in the ideal manner for both parties.

Social media impact on marketing formats and tools can easily be understood from the way e-marketing, internet marketing and promotions have been proliferated. In future, mobile Applications will take over centre stage in the social marketing and customer centric marketing formats. Being customer-centric also has been in recent years, fueled in large part by e-commerce tools.

Customer-centricity is a marketing strategy with the primary goal of acquiring high-value customers and maximizing the value of every customer relationship. It acknowledges that there is no "average" customer and that the differences among customers represent an opportunity to build more long-lasting, profitable relationships through relevant communication. Customer-centricity stands in contrast to other common marketing strategies, such as product-centricity (competitive advantage through superior product design or merchandising) or channel-centricity (focus on achieving dominance in one or more channels).

Human centric marketing is a futuristic approach as indicated by marketing gurus like Phillip Kotler. The companies that will succeed in this next era of marketing will be those that build their brands and entire companies around a serious, deep purpose—an ultimate concern—and then effectively translate that purpose to people with different worldviews and perspectives.

In conclusion it would suffice to say customer-centric marketing isn't new, but in many ways, it represents a return to a much earlier era of marketing: the personal relationship between neighborhood shopkeeper and customer.

Suggestions

Advances in technology and communication, combined with the explosive growth in data and information, have given rise to a more empowered global consumer. Recent economic and political events highlight the need for marketers to understand how consumers view the world and the most important attributes for their purchasing decisions. The journey to customer centricity will not be an easy endeavor. In building a strong foundation for the future, companies will need to focus on a new set of core principles to redefine relationships. There will be many challenges in developing the critical new capabilities that align objectives, targets, rewards and recognition with customer needs.

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IMPACT OF DEMOGRAPHIC CHARACTERISTICS ON INVESTORS DECISION: AN EMPIRICAL STUDY

Abstract

In the present fast changing economic environment, the money is considered as the root cause of all happiness. The saving and investments have become two most important means for a secure life and a better future. But the dilemma is that investors are confused with various avenues and their risk-return profile. There are large numbers of investment avenues available to the investors to invest their funds. But the choice of investment avenues differs from investor to investor based on demographic characteristics. Present study analyses the impact of demographic characteristics of respondents on their investment decision. In a survey of 151 respondents conveniently chosen from Lucknow city, it was found that most of the respondents prefer to invest in government securities. Further, it was found that age level and level of income of the respondents significantly affect the high risk investments. It is also observed from the result that whether a security chosen for high risk and high return or low risk and low return expectation is affected by the income level of the security. Some of the suggestions and future direction were also drawn to cope with the risk associated with investment.

Key words: Investment Decision, Demographic Characteristics, Government Securities, Investment Avenues etc.

Introduction

In the present fast changing economic environment, the money is considered as the root cause of all happiness. The savings and investments have become two most important means for a secure life and a better future. But the dilemma is that investors are confused with various avenues and their risk-return profile. Investment is the sacrifice of current money or other resources for future benefits. In the financial sense, "Investment is the commitment of a person's funds to derive income in the form of interest, dividend, premiums, pension, benefits or appreciation in the value of their capital, purchasing of shares, debentures, post office savings certificates, insurance policies are all investments in the financial sense" (Mishra, 2010). There are large numbers of investment avenues available to the investors to park their funds (Geetha & Ramesh, 2011). But the choice of investment avenues differs from investor to investor based on their level of financial literacy and expectations (Jain & Mandot, 2012). A large number of studies have been conducted to find out the preference of investment avenues among the investors and the factors that influence the investment behaviours (Chambers & Schlagenhauf, 2002; Gomes, et. al., 2004; Kesavan et. al., 2012). Lewellen et. al. (1977) found that age, gender, income and

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education affect investors' preferences and attitudes towards investment decision based on their investment objectives. Jamshidinavid, Chavoshani & Amiri (2012) found that "The investment prejudices in individual investors has relationship with personal characteristics meaningfully and with some of the demographic variables weakly".

Savings and investments are normally considered in economics as disposable income minus consumption expenditure. It could also be regarded as income that is not consumed immediately by buying goods and services (Odoemenem et al, 2013).The demographic composition of a country's population may be associated with its saving rate and investment, and may therefore have consequences for its economic growth. One explanation for such an association is that the saving and investment rate tends to be relatively high for a birth cohort when it experiences its peak earnings, and relatively low when a cohort anticipates relatively low earnings, such as during retirement (Hira, 2006). In finance, investment is the application of funds to hold assets over shorter or longer term in the hope of achieving gains and/or generating income from those assets. Saving is closely related to investment and in many instances the terms saving and investment are used interchangeably (Sireesha & Laxmi, 2013). The theory of economic growth, Schumpter (2008) has stated the interest to increase domestic financial institutions and patterns of behavior necessary to generate and mobilize scarce capital or saving and investment funds as key conditions for economic growth. An economy needs to develop true capital formation, it has to provide a climate that motivates saving and mobilized into productive investment. The average gross domestic investment (GDI) of SSA countries as a proportion of their GDP has been lower than the corresponding average for all developing countries (Oyejide, 1999). A high level of liquidity in financial system is not necessarily a reflection of high level of saving. In fact, the overall saving and investment ratio of sub-Saharan counties are very low (Word Bank, 2008).However, Ethiopia is part of sub Saharan countries and the saving level in Ethiopia is very low and little is known empirically about the influence of demographic variable on individual saving and investment. Hence, the researcher was motivated to conduct a study on the influence of demographic characteristics on saving and investment preferences.

Literature review

Many studies are conducted to examine the effect of demographic factors on investor's level of risk tolerance during investment decision making. People having different gender, ages, income level, knowledge, marital status and occupation shows different attitudes towards decision making, some are risk seekers and some are adverse risk. Brief literature about the effect of demographic factors on investor's behaviour with international evidence is given below.

Loewenstein et al.(2001) indicated that among other demographic factors gender is the first effective differentiating and classifying factor because of the role of emotional Variables, Risk attitudes differ between men and women. Herrmann, Andrew. F. (2007) in his research work on "People Get Emotional About Their Money:" provided the estimation results and discussed that supported the initial hypotheses regarding the roles of race/gender in investment preferences. Using multiple specifications and leveraging multiple risk/return measures, the evidence pointed to significant effects with respect to both race and gender.

Croson, R., & Gneezy, U. (2009) in their research work on "Gender Differences in Preferences" discussed a number of studies that demonstrated how strongly (and in what direction) social preferences manifest themselves in men and in women. They included evidence on altruism and inequality aversion from ultimatum and dictator game studies. They also included evidence on reciprocity from studies using trust and related games. Finally, they briefly mentioned a large number of older studies using the Prisoners' Dilemma game and discussed in more detail various studies using social dilemmas and/or public goods provision games. Stendardi et al. (2002) found that as compared to male investor, female investors have wider risk aversion in different activities like financial decision making. Barber and Odean (2001) found that male's investors are more confident in their investment decisions, they have more financial knowledge and wealth and ability to take risks.

Investment performance or decision making process of individual investor is also based on his /her age. Wang, H. & S. Hanna, (1997) found that risk aversion relatively decreased with the age of people when other variables are held constant. Grable and Lytton, 1999 found that older people tolerate more risk as compared to the young investors. Kumar, and Korniotis, 2011 explained that a young investor can not accurately assess about his work performance as compare to older one. Old people gain investment knowledge and experience, and make better investment Choices .

Richard B. Freeman (1979) in his research work on "Gender differences in explicit and implicit risk attitudes: A socially facilitated phenomenon " showed that from the late 1960s through the mid 1970s when the number of young workers increased .rapidly, the earnings of young male workers fell relative to the earnings of older male workers, altering male age-earnings profiles, particularly for college graduates. His study suggested that the increased number of young male workers was the major causal force underlying the increased earnings of older men relative to the earnings of younger men.

