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Dear Reader,

The Volume 3 Issue 1 of SHODHADITYA is a fact. Looking back at the earlier issues we can't be anything but proud.

Large number of manuscripts were submitted and received through a system that functions on a professional level. The members of the editorial board are becoming more aware of their individual tasks and greater plans are being made for the future of Shodhaditya.

This, however does not mean that we are fully developed. Although the evolution has taken with help of faculty members, in the coming days we plan to involve corporate members and students as well. For this, we need help of the fraternity at large as you will make this journal a success by regularly sending in the quality manuscripts and reading the work of fellow members. But let us not forget all the others who read it.

Our aims are unchanged, we want to publish a high quality management journal for all the stakeholders.

'Enjoy the read'. I look forward to your views and valuable contributions!

Dr. Manoj Bhatia

Director

AIMSR

Foreword

Mr. Koushik Majumdar

Director, Industry Strategy & Insight

Oracle India

"I am delighted to be able to write a few words of introduction to the release of Volume 3 Issue 1 of “Shodhaditya”. Niel Amstrong had remarked once 'Research is creating new knowledge'. Readers of “Shodhaditya” can also look forward to it when they make a diligent reading of the research journal. I am very confident that the published research papers will be very well received by the readers and will create a new benchmark for research journals in India.

Very special thanks to the research team of “Shodhaditya”, who have worked for a long time and burnt a lot of midnight oil to get this journal to what it is today."

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NAFTA Stock Market: An Econometric Analysis

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Abstract

The Current economic and financial liberalization policies have improved the internationalization of emerging markets. A bold strategy undertaken by Mexico formed the North America Free Trade Agreement (NAFTA); in addition to increased trade and investments, it should have led to stronger links among the equity markets from Canada, United States and Mexico. This paper studies the co-movements of the U.S., Canadian, and Mexican daily stock market index returns with the Johansen's co integration techniques during the January 2000-December 2013 period. The weak-form market efficiency test results show that the returns of all three NAFTA stock markets follow a random walk, i.e., the past returns of none of the three stock markets can predict its own future returns.

Keywords

Co-integration, Integration, NAFTA, Mexico, liberalisation.

Introduction

Financial markets all over the world have witnessed growing integration within as well as across boundaries, spurred by deregulation, globalisation and advances in information technology. In globally integrated economy, knowledge and understanding of international stock markets is necessary for prospective investors, investment companies and policy makers. The information is important for both retail investors and fund managers in making their financial decisions in relation to investment and risk management. If the stock market of different countries moves together then investing in different stock market would not generate required portfolio diversification (Lim, 2007). For this reason, it is imperative for them to have a good estimate of the degree and nature of relationship among the returns across the global stock market (Siddiqui, 2009).

In present scenario where the economic crisis is

looming large over the global economy, stock market integration analysis can also help the policy makers in framing suitable policies their respective economies especially for the financial sector. Therefore, a comprehensive study on stock market integration will carry a lot of importance in the present day situation. With increased market integration, the current world financial markets have become more closely correlated and interdependent over time. The present study is a modest attempt in this direction and examines the stock market integration of NAFTA economies. An important goal of the North American Free Trade Agreement (NAFTA), which has been in effect since 1 January 1994, is to increase the integration of financial markets of the US, Canada and Mexico, in addition to obtaining more liberal international trade. Furthermore, it can be argued that stronger economic linkages are likely to lead to increased co movement among the national markets.

Mexico started reforming its economy during the mid 1980's and strong financial liberalization policies began to be implemented by the end of that decade. A significant step of this process was the North American Free Trade Agreement (NAFTA) signed by Mexico, Canada and United States, which opened the three countries' capital markets to corporations and investors from these nations. Hence, it should be expected stronger links among their stock markets, particularly since the implementation of the trinational agreement, January of 1994. Furthermore, liberalization of the Mexican, Canadian and U.S. economies and financial systems suggests that their capital markets must have also become integrated, at least in some degree, with the world capital market. In this paper empirical evidence about both of these hypotheses is provided through co integration analysis.

Literature Review

Markets are said to be integrated if they share a common trend, that is to say, if they move together.

Darrat et.al (2000) used the Johansen-Juselius test and suggested that the Middle East emerging stock markets are segmented globally, but appear highly integrated within the region. Owen (2002) investigated time-varying interdependence between South Africa and both the UK and US is modelled using a latent variable approach and founded little interdependence prior to March 1995 when exchange controls and a dual exchange rate regime were in place. Yang et al (2002) examined long-run relationships and short-run dynamic causal linkages among the U.S., Japanese, and ten Asian emerging stock markets, with the particular attention to the 1997-1998 Asian financial crisis and founded that the degree of integration among countries tends to change over time, especially around periods marked by financial crises, Marashdeh (2005) Examined financial integration among four emerging stock markets in the Middle East and North African (MENA) region and utilized the newly proposed autoregressive distributed lag (ARDL) approach to Cointegration. Barari and Lucey (2005) studied the evolution of global equity market integration using US dollar denominated iShares and applied time varying methodology for the analysis of both short-term and long-term co movements that provide detailed evidence on the pattern and dynamics of the equity market linkages. Febrian, and Aldrin (2007) observed the co-integration and causal relations among three major stock exchanges in Southeast Asia and employed Value at- Risk with delta-normal approach. Claudio (2007) investigated the contribution of economic and financial integration to international stock markets co movements by factor vector autoregressive framework (F-VAR).

Robert, Jr (2008) investigated the time-series relationship between stock market index prices and the macroeconomic variables of exchange rate and oil price for Brazil, Russia, India, and China (BRIC) using the Box-Jenkins ARIMA model. Although no significant relationship was found between respective exchange rate and oil price on the stock market index prices of either BRIC country. Wang And Moore (2008) investigated the extent to which the three emerging Central Eastern European stock markets have become integrated with the aggregate euro zone market over the sample period from 1994 to 2006 by utilizing the dynamic conditional correlation and founded a higher level of the stock market correlation during the period after the Asian and Russian crises and also during the post-entry period to the European Union. Bekaert and

Harvey (1995), Carrieri, Errunza and Hogan (2001), and Barari (2004) find evidence that integration of the Mexican Stock Market to the world capital market changes over time. Finally, concerning the NAFTA countries, Atteberry and Swanson (1997), Aggarwal and Kyaw (2005) and Darrat and Zhong (2005), suggest changing degrees of integration among their capital markets. Galindo and Guerrero (1999) also show some variation in the level of cointegration among the Mexican and U.S. capital markets; nonetheless, Ewing, Payne and Sowell (1999) do not find evidence of co-integration even after controlling for NAFTA effects. Lim L.K (2007) examined the direction of Granger causality between returns of ASEAN-5 markets. The results of the Granger causality tests indicate interdependence between ASEAN-5 market Returns Chittedi investigated the stock indices of the founded that co integration existing between India and developed countries. (USA, UK, Japan, France and Australia).

Bakri. et al. (2009) examined stock market integration among the emerging stock market of Indonesia and its major trading partners (Japan, the US, Singapore and China). We employ the newly proposed autoregressive distributed lag (ARDL) approach to co integration and recent weekly stock market data spanning from July 1998 to December 2007. Burcu (2009) examined the integration of stock markets in Germany, France, Netherlands, Ireland and UK over January 1973-August 2008 at the aggregate market and industry level considering basic materials, consumer goods, industrials, consumer services, health care and financials. Through -convergence and convergence methods. Hedi and Fredj investigated the stock market integration hypothesis of two emerging countries (the Philippines and Mexico) into the world capital market over the last three decades and used the nonlinear co integration techniques to show that the stock market integration process is nonlinear, asymmetric and time-varying.

Surya (2009) showed that there is one way volatility spillover between Indonesia and USA (USA effecting Indonesia). Bhattacharyya and Banerjee (2009) examined the existence (or absence) of integration among stock indices of 11 developed and emerging stock markets from three continents: Asia, Europe and America by using an error correction vector auto regression (VECM) model. Phuan. et al. (2009) investigated that the ASEAN-5 stock markets share a

common trend that implies the markets move together and driven by common shocks, which have a permanent effect, providing limited long-term gains to international diversification Ghulam Sarwar and Rafiqul Bhuyan (2009) investigated the spillover effects between the US stock market and the emerging stock markets of Brazil, Russia, India, and China (BRIC) for the period 1995 to 2007 and used a variant of the aggregate shock model under the GARCH framework and allowed for both the mean return and volatility spillover effects from the US market to the BRIC markets.