Education level of respondents causes a higher financial risk tolerance during decision making process. Kimball et al (2007) found that level of education obtained and risk tolerance have a positive relationship . Marital status is also an effective factor influencing the decision making of investor. Barber and Odean (2001) indicated that single individuals are more risk taker than married because married individuals have responsibilities for themselves and dependents

Terry, and Parker, (2002) indicated that Income level of an investor also affects his or her behaviour toward investment. A person with greater wealth takes greater risk

Objectives of The Study

The objectives of the study include the following:

- To study the impact of various demographic variables on choice of investment avenues.
- To study the impact of various demographic variables on investment horizon.

Research Methodology

Current study is based on empirical study on retail investors residing in Dehradun, Uttarakhand. The research question was to identify the impact of demographic variables on investment decisions. For the said purpose, first exploratory as well as descriptive study was conducted to identify various investment decisions made by the respondents and following two investment decisions were selected for the study i.e. the decision to invest for specific time period and decision to invest in a specific investment instrument.

The investment preference was gauged with the help of structured questionnaire which was administered through face to face respondent interaction and online media. The questionnaire was aimed at finding the impact of demographic variables therefore emphasis was laid on finding the demographic characteristics as closely as possible. The sample for the study necessitated that the respondents should be having awareness about various financial investment avenues therefore respondents were selected using snowball sampling method. The questionnaire was sent to 200 individuals out of these, 151 responses were found to be valid for the study. The study made use of two statistical tests namely independent t test as well as one way ANOVA to test the study hypothesis.   In the study first individual responses were calculated on the various questions which included one particular question related to choice of investment avenues. This question contained 14 investment instruments or avenues used by retail investors which was taken on the basis of literature review. These 14 variables were combined to make 3 categories of investment tools having high risk investment (HRI), moderate risk (MRI) and low risk investment (LRI). Again the categories were made on the basis of literature review on investment tools.

Hypothesis: taking into consideration the two research objectives following hypothesis were proposed for the study:

1. H0: there is no significant difference between the selections of investment avenues on the basis of age.

    H1: there is significant difference between the selections of investment avenues on the basis of age.

2. H0: there is no significant difference between selections of investment avenues on the basis of education.

    H1: there is significant difference between the selections of investment avenues on the basis of age.

3. H0: there is no significant difference between selections of investment avenues on the basis of gender.

    H1: there is no significant difference between selections of investment avenues on the basis of gender.

4. H0: there is no significant difference between selections of investment avenues on the basis of income level.

    H1: there is significant difference between selections of investment avenues on the basis of income level.

5. H0: there is no significant difference between selection of investment avenues on the basis of family size.

   H1: there is significant difference between selections of investment avenues on the basis of family size.

Table 1 Demographic Characteristic of Respondents

Characteristics	Group Category of respondents	No.of Respondents	%
	Total Number of Respondents	**151**	**100**
Age	Upto 25 Years	9	6.0
	25-35 Years	31	20.5
	35-45 Years	48	31.8
	45 to 55 Years	28	18.5
	above 55 Years	35	23.2
Gender	Male	102	67.5
	Female	49	32.5
Marital Status	Married	104	68.9
	Unmarried	42	27.8
Family size	Upto 2 members	39	25.8
	3 to 4 Members	95	62.9
	5 to 6 members	13	8.6
	More than 6 members	4	2.6
Education Qualification	Up to Matriculation	2	1.3
	Intermediate	20	13.2
	Graduate	49	32.5
	Post Graduate and others	65	43.0
	Super specialization degree	15	9.9
Level of Income	Upto Rs.15000	18	11.9
	Rs. 15001 to Rs 30000	27	17.9
	Rs. 30001 to Rs. 45000	32	21.2
	Rs. 45001 to Rs. 60000	24	15.9
	Rs 60001 to Rs.100000	19	12.6
	Above Rs. 100000	31	20.5
Profession	Salaried	78	51.7
	Businessman	39	25.8
	Retired	7	4.6
	Independent professional	22	14.6
	Vocation (where specific skills are required)	5	3.3

Source: Data from primary sources

Interpretation: Table 1 indicates the demographic characteristics of the investors. the respondents taken were from the age group of 18 and above. Maximum respondents belonged to age category 35 to 45 years. It was followed by respondents in age group above 55 years. The number of male respondents for the study was 102 and female respondent was 49. Most of the respondents were married. It was found from the responses that many respondents were living in the family size of 3 to 4 members. The education level of most of the respondents was found post-graduation and graduation. The number of respondents with the monthly income of 30001 to 45000 was 32 followed by respondents in income level of 15001 to 30000. Most of the respondents were salaried.

Table 2 Years of Experience of Investment in Equity

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid upto 1 years	38	25.2	25.2	25.2
1-3years	42	27.8	27.8	53.0
4-6 years	39	25.8	25.8	78.8
7-9 years	28	18.5	18.5	97.4
More than 9 years	4	2.6	2.6	100.0
Total	**151**	**100.0**	**100.0**	

Interpretation: the information presented in the table indicates the year of experience of the respondents in the investment in equities. It was found in the study that years of investing experience has significant impact on the individuals' choice of investment instruments. Most of the respondents were in category of 1to 3 years of experience, followed by 1 to 6 years and up to 1 years of experience.

Table 3 Nature of investment

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than 1 year	54	35.8	35.8	35.8
	1to 3 years	36	23.8	23.8	59.6
	3-5 years	37	24.5	24.5	84.1
	5 -10years	13	8.6	8.6	92.7
	More than 10 years	11	7.3	7.3	100.0
	Total	**151**	**100.0**	**100.0**	

Interpretation: the information presented in the above table 3 shows the nature of investment in terms of average time horizon for which an individual investor remains invested. Most of the investors were having investment horizon of less than 1 year. It was followed by the respondents in 3 to 5 years and 1 to 3 years.

Table: 4 Investment pattern : A Descriptive Statistics

	N	Mean	Std. Deviation
Government Securities	151	3.7020	1.14190
Commercial paper	151	3.1987	1.37608
Equity shares	151	3.4172	1.09153
Preference Shares	151	3.5166	1.23749
Real estate	151	3.4106	1.29240
Derivatives Instruments	151	3.6225	1.15897
Certificate of Deposits	151	3.3311	1.17031
Art, Paining, and Antique	151	3.4437	1.16411
Debentures/ Bonds	151	3.2583	1.21909
Mutual Funds	151	3.1987	1.52324
Postal Savings	151	3.0530	1.18202
Fixed Deposits	151	3.2252	1.15569
Life Insurance	151	2.8411	1.26540
Provident Funds	151	2.8874	1.24656
Valid N (listwise)	151		

The information presented in the above table 4 indicates the investor investment preference in various investment avenues. Mean and standard deviation presented in the above table indicates that government security have scored highest mean (3.7020) followed by Derivatives instrument(3.6225). highest standard Deviation towards Mutual Funds (SD= 1.5232) indicates that investors view of this avenues are heterogeneous. Further ,all the above selected securities were grouped in to 3 categories on the basis of literature review. Thus High Risk Investment (HRI) consisted of Equity shares, Preference Shares and Derivatives Instruments. Moderate Risk Investment (MRI) consisted of Real estate, Art, Paining, and Antique, Mutual Funds and Life Insurance. Low Risk Investment (LRI) consisted of Government Securities, Commercial paper, Certificate of Deposits, Debentures/ Bonds, Postal Savings, Fixed Deposits and Provident Funds.