Shuming Bai (2007) investigated the level of integration among global financial markets. Claudio Morana (2006) investigated the contribution of economic and financial integration to international stock markets co movements by means of a large scale macro econometric model, set in the factor vector autoregressive framework (F-VAR). Gay (2008) established relationship between share prices and macroeconomic variables is well documented for the United States and other major economies.

Rationale and Objective

World economies have seen many bumps & turbulence over a recent past. That is the main reason why NAFTA countries have gained importance in the eyes of worldwide investors. According to reducing rates of internal economical growth, reduction in domestic demand, falling markets have created major threats to the survival of Global Investors & they are searching for new avenues for investing their funds to ensure a good return on capital & also the safety for their capital. Given the turbulent global market scenario investor are getting attracted to major NAFTA nations due to high rate of return on investment plus a Capital appreciation anticipated. As a Global Investor one can not ignore the growth potential of these countries & any investment in these countries would guarantee an improvement Portfolio performance. This has diverted the attention of most of the global Investors from western countries to these nations. This global attention would again help these countries to harness their resources in most optimum way and would make these markets more competitive ensuring more transparency in market operations.

Objectives of the Study

The primary objective of the study is to investigate the stock market Integration in the context of NAFTA stock

markets vis-à-vis to find integration among NAFTA stock markets.

Methodology

Return of the indexes shall be used to find out the co-integration among the stock markets, and daily returns have been calculated by taking the natural logarithm of the daily closing price relatives, i.e. $r = \ln (P_t/P_{t-1})$ where P_t is the closing price the t th day. Following methods/tools are used to test correlation; stationarity of time series, co- integration and causalities between the stock markets using Eviews 5.1.

Sample

- NAFTA stock markets
- MSX-Mexican Stock Exchange
- NASDAQ-USA Stock Exchange
- TSX-Canadian Stock Exchange

Period of the Study

The data for the study has been taken from published and online sources. Yahoo finance website has been extensively used to collect the data and reach at meaningful decision. The data belongs to year 2000-2013.

Hypothesis

Hypothesis 1 - Stock markets return are not normally distributed

Hypothesis 2 - Existence of unit root (non stationarity) in stock markets

Hypothesis 3 - No co integration among NAFTA stock markets

Hypothesis 4 - No causality is found between NAFTA stock markets.

The Jarque-Bera Test shall be used to test whether returns of stock markets follow the normal probability distribution.

In a time-series statistical model, variables need to be tested first to see whether they are stationary variables. For this reason, the paper uses the common Augmented Dickey and Fuller (ADF) and Phillips-Perron unit root test method.

Co-integration test shall be used for pinpointing the long run relationships among the markets under study. Engle and Granger (1987) have given the Co integration theory, i.e, non-stationary variables can

become stationary variables by linear combining these non-stationary variables, namely, that these variables have a co-integration relationship. i.e, there exist long-term even relationships among these variables. Even if these variables depart from the equilibrium levels because of some short-term outside disruptions, with time, the degree of variation of the variables will gradually decrease and variables will return to the general equilibrium levels.

For Causality Test, Granger test shall be used, which identify the direction of the influence from one series to another. A time series X is said to Granger-cause Y if it can be shown, usually through a series of t-tests and F-tests on lagged values of X (and with lagged values of Y also included), that those X values provide statistically significant information about future values of Y.

Analysis and Findings

Table 1 provide summary statistics about index prices, namely sample means, minimums, maximums, medians, standard deviations, skew ness, kurtosis and the Jarque-Bera. It is noted from Table 1 that standard deviation in NASDAQ return is highest, thus showing the highest volatility during the period of study. Mexico market is found to be least volatile during the period under consideration. It is further noted that only NASDAQ market have shown positive skewness. To see whether the returns of the stock indices under study are normally distributed, Jarque-Bera Test Statistics are used and the same are given in Table 1 .Accordingly the first hypothesis is accepted as the results show that the returns are not normally distributed. This leads us to the issue of stationarity of the time series of returns under study (Hypothesis 2)

Table 1: Descriptive Statistics:

	NASDAQ	MSX	TSX
Mean	0.000311	-0.052363	0.012028
Median	0.073935	-0.093040	0.046696
Maximum	13.25464	8.267350	9.370234
Minimum	-10.16841	-10.44071	-9.787857
Std. Dev.	1.747077	1.401542	1.193443
Skewness	0.045674	-0.039736	-0.642323
Kurtosis	7.904689	7.550499	11.79632
Jarque-Bera	3529.434	3037.960	11590.42
Probability	0.000000	0.000000	0.000000

Unit Root Test

A unit root test is used to test a time series for stationarity. The most appropriate and widely used tests are the Augmented Dickey-Fuller (ADF) test and Phillips- Perron (PP) test. Both tests use the existence of a unit root as the null hypothesis.

Augmented Dickey-Fuller (ADF Test)

Inferring from Table 2 one can conclude that the null hypothesis i.e the hypothesis 2 about the existence of a unit root can be rejected for all the variables using intercept terms in the test equation at the level form on the basis of the probability value which is 0. So it can be said that all the variables not contain a unit root that is stationary in their level forms. We accept the alternate hypothesis i.e. variables are stationary.

Table 2: Augmented Dickey Fuller Test

Null Hypothesis: Unit root (individual unit root process)		
Series: NASDAQ, MSX, TSX		
Exogenous variables: Individual effects Automatic selection of maximum lags Automatic lag length selection based on SIC: 1		
Method	Statistic	Prob.**
ADF - Fisher Chi-square	80.2126	0.0000
ADF - Choi Z-stat	-7.84634	0.0000

** Probabilities for Fisher tests are computed using an asymptotic Chi-square distribution. All other tests assume asymptotic normality.

Intermediate ADF test results UNTITLED

Series	Prob.	Lag	Max Lag	Obs
NASDAQ	0.0000	1	29	3518
MSX	0.0000	1	29	3518
TSX	0.0000	1	29	3518

The Phillips-Perron test is less restrictive and provides an alternative way for checking the stationarity of a time- series. Table 3 summarizes necessary output related to Phillips-Perron Test and it also supports the conclusion inferred from the Dickey-Fuller tests. Keeping in consideration the fact that the time series of various stock indices under study are stationary at their level as inferred from the ADF Test and the P-P Test, the co- integration test and the Granger causality test are performed accordingly.

Table 3: Phillips-Perron test results

Null Hypothesis: Unit root (individual unit root process)		
Series: NASDAQ, MSX, TSX		
Exogenous variables: Individual effects		
Cross-sections included: 3		
Method	Statistic	Prob.**
PP - Fisher Chi-square	55.2620	0.0000
PP - Choi Z-stat	-6.44153	0.0000

** Probabilities for Fisher tests are computed using an asymptotic Chi-square distribution. All other tests assume asymptotic normality. Intermediate Phillips-Perron test results Untitled

Series	Prob.	Bandwidth	Obs
NASDAQ	0.0001	15.0	3519
MSX	0.0001	17.0	3519
TSX	0.0001	10.0	3519

Co-integration Test

Co-integration is a property of two or more variables moving together through time, and despite following their own individual trends will not drift too far apart since they are linked together in some sense. The results of the unit root test show that the time series of indices of share prices related to various stock exchanges under study are stationary. Therefore, co-integration will be a suitable means for correctly testing hypotheses concerning the long-term relationship among the time series under the study. It tests a set of null hypothesis that there exist no co-integrating equations among variables. First part of the co-integration results (Table 4), the trace test, indicate that there exists 3 co-integrating vectors at 5% level. Second part of the co-integration results (Table 4), the Maximum Eigenvalue test, also indicates the same result. Therefore, both tests indicate that stock markets across America are integrated, that is, they are trending together which may indicate the fact that assets allocation across the markets may not provide enough opportunities of diversification gains. Further, the evidence that the co-integrating results are significant at most all level at the 5% level which could hint at that there may exist three types of a long-term or co-integrating relationship between prices of stock markets across the world. It is important to note that co-integration reflects only co-movements between two time series over a period of

time among variable under study but does not represent the correlation among them. Hence, through the co-integration tests, one can conclude that by and large stock price indices across the world move together.