Table 5 One Way ANOVA Statistics Investors Investment Patten Across the Demographic Characteristics

Demographic variable	Nature of Risk	F	Significance
Age	High Risk Investment Instrument	4.001	.004
	Medium Risk Investment Instrument	1.711	.151
	Low Risk Investment Instrument	1.079	.369

Demographic variable	Nature of Risk	F	Significance
Gender	High Risk Investment Instrument	.014	.905
	Medium Risk Investment Instrument	.015	.903
	Low Risk Investment Instrument	.039	.843
Marital Status	High Risk Investment Instrument	.086	.918
	Medium Risk Investment Instrument	.975	.380
	Low Risk Investment Instrument	1.256	.288
Family Size	High Risk Investment Instrument	1.283	.283
	Medium Risk Investment Instrument	.475	.701
	Low Risk Investment Instrument	.141	.935
Education	High Risk Investment Instrument	.014	.905
	Medium Risk Investment Instrument	.015	.903
	Low Risk Investment Instrument	.039	.843
Income	High Risk Investment Instrument	7.345	.000
	Medium Risk Investment Instrument	3.981	.002
	Low Risk Investment Instrument	4.100	.002
Occupation	High Risk Investment Instrument	.722	.578
	Medium Risk Investment Instrument	.781	.539
	Low Risk Investment Instrument	.544	.703

Interpretation: The above table shows the respondents' preference for various investment avenues asked in the questionnaire as multiple response question. Further ,one way AOVA test was used to measure the significance of variations in the responses. On the basis of age, it was found that there was significant difference in the choice of high risk investment and age group of the respondents. The significance value is 0.004 <0.05. Thus null hypothesis is rejected and it implies that there is significant difference in the choice of high risk investment avenues on the basis of age groups. For moderate risk and low risk investment the difference was found statistically insignificant. On the basis of gender, if was found that there is no significant difference between the choice of all the investment avenues and gender. It means that whether the riskiness of the investment avenues is high, moderate or low the preferences for these were almost same for males and females. On the basis of marital status, the differences in the choice of investment avenues were found to be insignificant. It implies that whether the riskiness of the investment avenues is high, moderate or low the preferences for these were almost independent of the marital status. On the basis of family size, the differences in the choice of investment avenues were found to be statistically insignificant. It implies that the family size has no significant impact on the choice of investment avenues. On the basis of education, the differences in the choice of investment avenues were found to be statistically insignificant. It implies that the education level has no significant impact on the choice of investment avenues. On the basis of income, there were significant differences were reported for all the three categories of investment avenues. For high risk investment the significance value was 0.00 <0.05. Thus null hypothesis was rejected and it implies that there were significant differences in the choice of high risk investment on the basis of income. For moderate risk investment, the

significance value was 0.002<0.05. Thus null hypothesis was rejected. For low risk investment significance value was 0.002<0.05. Thus null hypothesis was rejected. It means that income level of the respondents have a significant impact on the choice of investment avenues. On the basis of occupation, there was no significant difference found between occupation groups and investment avenues. It implies that the choice of investment avenues was not affected by the types of occupation in which the respondent is involved.

Table 6: The Mean of High Risk Investment , Moderate Risk Investment and Low Risk Investment Across the Investors Years of Experience of Investment in Equity

Years of Experience of Investment in Equity	HRI	MRI	LRI
Up to 1 years	3.4842	3.0395	3.2632
1-3years	3.3095	3.1786	3.1286
4-6 years	3.5897	3.1859	3.2667
7-9 years	3.6071	3.0893	3.3143
More than 9 years	3.3500	3.0000	3.4000
Total	**3.4821**	**3.1242**	**3.2397**

Table 7: One Way ANOVA Across different Level of Risk in Investment across the Investors Years of Experience of Investment in Equity

		Sum of Squares	df	Mean Square	F	Sig.
HRI * Years of Experience of Investment in Equity	Between Groups (Combined)	2.211	4	.553	.677	.609
	Within Groups		119.251	146		.817
	Total	121.462	150			
MRI * Years of Experience of Investment in Equity	Between Groups (Combined)	.641	4	.160	.229	.922
	Within Groups		102.343	146		.701
	Total	102.984	150			
LRI * Years of Experience of Investment in Equity	Between Groups (Combined)	.827	4	.207	.476	.753
	Within Groups		63.335	146		.434
	Total	64.162	150			

Interpretation: The above table shows the result of one way Anova between years of experience of investment and types of investment avenues. It was found from the result that there was no significant difference on the basis of years of experience on selection of investment avenues. The significance values for all the three investment avenues is greater than 0.05, thus null is accepted.

Table 8: the Degree of Association of Years of Experience of Investment in Equity and Nature OF Investment

		Nature of Investment					Total
		Less than 1 year	1to 3 years	3-5 years	5 - 10years	More than 10 years	
Years of	upto 1 years	28	0	1	5	4	38
Experience of	1 to 3 years	10	27	2	2	1	42
Investment in	4-6 years	10	6	16	4	3	39
Equity	7-9 years	5	3	16	2	2	28
	More than 9 years	1	0	2	0	1	4
Total		54	36	37	13	11	151
Pearson Chi-Square		100.258[a]	16	.000			

Interpretation: The chi square test was carried out to test the degree of Association of Years of Experience of Investment in Equity and Nature OF Investment. The above table shows the result of chi square test to check the degree of association between years of experience of investment in equity and nature of investment. The significance value obtained was $0.00<0.05$. Thus the null hypothesis is rejected. There is significant association between the two variables. Thus years of experience of investment in equity and nature of investment are associated.

Conclusions

The study took under consideration various demographical factors relevant for the study which was selected on the basis of literature review. From the study it can be concluded that income level of the individual plays a vital role in the selection of investment avenues. It was made visible by the statistically significant results shown by the study. It could be concluded from the result that whether a security chosen for high risk and high return or low risk and low return expectation is affected by the income level of the security. It was also found from the study that age plays a differentiating role while selecting a high risk security.

Scope for future research

The study took into consideration the respondents profile from a specific location whereas it can further be analyzed by taking into consideration the different locational factors.

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SERVICE QUALITY GAP AND ITS IMPACT ON CUSTOMER SATISFACTION: AN ANALYTICAL STUDY ON ONLINE BANKING SERVICES IN INDIA

Abstract

The objective of this analytical research is to find out and analyse the gap between the perception of customers and their expectation towards service quality of online banking in Commercial Banks of India. It mainly aims at improving the customer's satisfaction through examining the different magnitudes and dimensions of service quality. This research paper, focuses on several key dimensions viz., Accessibility; Reliability; Responsiveness; Ease to Use; Privacy and Security; Efficiency; and Cycle Time as the exogenous variables and customer satisfaction as endogenous variable. This paper, at the same time, provides a brief review of some of the relevant approaches that have been used for the measurement of customer satisfaction. The study has been conducted through causal research design based secondary data as well as on primary data collected through closed ended questionnaires. The findings specify that there is a significant gap between perception and expectation of service quality towards online banking. In this ICT (Information, Communication and Technology) era, the mode of direct pay, online financial services has gained value. Now-a-days, customers need flexible hours of operation, customization and transparency. Due to increased market competition, customers' defection rate is high. Thus, research on service quality and satisfaction of customers in banking sector is considered important.

Keywords: Internet/online Banking, Customer perception, Service quality, Customer Satisfaction, E-Banking, Empathy, Reliability, Responsiveness, Tangibles.

Introduction

Service quality has become an important tool in the service industry. The conception of customer satisfaction is extensively accepted as a key differentiator which occupies a central position in marketing thought and practice and is the major outcome of any marketing actions. In the current banking era of technological advancement, online banking is an innovation that has progressively rendered itself in pervasive ways cutting across several financial institutions and other sectors of the economy. During the 21st century, mobile banking advanced from providing mere text messaging services to that of pseudo internet banking where customers could not only view their balances and set up multiple types of alerts but also transact activities such as fund transfers, deposit cheques via the mobile phone and instruct payroll based transactions (Vaidya 2011).

The literature review prepared for this study on service quality and satisfaction of customers

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in all banks (both public and private) situated in India reflects the findings of various professionals based on their studies. The SERVQUAL model of Parasuraman et al. (1988) proposes a five-dimensional construct of perceived service quality: tangibles; reliability; responsiveness; assurance; and empathy – with items reflecting both expectations and perceived performance.There are many research instruments developed to measure the perceived service quality. Among such general instruments, the most popular being the SERVQUAL model, a well known scale developed by Parasuraman et al. According to Khan (2007), Internet (online) banking includes the system that enables financial institution customers, individuals or businesses, access accounts, transact business, or obtain information on financial products and services on public or private network including Internet. According to Saha and Zhao (2005), In many ways, E-banking is like traditional payment, inquiry, and information processing systems, differing only in that it utilizes a different delivery channel. Any decision to adopt E-banking is normally influenced by a number of factors. These include customer service enhancement and competitive costs, all of which motivate banks to assess their services. Many researchers appreciate that online banking (e-banking) is defined to include the provision of retail and small value banking products and services through online channels as well as large value online payments and other wholesale banking services delivered online. (Georgescu,2005).