Table 4: Co-integration Test

Trend assumption: Linear deterministic trend
Series: NASDAQ MSX TSX

Lags interval (in first differences): 1 to 4

Unrestricted Co-integration Rank Test (Trace)

Hypothesized	Eigenvalue	Trace	0.05	Prob.**
No. of CE(s)		Statistic	Critical Value	
None *	0.197837	2131.600	29.79707	1.0000
At most 1 *	0.184160	1356.742	15.49471	1.0000
At most 2 *	0.166773	641.3083	3.841466	0.0000

Trace test indicates 3 co-integrating eqn (s) at the 0.05 level

* denotes rejection of the hypothesis at the 0.05 level

**MacKinnon-Haug-Michelis (1999) p-values

Unrestricted Cointegration Rank Test (Maximum Eigenvalue)

Hypothesized	Eigenvalue	Max-Eigen	0.05	Prob.**
No. of CE(s)		Statistic	Critical Value	
None *	0.197837	774.8583	21.13162	0.0001
At most 1 *	0.184160	715.4337	14.26460	0.0001
At most 2 *	0.166773	641.3083	3.841466	0.0000

Max-eigenvalue test indicates 3 cointegrating eqn(s) at the 0.05 level

* denotes rejection of the hypothesis at the 0.05 level

**MacKinnon - Haug-Michelis (1999) p-values

Pair-wise Granger Causality Tests

After the co-integration test, there is a need to confine the degree and the direction of correlation among the stock price indices under study pair-wise Granger Causality Tests are conducted. These tests involve examining whether lagged values of one series have significant explanatory power for another series. They have null hypotheses of no granger causality. The results of these tests summarized in Table 5 and it indicates whether there exists significant Granger Causality among various stock markets. It can be inferred from the observation of Table 5 that no stock market is playing a very dominant role, as the direction of the Granger Causality is not following i.e. there do not exist granger causality among NAFTA stock markets.

Table 5: Pairwise Granger Causality Test

Pairwise Granger Causality Tests Lags: 5			
Null Hypothesis:	Obs	F-Statistic	Prob.
MSX does not Granger Cause NASDAQ	3515	0.21858	0.9547
NASDAQ does not Granger Cause MSX		1.82016	0.1054
TSX does not Granger Cause NASDAQ	3515	2.23918	0.0479
NASDAQ does not Granger Cause TSX		5.11843	0.0001
TSX does not Granger Cause MSX	3515	0.20518	0.9604
MSX does not Granger Cause TSX		0.85290	0.5121

Scope for Further Research

The present research studies the co-movements of the U.S., Canadian, and Mexican daily stock market index returns with the Johansen's co integration techniques during the January 2000-December 2013 period. Future researchers can compare the various trading blocks such as NAFTA and SAFTA and even other trading blocks can be compared. It can provide the roadmap to investors, policy makers and stock exchange about the fluctuations and volatility of various stock exchanges.

Conclusion

Interdependency among NAFTA stock markets is studied primarily through Co-integration and the Granger Causality. This study is a continuation of research on the issue of growing interdependency among the stock markets. It is observed that stock prices among these countries are trending together. Furthermore; it provided that no stock market is playing a dominant role in influencing other markets. If the results of this study, regarding the influence of the one market on other markets, are compared with the previous studies in the literature, it can be concluded that stock market integration and causation between different markets have changed over the time. In brief, it can be concluded that the interdependencies among the stock markets in the world has increased and no clear direction of relationships exists in the sense of Granger Causality indicating the fact that influence of few markets has eroded over a period of time. It is hoped that the results of the present paper would be useful for individual and institutional investors who mainly focus on or invest in American Stock markets and for the management of their portfolios and policy making.

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Effectiveness of Online Advertisements

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Abstract

Online marketing is also known as web marketing, internet marketing, e-Marketing or i-marketing. The term literally translates as “advertising online or on the web”. Online marketing is an interactive tool which can be used between marketers and the public at large. Advertising resources assigned to internet media have grown dramatically over the past few years. With the rapid growth in technology, the internet is becoming an important one stop point for consumers in finding most of their needs. This growth is suggestively driven by search and performance. Measuring online advertising effectiveness is a very intricate process particularly in an ever changing environment where new resources are constantly developed every passing day. The current study investigated the effectiveness of internet advertising. The study sought to determine the effectiveness of internet advertising on reach and creation of awareness; to establish the reliability of internet advertising through recall; and to determine the relationship between internet advertising and purchase decision.