Technology has greatly advanced and is playing a major role in improving the standards of service quality. Days are long gone when customers would queue in the banking halls waiting to pay their utility bills, school fees or any other financial transactions. They can now do this at their convenience by using e-banking from the comforts of their homes. Additionally, due to the tremendous growth of the mobile phone industry, mobile phone network providers offer services to their clients. E-banking became possible in early 1990s when the Internet was opened to commercial use. With the 24*7 availability of Internet commerce websites, it has become very important to the users to trace and track their transactions, as they occur to ensure the account status and stability. Thus, it has become very important to have banks that can serve, support and work with e-commerce companies and consumers 24*7.Many online banking delivery channels provide banking services to customers. Among them ATM, POS, Mobile banking and internet banking are the most widely used.

Service quality & customer satisfaction

The satisfaction of customer model posits that confirmed standards lead to moderate positively disconfirmed (exceeded) standards lead to high satisfaction, and negatively disconfirmed (underachieved) standards lead to dissatisfaction. The matter of continued

(and considerable) discussion in the literature of marketing, the discrepancy and association between service quality and customer satisfaction remains at the forefront of many academicians and practitioner-oriented research endeavors (Spreng and Mackoy, 1995). Many studies on consumer satisfaction have been shown in service settings, and, generally, researchers agree that the two constructs are conceptually distinct (Bitner, 1990). However, based on the findings of the past research (e.g. Oliver, 1989), an attempt has been made in this paper to explore the contention that service quality influences, among other things, levels of customer satisfaction.

There exist numerous empirical works to support the quality/satisfaction causal order. In a study, Cronin and Taylor (1992) tested, among other things, the causal relationship between service quality and customer satisfaction. This study emphasized that marketing researchers are not in agreement in terms of the causal order of these constructs, and suggested that empirical justification is necessary to determine the true nature of this relationship. The findings of this study revealed that perceived service quality leads to satisfaction (as opposed to the reverse).

In a study addressing the relationship between service quality and satisfaction, Spreng and Mackoy (1996) suggested that perceived service quality was an antecedent to satisfaction. Although the direction of the quality/satisfaction relationship (i.e. quality leads to satisfaction) is fairly well understood for services, the question whether or not (and how) this relationship varies depending on particular settings and/or situations is not. Service quality and customer satisfaction do exhibit independence and are indeed different constructs from the customer's point of view. A small step in unearthing and understanding the constructs of service quality and customer satisfaction and their implications on competitive fruition has been put forward in a study on banking services (Sureshchandar et al., 2002).

The study also uncovered the issue that the private sector banks compete successfully with foreign banks and make efforts to provide better banking services in changing global competitive scenario.

In an attempt to study the service gap, Dash and Kumar (2007) revealed that customers' expectations exceeded their perceptions, with regards to various dimensions of service quality. They further claimed that perception of either positive or negative service quality was related to the customer's future behavioral intentions. Therefore, if a positive quality gap exists, the customers would be inclined to comment positively about the service. On the contrary, a negative quality gap would result in customers complaining, negative Words of Mouth (WOM), switching to other service providers, or just decreasing the usage of the service. Hence it is positively suggested to the banks, managers and employee that the banks should constantly observe the service quality levels so as to avoid loss of service quality and migration or switching by customers to another bank.

The distinction between service quality and customer satisfaction

After review of so much literature on this particular topic researchers found and suggested that there appears to be relative solidarity among marketing researchers that service quality and customer satisfaction are separate constructs which is unique and share a close relationship (Oliver, 1993). Much research done on consumer satisfaction has been conducted in service settings, and, generally, researchers agree that the two constructs are conceptually distinct (Bitner, 1990). Though, they are interconnected conceptions, but

there are differences between service quality and customer satisfaction.

A number of key elements that differentiate customer satisfaction from service quality are mentioned below to clarify more.
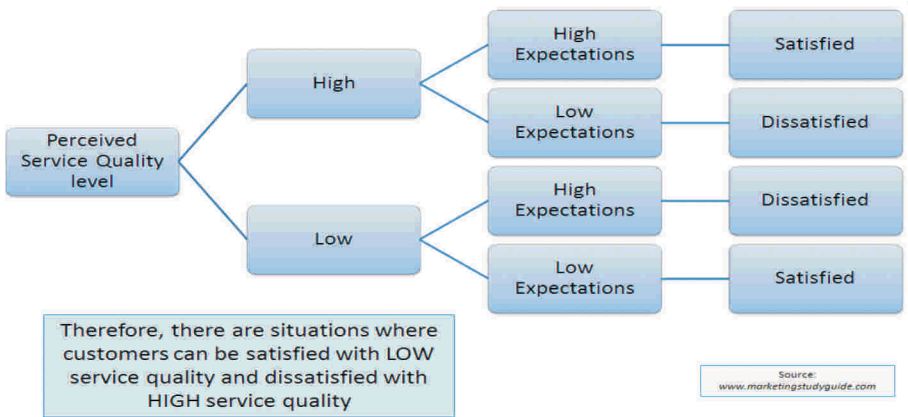
DIFFERENCES BETWEEN SERVICE QUALITY AND CUSTOMER SATISFACTION

Customer Satisfaction	Service Quality
Customer Satisfaction is the customer's evaluation of the product/service relative to the customer's prior expectations.	Service quality, however, is the consumer's estimate of the firm's overall level of quality.
Potentially all attributes of dimensions of the product or services.	It is specified to characteristics defining quality for the product and services.
It considered as short term concepts.	It is considered as long term concepts.
It considered as predictive expectations.	It considered as ideal expectations.
Customer satisfaction = Expectations -Perceptions.	Quality of the Service derives from a relation between Expectations and Perceptions.
Also by factors external to the service (i.e. the specific situation, emotions) not controlled by the "service"	It is rigorously linked by internal factor; not influenced by external factors

The major dissimilarity discusses the type of expectation reflected by two models. The common reading key in this macro category is the consideration of the expectation as foreseen by the customer and related to what is probably going to happen. However, expectations as "ideal standard" are mostly used in the literature about quality of service and they refer to expectations as the desired level of performance for the customer (Prakash 1984; Spreng, 1996; Boulding et al., 1993).

It is essential that the producer should visibly recognize the difference between service quality and customer satisfaction. If an organization has a significant number of dissatisfied customers, then the organization should endeavour to recover customer satisfaction levels either by shaping more realistic expectations for customers or by refining their service quality. These moves, in general, should be a repositioning of expected and delivered values, rather than an extensive change. This is because overall service quality needs to be aligned to the firm's competitive strategy. By radically increasing or decreasing the firm's service quality they will appeal to a different target markets and be faced with a different set of competitors.

Model of service quality and customer satisfaction

Therefore, there are situations where customers can be satisfied with LOW service quality and dissatisfied with HIGH service quality

Source: www.marketingstudyguide.com

Statement of problem

Satisfying customers is the first major mission and purpose of any business organization. It is when customers are satisfied the organizations achieve higher sales, profit and market share and vice-versa. Online banking is implemented by banks so as to improve their service delivery, minimize waiting time in the banking hall, enable customers withdraw cash 24*7, aid payment and remittance, request for online statement, or even transfer deposit to a third party account. The benefits banks derive from Online/Online Banking in banking operations, especially with respect to service delivery, is improved efficiency and usefulness of their operations so that more transactions can be handled faster and most conveniently, which will indeed impact significantly on the overall performance of the banks. Presently, there are several factors such as Long Queues at the banking hall, ATM machines not serviceable or running out of cash, no printing statements, cards get blocked, unreliability of ATM service, lack of sufficient technicians, lack of sufficient alternative system to substitute ATM service etc which affect customer satisfaction in online banking service in commercial banks of India.

Research objectives

1. To analyse the customer's perception of service quality parameters of online banking services in India.

2. To assess the service quality gap of online banking and identifying the relative significance of gap parameters.

3. To find out the factors of online banking service hat has impact on customer satisfaction.

$$Y = \beta_0 + \sum_{i=1}^{7} \beta_i X_i + \mu_t$$
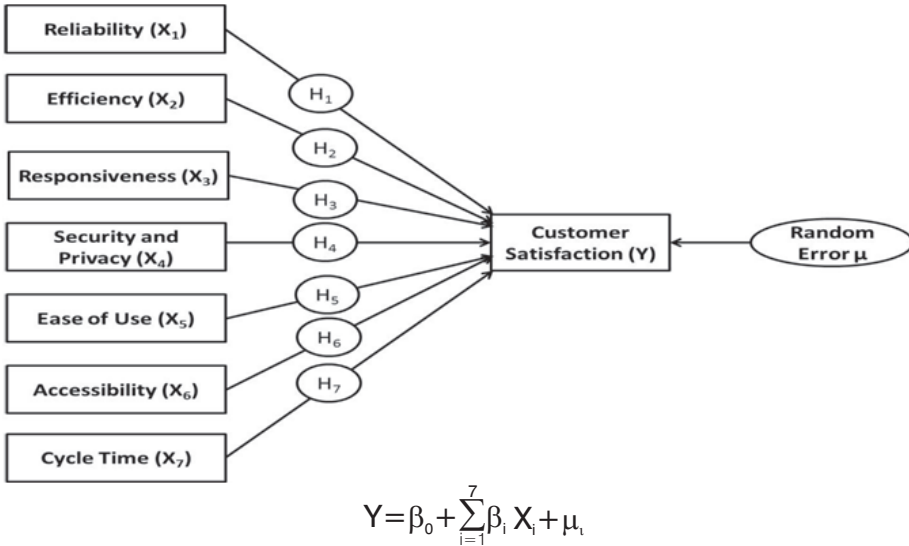
Conceptual framework of the study

The study has been conducted through recursive model where *Reliability; Efficiency; Responsiveness; Privacy and Security; Ease to Use; Accessibility; and Cycle Time have been taken to be exogenous and Customer satisfaction as endogenous variables.*

Research hypotheses

H0: There is no significant difference in the different components of service quality and their impact on customer satisfaction

H1: There is significant difference in the different components of service quality and their impact on customer satisfaction

Research methodology

This current study has been accompanied through causal research based on primary and secondary data collected on the basis of customer's feedback and personal interview with aims at obtaining the detailed information that may help the researcher to establish the relationship between service quality gap of online banking and customer satisfaction. The study population comprises of online banking customers using online banking services.

Table 1: The service quality parameters gap between expectation and perception Paired t Test

pair		Mean	Std. Deviation	Std. Error	95% Confidence Interval Mean of the Difference		t	df	Sig (2-tailed)
					Lower	Upper			
Pair 1	Perception on reliability-expectation on reliability	.22465	.96616	.04505	.13613	.31318	4.987	459	.000
Pair 2	Perception on ease to use - expectation on ease to use	-.20972	.81115	.03782	-.28404	-.13540	-5.545	459	.000
Pair 3	Perception on Accessibility-Expectation on Accessibility	-.34375	.87201	.04066	-.42365	-.26385	-8.455	459	.000
Pair 4	Perception on security and privacy -Expectation on security and privacy	-.21458	.84567	.03943	-.29207	-.13710	-5.442	459	.000
Pair 5	Perception on Efficiency-Expectation on Efficiency	-.50327	.80091	.03738	-.57673	-.42980	-13.462	458	.000
Pair 6	Perception on Responsiveness-Expectation on Responsiveness	-.22600	.77065	.03593	-.29661	-.15539	-6.290	459	.000
Pair 7	Perception on cycle time-expectation on cycle time	-.22594	.90816	.04234	-.30915	-.14273	-5.336	459	.000

Analysis and discussion

According to table 1, all the service quality gap difference is significant that on the case of reliability perception is greater than Expectation so in this case customers are satisfied with Reliability of electronic banking, but in all other cases perception is less than Expectation that mean customers need is not met. When researchers see the gap between perception and expectation of seven service quality gap parameters, the difference is high in the case of efficiency and very low in the case of ease to use parameter. In the case of efficiency, the gap between perception and expectation is .50327 which is highest gap when researchers compares the gap with other gap. The gap is very low in case of ease to use parameter in –ve sign which indicate that, even the gap is low, customers are not satisfied because perception is much lower than that of expectation. The only positive difference is that of reliability gap which is .22465 in the case customers are satisfied in reliability parameter of electronic banking. Standard deviation is high in case of reliability which is about .96616 where as low in case of responsiveness which is .77065. The Sig. (2-tailed) is .000 in all case which indicates the difference or the gap is Significant.

Table 2 : Summary of all service quality gap

Paired Differences	Mean	Mean Difference	Std. Deviation	Std. Error Meanthe	95% Confidence Interval of Difference		t	df	Sig (2-tailed)
					Lower	Upper			
Expectation	4.0043	-.16785	.58706	.02737	-	-	- 6.132	459	.000
Perception	3.8365				.221	.11406			

Over all service quality gap shows significant difference between perception and expectation of electronic banking. the mean difference is 0.1678 as indicated in above table which is the difference of expectation mean 4.0043 and perception mean of 3.8365.the difference is significant because of that the p – value is less than 0.05 and it indicates that customers dissatisfaction .

Impact of all seven service quality parameters on customer satisfaction by multiple Regression

Table 3: Model Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
0.901	0.811	0.809	0.264

Table 4: ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Regression	135.680	7	19.383	277.879	0.000
Residual	31.528	452	.070		
Total	167.209	459			

Table 5: Coefficient

Unstandardized Coefficients		Standardized Coefficients		t	Sig.
	B	Std. Error	Beta		
(Constant)	-0.141	0.100		-1.406	0.161
Reliability gap	0.123	0.022	0.137	5.588	0.000
Efficiency gap	0.149	0.027	0.168	5.490	0.000
Responsiveness gap	0.139	0.026	0.152	5.242	0.000
Security and privacy gap	0.045	0.028	0.048	1.619	0.106
Ease to use gap	0.184	0.030	0.203	6.228	0.000
Accessibility gap	0.258	0.032	0.288	7.970	0.000
cycle time gap	0.138	0.020	0.162	6.915	0.000

Research hypotheses H1, H2, H3, H5, H6 and H7 are accepted while H4 is rejected. It suggests that Reliability; Efficiency; Responsiveness; Ease to Use; Accessibility; and Cycle Time have significant impact as far as gap is concerned towards customer satisfaction. On the Other hand, the impact of security and privacy gap is insignificant (Table 5). The coefficient of determination is 81.1% which determines the model fit of the study.

The regression equation is)

$$Y = -0.141 + 0.123X_1 + 0.149X_2 + 0.139X_3 + 0.184X_5 + 0.258X_6 + 0.138X_7 + 0.264$$

Conclusion

The findings of the study show that Reliability; Efficiency; Responsiveness; Ease to Use; Accessibility; and Cycle Time have significant impact as far as gap is concerned towards customer satisfaction towards expected and perceived service quality of online banking. The gap between the expected and perceived service quality towards internet banking in Commercial Bank of India is significant. The entry of private banks is also marked in the economy which may create a tough fray to Commercial Banks . So, Commercial Banks have to reconsider its strategy towards its service quality for internet banking. These strategies are suggested in the areas of Reliability; Efficiency; Responsiveness; Ease to Use; Accessibility; and Cycle Time. In addition, useful managerial implications have emerged from this research, as well as the strengthening of the existing foundation for future research efforts in this very interesting area of study. This study develops an integrated approach to deepen our understanding of consumers' causal attributions after a service encounter and the effects of these attributes on customer satisfaction and consequent behavioural intentions.