Keywords:

Online marketing, Web marketing, Internet Marketing, e-Marketing, i-Marketing, Internet Advertising, Display Advertising, Affiliate Marketing, Search Engine Marketing (SEM), and Mobile Advertising. Web Site Testimonials.

Introduction:

Online advertising is a marketing strategy that involves the use of the Internet as a medium to obtain website traffic and target and deliver marketing messages to the right customers. Online advertising is geared toward defining markets through unique and useful applications.

Since the early 1990s there has been an exponential increase in the growth of online advertising, which has evolved into a standard for small and large organizations.

Types of Internet Advertising

One major benefit of online advertising is the immediate publishing of information that is not limited by geographic or time constraints. Online advertisers can customize advertisements, making consumer targeting more efficient and precise. On the other hand, consumers have greater control over the content they see, affecting the timing, placement, and visibility of online advertisements. Within the scope of Internet marketing, online advertising includes display advertising, affiliate marketing, search engine marketing (SEM), and mobile advertising.

Advertising on the Internet is almost a necessity for modern businesses, especially those that do business outside of their local community. Consumers use the Internet for more than simply entertainment or information, as they do with radio, television, magazines and newspapers. Consumers use the Internet to assist them in nearly every aspect of life, creating countless opportunities to place relevant, targeted ad messages.

Advantages

The Internet's vast reach can allow advertisers to reach significantly more people than traditional advertising media at a fraction of the cost. Internet advertising is ideal for businesses with a national or international target market and large-scale distribution capabilities. As a rule, the more people your business serves, the most cost-efficient internet advertising can be. Internet advertising can also be more targeted than some traditional media, ensuring that your messages are seen by the most relevant audiences.

Disadvantages

One disadvantage of advertising on the Internet is that your marketing materials are automatically available for anyone in the world to copy, regardless of the legal ramifications. Logos, images and trademarks can be copied and used for commercial purposes, or even to slander or mock your company.

This is not the case with television and magazine advertising, wherein images must be replicated rather than simply copied electronically. Another disadvantage is the fact that the Internet-advertising gold rush has begun to introduce ad clutter to the Web. Web users are so inundated with banner ads and spam email that they have begun to ignore internet advertising just as much as ads on traditional media.

Review of Literature:

Salem Salem Ben Brahim (2016), specified that, The impact of online advertising on consumer behavior has been little studied and research on the topic reached mixed results. Their study focuses on the determinants of online advertising and the role of the mediating variable "attitude towards online advertising" in the relationship between perceived advertising value and consumer purchase intent. The results showed that online advertising value depends positively on its informativeness, credibility and entertainment value. They also indicate that credibility and online advertising value affect consumers' attitude towards this type of advertising. Finally, they showed that attitude plays a mediating role between perceived advertising value and purchase intent.

Dr. Manjeet Singh and Vikramjit Singh (2015), mentioned that, Online advertising is a form of marketing and advertising which uses the Internet to deliver promotional marketing messages to consumers. Their study examined that, how consumers perceive the Internet as an advertising medium. It explored the perception and attitudes of respondents toward major factors affecting the Online advertising.

Bohdan Pikas and Gabi Sorrentino(2014), stated that, The growth of Internet usage has created a platform for businesses to attract and retain customers. While online advertising strategies are used by many businesses, the effectiveness of these methods being used can be debated. This study will provide an analysis of online advertising and its effectiveness. They conducted a study to test the consumer's perception of online advertising on the popular social webpages: Facebook, YouTube and Twitter. Steps were also taken to test a possible gender difference when it comes to consumer's receptiveness to online advertising on these sites.

James Mathew, Peter M. Ogedebe and Segun M. Ogedebe (2013), identified the influence of web advertising on consumers in Maiduguri Metropolis.