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GOVERNANCE FAILURE- CAUSES AND PREVENTION: A CASE STUDY APPROACH

Abstract

The financial frauds are epidemic problem across the globe. The study analyzed cases on financial frauds of Enron, WorldCom, and Satyam with respect to the scheme of fraud, governance failure and the common trends. The studies further recommend trends in governance failure and suggest better governance in the corporate setup.

Key words: Financial Frauds, Financial statement, Governance, Enron, WorldCom, and Satyam.

Introduction

Financial fraud is a very serious problem all over the globe, and more so in a developing country like India. The period from 2000 to 2009 witnessed a large number of financial frauds worldwide. The Association of Certified Fraud Examiner (ACFE) estimated that the annual volume of frauds is $3.5 trillion worldwide (occupational fraud and abuse, 2012).

Financial fraud continues to be a concern for accountants, auditors, investors and regulators because of increasing globalization, intense competition, and rapid developments in technology. Trillions of market capitalization had been swept off from the financial markets because of frauds like Enron, WorldCom, etc. Investors lost their entire life's savings in one wave of financial fraud. Because of this, the trust of investors in financial markets and professions has been shattered. But we are very slow in learning and rectifying the mistakes committed in the past.

Literature Review

During the last decade there has been tremendous increase in financial statement fraud. The Association of Certified Fraud Examiner (ACFE) estimates the annual fraud costs for U.S to be more than $990billion. In spite of large scale frauds like Enron and Satyam there is bleak awareness of forensic examination among accounting students.

Mark S. Beasley (1995), in his paper "An Empirical Analysis of the Relation between the Board of Director Composition and Financial Statement Fraud" empirically examines the relationship between Board composition and Financial Statement Fraud. His sample consisted of 150 publicly traded firms, of which 75 represented frauds and 75 no-frauds. A logic cross-sectional regression analysis was done on these samples. The conclusions of this study were:

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- The presence of large number of outside members on Board of Directors significantly reduces the likelihood of FFS.
- No-fraud firms have higher number of outside members on Board than fraud firms.
- Presence of audit committee does not significantly affect the likelihood of FFS.
- As outside directors' ownership in the firm and tenure increase, and as the number of outside directorships in other firms held by them decreases, the likelihood of financial statement fraud decreases.

Hanish Rajpal (2012), in his paper "Independent Directors and Earnings Management-Evidence from India" analyzes the impact of independent directors in a firm on earnings management. He takes a sample of 200 non-government owned large manufacturing firms listed on National Stock Exchange (NSE) and examines the impact of certain factors on earnings management for a period of three years. The factors are:

- Presence of independent directors on board.
- Diligent behavior of independent directors. And
- Busy ness of independent directors.

The methodology used is regression, where "opportunistic earning management" is the dependent variable and characteristics of independent directors are independent variable.

The conclusions of this study are:

- Presence of Independent directors who also occupy the position of chairperson in other companies and holding other directorships on board increases earnings management.
- Independent director's directorship in other companies, without holding the position of chairperson reduces earnings management.
- It is no independence of board but quality of independent directors and their busyness that constraints earnings management.

Zabihollah Rezaee (2005), in his paper "Causes, Consequences, and deterrence of financial statement fraud" equates financial statement fraud with the term "CRIME", where:

- 'C' stands for "crooks" (i.e. people involved in the fraud. Example- CEO's, CFO's)
- 'R' stands for "Recipes" (i.e. manner of fraud. Example- overstating earnings.)
- 'NI' stands for "incentive" (i.e. reason for committing fraud. Example- meet analysts forecast)

- 'M' stands for "monitoring" (i.e. lapses by the overseeing authorities.)
- 'E' stands for "end result" (i.e. consequences of the fraud.)

He analyses various frauds of the past using "CRIME" framework and concludes by stressing on the importance of corporate governance and corporate governance participants (i.e. board of directors, audit committees, top management team, internal auditors, external auditors, and governing bodies) in preventing and detecting frauds.

Robert L. Braun (2000), in his paper "The effect of time pressure on auditor's attention to qualitative aspects to misstatements indicative of potential fraudulent financial reporting" investigates the effect of time pressure on auditor's attention to potential indicators of fraudulent financial reporting. The method employed was an experiment in which fifty auditors representing different accounting firms from two different cities participated. The tasks given to these auditors were based on Mc Daniel (1990). The task included collecting the details of inventory for a medium-sized manufacturing company, about which the auditors were given background information and were asked to gather evidences. The auditors were randomly assigned different time deadlines in which the tasks were to be completed.

The result of the experiment were that, under time pressure the attention is more focused on accumulating evidence regarding the frequency and amount of misstatement at the expense of focusing on qualitative aspects of misstatement indicative of potential FFS. Evidence suggested that auditors under low level of time pressure focused on broader range of cues while carrying out the tasks.

Benita Gullkvist and Annukka Jokipii (2013), in their paper "Perceived importance of red flags across fraud types", provides the perception of Finnish internal auditors, external auditors and economic crime investigators regarding the importance of red flags across two fraud types- fraudulent financial reporting (management fraud) and misappropriation of assets (employee fraud). The conclusions of this study were that a significant difference exists among participant groups. Internal auditors perceived importance of red flags in detecting misappropriation of assets, economic crime investors perceived importance of red flags in detecting fraudulent financial reporting, and external auditors were neutral(i.e.- it can be used for both category of frauds).

Mark S. Beasley, Joseph V. Carcello, and Dana R. Hermanson (1999), in their report titled "Fraudulent Financial Reporting: 1987-1997-An Analysis of U.S. Public Companies" presented to Committee of Sponsoring Organizations of the Treadway Commission reported the following:

- Companies committing financial statement fraud were relatively small and were not listed.
- The companies were experiencing net losses in periods prior to the fraud.
- Top senior executives were involved in majority of the cases.
- The companies had no audit committee or met only once a year.
- BOD's were dominated by insiders.
- Family relationships among directors were common.
- Though the sizes of companies were small, the amount of frauds was huge.

- Frauds were not isolated to a single financial period.
- Techniques involved were overstatement of revenues and assets.
- Frequent change in auditors was observed.

Mark S. Beasley, Joseph V. Carcello, Dana R. Hermanson, and Terry L. Neal (2010), in their report titled "Fraudulent Financial Reporting: 1998-2007-An Analysis of U.S. Public Companies" presented to Committee of Sponsoring Organizations of the Treadway Commission reported the following:

- Nature of fraud companies: companies were of varying sizes large and small, from variety of industries and often under financial stress.
- Fraud techniques: revenue recognition, overvaluation of assets and cooking of books and not theft.
- Alleged perpetrators of fraud: In 89% of the cases CEOs and/or CFOs were involved. Motivation included meeting expectations of stakeholders, deteriorating financial condition and preparing for debt or equity offering.
- Role of board of directors: There were few differences between fraud and no-fraud firms. Boards were similar in size, percentage of outsiders. Almost all fraud companies had audit committees with similar size and similar number of meetings as no-fraud firms.
- Rate of auditor changes surrounding fraud period were twice the rate of change for no-fraud firms.

Statement of problem

Based on the above literature it was found that there is hardly any work which provides a comprehensive insight into the major frauds which analyzes the common trends among them and provides a checklist which includes financial as well as non-financial tools to users to evaluate the company. This research paper aims to fulfill this gap.

Objectives of the study

- Analyze the past financial frauds like Enron, WorldCom, and Satyam.
- Identify the common trends in them and prepare a checklist for investors and auditors.
- Recommend ways to prevent financial frauds.

Need and significance of the study

"Recent accounting scandals have ignited an increased interest in fraudulent financial reporting among professionals, regulators and academicians" (Kerler W. and Killough L). Financial frauds and accounting scandals have become popular topics in accounting and auditing field. Fraud examination and Forensic accounting are the trending topics in accounting today. But *"there is bleak awareness of Forensic examination in accounting students"* (Shinde Jaysinha S., Shinde Udaysinha S., and Wacker Raymond, 2013).

The Indian Government has also become aware of the need to curtail financial frauds because financial frauds negatively affect the foreign inflow into the country. To accomplish this objective, it ordered Serious Fraud Investigation Office (SFIO) to probe into as many as 125 companies to safeguard the interests of investors.

Therefore, a need was felt to understand the past frauds in order to bridge in the present loopholes and prevent frauds in future.

Scope of the study

- The study includes selected financial frauds which happened from 2000 to 2009.
- The study includes only frauds which are internal to the companies.
- It does not include external frauds like corporate identity thefts, intellectual property fraud & cyber crimes.
- The scope of this study is to analyze the past frauds & identify some trends, and use this to create a checklist for investors and auditors.

Nature of the Study

The focus of this study is to understand the scheme of frauds, areas prone to frauds and red flags which are evident in fraudulent firms, by analyzing the past frauds. The nature of this study is partly qualitative and partly quantitative. Analyzing the scheme of fraud, areas of fraud and governance failure includes the qualitative aspect and analyzing the red flags involves the quantitative aspect of this study.

Sampling procedure and Sample

The technique of sampling adopted to analyze the past frauds is "judgmental sampling". The companies to be analyzed were selected based on the judgment of experts in the field of accounting and auditing. The criterion set out by the experts was to study the biggest frauds, as they would give a comprehensive idea of relevant areas of fraud. Based on the opinion of the experts, the following samples of fraudulent companies were selected: Enron, WorldCom and Satyam.

Data collection

All the data used in the study were from secondary sources. The areas of fraud, scheme of fraud and governance failure were analyzed from various new websites, published journals, articles and books. The data were obtained from the annual reports of the companies. The reports published by regulatory authorities like Securities Exchange Commission (SEC) and Serious Fraud Investigation Office (SFIO) were extensively used. The website of Association of Certified Fraud Examiner (ACFE) was also extensively used.

Methodology

The facts regarding historical background, areas of fraud, scheme of fraud and detection of fraud, for the companies selected, were studied from the secondary sources like news articles, published reports and books. Then the analysis of financials was done to identify the red flags which were evident in them. The non-financial red flags were studied from the various disclosures in the financial statements.

Limitations of the study

The limitations of this study are as follows:

- The study is limited only to past frauds and does not unearth potential future frauds.
- The study is limited to frauds during the period 2000 to 2009.
- The study is based only on the information publicly available.

Analysis and findings

The analysis of past frauds like Enron, WorldCom and Satyam in relation to how was the fraud done, governance failure and after effects of the fraud.

Case-I Governance failure in Enron

The failure of Enron can be attributed to the corporate governance failure. People or parties responsible for ensuring corporate governance failed to perform their duties.

- Top management failed to perform their duty because they were heavily compensated with stock options. Stock option compensation made their vision short term and they started focusing on pushing up the stock prices.

- Audit committee met just a few times in a year. Because they were outside directors, they relied heavily on the information provided by the management and internal & external auditors.

- Arthur Anderson, Enron's external auditor, applied lax standards in their audits. They were not independent and had conflict of interest because they earned significant consulting fees from Enron.

For example: In the year 2000, they earned $25 million in audit fees and $27 million in consulting fees.

- Security Exchange Commission (SEC) also failed in its duty to monitor Enron. Regulators oversee the company through auditors. SEC trusted Arthur Anderson's capabilities and reputation and admitted that it had not read and examined Enron's annual reports for the last 3 years (i.e. 1998, 1999, and 2000).

Case-II Governance failure in WorldCom

Failure of WorldCom can be attributed to corporate governance failure. The various stakeholders failed to perform their role to ensure corporate governance.

- Bernard Ebbers (CEO) was not concerned about the sustainability of the company but was more bothered about pushing up the stock prices. Ebbers in an interview had quoted "our goal is not to capture market share or be global. Our goal is to be the number one stock on Wall Street." He used WorldCom to fulfill the financial requirements of his personal businesses like hotels, real estates, timber lands, rice farms, luxury yatch building, lumber mill, a club and a hockey league club. The finances of these businesses were met by bank loans which were guaranteed by WorldCom's stocks. Ebbers also donated generously to politicians in Washington and secured favorable legislations for acquisitions until the attempted acquisition of Sprint communications in 2000.

- Scott Sullivan (CFO) was the main person in cooking the books of WorldCom by adopting questionable accounting techniques to achieve the targeted performances. Sullivan also manipulated the information provided to Arthur Anderson and the Board.

- Arthur Anderson (external auditors) ranked WorldCom as its "Flagship" and "highly coveted" client. But it failed in its fundamental duty to perform a basic documentation check regarding capital expenditures.

- The Board of WorldCom mostly comprised of former owners and officers or directors of acquired companies. The Board was not active and was detached from the

happenings in the company. Their lack of independence in their actions was evident from the sanctioning of low interest loan to Ebbers to settle his personal liabilities.

- Grubman (a star telecom stocks analyst) was paid $ 20 million a year to recommend "strong buy" to the investors to keep the stock prices of WorldCom upbeat.

- Case-III Governance failure in Satyam:

- The failure of Satyam had been because of poor governance practices. The company did not fulfill its obligations toward various stakeholders.

- Although Mr.Ramalinga Raju was the Chairman of the Board (COB) and Mr.Rama Raju was the Chief Executive Officer (CEO), there was no independence between these two roles and therefore CEO was all powerful. Both the brothers had put their self interest ahead of company's interest. They were actively selling large portions of their stake in the company a few months before the fraud came to light. They were also involved in diverting the funds of the company to their family business.

- The Board of Directors (BOD) were lax in their approach. The Board consisted of chairman friendly directors who did not question management's approach and strategy. They unanimously approved the Maytas deal which clearly indicated the conflict of interest of Mr.Raju and was violation of Companies Act of 1956. The Companies Act of 1956 requires shareholders approval in case of acquisition (directly or indirectly), if the acquired entity is valued at more than 60% of its paid-up capital. One of the independent Director, Krishna Palepu (earlier independent director of Global Trust Bank) went on to praise the Maytas deal in media. Even after receiving information from a whistleblower on December 18, 2008 the Audit Committee failed to take action against the management, instead they forwarded the information to Mr.Rama Raju.

- All these go on to say that although they were called independent directors, they were not independent in their approach.

- The external auditors, Price Waterhouse Coppers (PWC) failed in their duties and resembled Arthur Anderson. Even though, internal audit was not commensurate with the size of business they went ahead and certified the company. They did not do verify the invoices, debtors and actual balances in the bank. It is hard to believe that external auditors did not have the information of cooking of books from 2000 to 2008. The investigation revealed that during the period of 2003 to 2008, PWC's audit fee had tripled and was twice of what Satyam's peers paid their external auditors. It was also found that PWC had outsourced their audit function to another audit firm (Lovelock and Lewis), without the approval of Satyam. Thus external auditors, who are the most important party for maintaining corporate governance failed in their duty and were perpetrators to the fraud.

- The Credit Rating Agencies and Banks also failed in their duties to warn the general public. Both the parties did not carry out due diligence. Credit Rating Agencies continued to give favorable rating to Satyam based on fraudulent financial statements. Banks too failed to raise the alert signal. In spite of books showing huge surpluses, Satyam resorted to bank loans. The banks which gave loans were: HDFC Bank (Rs.530 crores), Citibank (Rs.223.87 crores), Citicorp Finance (Rs.222.28 crores), ICICI Bank (Rs.40 crores)and BNP Paras (Rs.20 crores).(source: Times of India (New Delhi), April 5, 2010.)

Common trends in the frauds- Findings

The financial frauds analyzed in the previous sections exhibit a similar trend. The most prominent trends are discussed below:

- Regulated to Self regulated: The pre-liberalization era was highly regulated and companies found it suffocating to do business. Therefore, a need was felt to liberalize the regulations because there were huge opportunities to grow. Thus ,the era of self regulation started. In a self regulated market, the competition became intense and the approach of companies became market driven. Many new players entered with latest technologies. Established players with strong fundamentals continued to fight it out, whereas established players with shaky foundation succumbed to the pressure of the market forces and resorted to fraudulent practices to live up to the expectations of investors.