150 questionnaires were distributed randomly to respondents scattered in the two Local Government Areas that made up Maiduguri Metropolis. 139 questionnaires were completed and returned. Their study discovered that majority 100 (71.94%) of the respondents said their disposition towards web advertising was positive. Minority 39 (28.06%) of the respondents said that their disposition towards web advertising was negative. 102 (73.38%) of the respondents said their attitude towards web advertising was informative. They also find out that majority 42 (30.22%) of the respondents said web advertising influences them to use some of the products and services. A total of 32 (23.02) of the respondents reported that web advertising only influences them to plan for their future purchase. Furthermore, another 22 (15.83%) of the respondents said that web advertising influences them to purchase some of the products and services. They concluded that the influence of web advertising on consumers over other forms of advertising would continue to increase, because of its' interactive nature, the global platform it presents to companies that advertised on it and the opportunities offered to consumers to purchase goods and services through online

Naveen Rai (2013), revealed that, In the current era of information explosion and the world of media, advertisements play a major role in changing the behavior and attitude of consumers towards the products shown in the advertisements. The advertisements not only change the way of product is consumed by user but alter the attitude with which they look at the product. All over the world, advertisements have been used since ages for a wide variety of brands. For over the last two decades, a sharp increase in advertisements per brand can be witnessed. Advertisements have great influence in purchasing decision of customers for particular brands. It is a ubiquitously accepted fact that advertisements can bestow special attributes upon a product or service that it may have lacked otherwise. The present study focuses on identifying the influence of advertisements on the consumer behavior and attitude with special reference to consumer durables Seyed Rajab Nikhashemi, Laily Paim and Saeideh Sharifi fard (2013), examined the effect of mediating and moderating demography factors on customer purchase intention in Malaysia. Data from 570 respondents with previous experience on online purchasing products and

services were collected. To do so, SPSS 19 was applied to analyze the collected data. Their findings revealed that service quality, social network and brand recognition can highly influence customers' perception toward web-based advertisement. Consequently, consumers who are more optimistic in web-based advertisement (E-advertisement) have most likely higher intention to online purchase. Besides, the results of their study showed that the demography factors cannot mediate the customer perception toward advertisement nor the effectiveness of E-advertisement toward customer purchase intention.

Erni Martini and Sri Widaningsih (2013), aimed to determine the impact of the dimension of online advertising to adolescent attitude in Indonesia. The method used was descriptive research method by using simple regression analysis. Population of this study was adolescent who use internet. Sample collection technique was convenience sampling of 111 respondents. The result of simultaneous testing of this study shows that online advertising has significant effect on the attitude of adolescent as internet users in Indonesia. Based on partial testing, Advertising utility, Indignity, and Price perception positively affect the online attitude of adolescents. Trust negatively affects the online attitude of adolescent, whereas regulation does not affect the online attitude of adolescent in Indonesia

Objectives of The Study:

- To understand the effectiveness of online advertising on reach and creation of awareness in online customers
- To identify Consumer Responses towards online advertising
- To determine the relationship between online advertising and purchase decision of the online customers.
- To ascertain the effectiveness of internet for the advertisements.

Statement of The Problem:

Internet is one of the important medium that owns all kinds of features, which implies a great potential and powerful advertising medium in the future. In addition, Internet has a better impact than traditional media in the features like Format Variety, Affinity, and Preservability. Furthermore, Internet is the only medium so far which owns the feature of interactivity.

That creates lots of new communication opportunities and possibilities that were unable to be achieved in the past because of the limitation of media technologies. This study is to understand whether the online advertisement is effective in influencing the Potential Buyers in modern era?

Scope of The Study:

The scope of the study is quite vast. This study helps in understanding the attitude and behavior of online customers towards online advertising. The study aims to help companies to build better online advertisement. It also helps companies to identify critical areas in online advertising which customers find highly valuable which helps to attract customers & retain existing customers. The study is based on survey conducted in Bangalore city.

Hypothesis:

H₀: There is no significant relationship between gender specification and awareness of online advertisement.

H₁: There is significant relationship between gender specification and awareness of online advertisement.

Sources of Data

PRIMARY DATA: The data is collected directly from the consumers by communicating with them.

SECONDARY DATA: The data is collected from various sources such as, journals, magazines, books, internet sources, etc.