- The fraudulent firms used techniques to boost the top line so that the bottom line automatically reflects rosy picture.

- Related party transactions: Related party transactions was the most common way to hide the debts or pull out the money from the company. Enron had created many Special Purpose Entities to transfer the risky assets and portray a rosy picture. Ramalinga Raju had used subsidiaries to pull out the money from the company.

- Revenue recognition: The fraudulent firms had used the ambiguity in the law to their favor to boost the profits. Enron had used Mark To Market accounting to recognize their revenues.

- Huge compensation to top management: The most prominent common thread among fraudulent firms was huge compensation to the top management. The compensation was linked to percentage of profits and Employee Stock Option Plan (ESOP's). By showing huge paper profits they were able to get huge compensation as well as by pushing up the stock prices (by reporting huge profits) they were able to benefit from ESOP's.

- All the firms involved in financial fraud exhibited lack of regulatory oversight, because in a self- regulated market, the onus lies on the individual companies. The advantages of self- regulation also cannot be questioned. Therefore, the need of the hour in a self-regulated market is to strengthen the effectiveness of corporate governance to prevent frauds. In this regard, it emphasizes on the ways to improve the corporate governance practices so that future frauds are prevented.

- Conclusion and Recommendations

- As a result of collapse of Enron and WorldCom due to financial frauds, Sarbanes Oxley Act (SOX) was introduced in 2002 in U.S, to prevent frauds and ensure effective implementation of corporate governance. In India, SEBI, based on the recommendations of Kumara Mangalam Birla committee and N.R.Narayana Murthy committee, introduced clause 49 in 2005 as a part of the listing agreement of the stock exchanges to prevent frauds and ensure effective implementation of corporate governance, which was in line with Sarbanes Oxley Act (SOX). But in spite of Sarbanes Oxley Act (SOX) and clause 49, frauds like Lehman Brothers and Satyam went undetected for a long period of time because these regulations were only followed in

letter and not in spirit. To ensure that corporate governance is practiced in spirit, certain changes are required. These changes can be discussed under the following levels:

- Management level.
- Board of Directors level, and
- External regulatory level.

Management level: At management level, parties responsible for ensuring corporate governance are Internal Audit Team and Chief Executive Officer (CEO).

- Internal Audit: Presently, the Internal Auditor is appointed by the Management and the Audit Committee reviews the internal audit report. The Internal Auditor reports to the Chief Executive Officer (CEO) on a day-to-day basis and also provides reports to the Audit Committee on a periodic basis. As the Internal Auditor is under the control of the Chief Executive Officer (CEO), there exists a potential conflict of interest in its role.

- Therefore, Internal Auditors appointment should be by the Audit Committee and it should directly report to Audit committee regarding internal controls on a monthly basis to ensure corporate governance. The Internal Auditor should also send a copy of the report to Chief Executive Officer (CEO) and Chief Finance Officer (CFO) to keep them informed.

- Chief Executive Officer (CEO): The Chief Executive Officer (CEO) is the most important person responsible for ensuring corporate governance. Presently, the CEO is appointed by the Board of Directors based on skills. Therefore, he has to be a person of integrity and ability to facilitate value based management. However, to ensure that CEO and CFO abstain from fraudulent activities and take due care, personal liability should be imposed for certifying cooked books. The penalty should also be made stringent in case of detection of fraud.

- Board of Directors level: At Board of Directors level, Independent directors and Audit Committee play an important role in ensuring corporate governance.

- Independent directors: The regulations requires independent directors to be on the Board to ensure independence in decision making. Although their designation is "independent director", their independence is questionable because of the current appointment procedure.

- Presently, the law requires appointment of independent directors by the shareholders. There is a nomination and selection committee which is created by the management. This committee selects the person(s) whom they feel is (are) appropriate. The committee proposes the name(s) to the shareholders. However, the shareholders are distributed in all parts of the globe and are unable to attend the meeting. Finally the management's decision prevails and institutional investors also support the management. Because of this appointment procedure, the management ends up selecting like-minded people as independent directors and independent directors remain loyal to management.

- Therefore, in order to ensure independence of Board in real sense, a professional body of directors should be formed (e.g. Institute of Directors of India). This body should be run on the lines of professional bodies such as the Institute of Chartered Accountants of India (ICAI) and the Institute of Company Secretary of India (ICSI). All the

independent directors should be members of this professional body. The professional body should train the directors in corporate governance and the field of their specialization. The nomination and selection committee can propose any persons' name, who is part of this professional body, to the shareholders. The shareholders should be given complete information regarding the background and knowledge of the proposed person(s). The shareholders should also be given the option of voting through a ballot system. This system will ensure that shareholders' decision prevails and independence of directors is maintained, thereby leading to effective corporate governance.

• Another aspect is the compensation of the independent directors. Presently, the independent directors are compensated in two ways, i.e. sitting fees and commission. Sitting fees is the fixed amount and generally a small amount. The commission part is linked to the amount of profits generated. Because of this compensation plan, independent directors tend to support decisions which lead to increasing the profits alone and not stakeholders' value. Therefore, in order to improve the independence of the independent directors, the commission part of the compensation should be eliminated and the amount of sitting fees should be increased.

• Audit Committee: Presently, the regulation requires that at least 1/3rd of the Audit Committee should be comprised of independent directors and the chairman of the Audit Committee should be expert in finance field. In practice, sometimes the independent directors are unable to attend the meetings. But in spite of independent director's absence the committee approves certain decisions because the quorum of 2/3rd is present.

• Therefore, to strengthen the Audit Committee, all the directors in Audit Committee should be independent directors. This will ensure that the management is continuously under the scrutiny of independent Audit Committee.

• External regulatory level: At External Regulatory level, Statutory Auditors and Regulators play an important role in ensuring corporate governance.

• Statutory Auditors: Presently, the statutory Auditors are selected by management and the management proposes this to the shareholders. By this mechanism, Auditor of management's choice is selected and post appointment they remain loyal to management and not to shareholders. Auditors are also uncertain about their next appointment and side with the management. This scheme encourages collusion.

• Therefore, the appointment and remuneration of Statutory Auditors should be recommended by the Audit Committee (which is fully independent) and appointed by the shareholders. This system will ensure that Statutory Auditors are able to discharge their duties professionally without being worried about the next engagement. In addition to the above, Auditors should not be engaged in any other assignment like consultancy with the same firm. This will ensure that there is no conflict of interests and the entire focus will be on auditing.

• Regulators: Regulator is the most important party in implementing effective corporate governance. A Regulator performs the role of a supervisor. Presently, all the companies file their reports and financial statements with the regulator i.e. SEBI. But SEBI due to lack of staff and time is unable to assess the quality of filings.

Therefore, SEBI can take help of professional credit agencies and analysts to examine the filings made by the companies and communicate their report on quarterly basis to the investors.

Presently, the credit rating agencies are appointed by the companies and companies pay their fees. It is proposed that the regulator should appoint the credit rating agencies and companies should pay for it. This will ensure that there is no collusion between the management and the credit rating agency.

In addition to the above, the punitive powers of the regulators should be increased, so that they can levy huge penalties if the company is found guilty. If an individual person is found guilty, then personal liability of huge sum (for e.g. Rs.1crore) should be imposed. This will ensure that, people think twice before committing fraud.

Presently, as a part of regulatory requirements, companies have Auditors certificate on corporate governance. It states that *"it is neither an audit nor an expression of opinion on the financial statements"* and also states that *"In our opinion, and to the best of our information and according to explanations given to us…….."* . This goes on to show that, the report is just a formality. Therefore, regulators should strengthen this reporting.

The whistle blower policy should also be strengthened so that people experiencing fraud can feel confident to report to the concerned authority. Finally to avoid collusion between regulators and ministry, a strong commitment from people in power is required.

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