Sampling:

Sample size: A total of hundred respondents were interviewed during the survey. The input from these respondents which was collected in Bangalore city formed the primary data for the study.

Sampling Technique: Convenience sampling

Limitations of The Study:

- 1) The sample size is limited to 100 Internet users hence, the result of the study cannot be taken as universal.
- 2) Findings of the survey are based on the assumption that the respondents have given correct information.
- 3) The study was conducted only in Bangalore city and therefore, several other potential samples outside the city were neglected.

ANALYSIS AND INTERPRETATION:**Table-1: Age group of respondents**

Age Group	No of Respondents	Percentage
Below 20	20	20
20-25	35	35
25-30	35	35
Above 30	10	10
Total	100	100

Source: Questionnaire

Interpretation :

It is observed that from the given table that the major portion of sample (35%) is constituted of respondents in the age group between 20-25 and 25-30 years, 20% of T The respondent are in the age group of below 20 years, and the rest of 10% of the respondent are in the age group of Above 30 years.

Table -2: Education of Respondents

Education	No of Respondents	Percentage
Under graduates	24	24%
Graduates	24	24%
Post graduates	40	40%
Professional	12	12%
Total	100	100%

Source: Questionnaire

Interpretation:

It is interpreted that the majority of the respondent are 24% under graduates, 24% are graduates, 40% are Post graduate and 12% are professional.

Table -3: Occupation of Respondents

Occupation	No of Respondents	Percentage
Student	40	40%
Employee	25	25%
Self Employed	25	25%
Others	10	10%
Total	100	100%

Source: Questionnaire

Interpretation:

It is interpreted that 40% respondents are students, 25% of respondents are employees, 25% of respondents are self-employees and 10% of respondents belong to other categories.

Table -4: Owning PC and Internet connection

Response	Owning Personal Computer	Percentage
Yes	75%	35%
No	25%	0%
Total	100%	100%

Source: Questionnaire

Interpretation:

It is interpreted that 75% of respondents own PC and 35% of them having connected to Internet. 25% don't have Personal Computer.

Table -5: Sources to browse the Net

Particular	No of Respondent	Percentage
Cyber centers	40	40%
College	20	20%
Friends	12	12%
Work place	18	18%
Other specify	10	10%
Total	100	100%

Source: Questionnaire

Interpretation:

It is interpreted that the 40% of the respondents browse Net from Cyber Center, 20% of respondents browse Net from college, 12% of the respondents browse Net from friends and 18% of the respondents browse Net from work place and 10% of respondent belong to other categories.

Table -6 : Frequency of browsing the Net

Particular	No of Respondent	Percentage
Daily	48	48%
Two or Three times a week	25	25%
One a week	15	15%
One a month	10	10%
Rarely	2	2%
Total	100	100%

Source: Questionnaire

Interpretation:

It is interpreted that 48% of the respondents that browse the Net Daily, 25% of respondents browse the net two

or three times a week , 15% of the respondents browse the net in once a week and ,10% of the respondents browse the net from one month , and 2% of respondent belong to other categories.

Table-7 : hours spend on Browsing

Particular	No of Respondent	Percentage
Less than 1 hr	28	28%
2 hr	50	50%
More than 2 hr	22	22%
Total	100	100%

Source: Questionnaire

Interpretation:

It is interpreted that 28% respondents spend less than 1 hour on Browsing and 50% respondents spend 2 hours and 22 % respondents spend more than 2 hour on Browsing.

Table-8 : Table showing percentage of respondents aware of online advertisement.

Particular	Checking Online Advertisements
Yes	60%
No	40%
Total	100

Source: Questionnaire

Interpretation:

It is interpreted that 60% of the respondents check online advertisement displayed on the Web and the rest 40% do not check the Advertisement displayed on the Net.

Table No-9 : Respondents checking Online Advertisement

Reasons for checking Advertisement	Percentage
Purchasing	25%
Information	30%
Academic	20%
Jobs	15%
Others	10%
TOTAL	100%

Source: Questionnaire

Interpretation:

It is interpreted that from the data collected that the 75% respondents are aware of online advertisement & the

rest 25% are not aware of online advertisement

Table -10 : Aspect for checking online advertising

Particular	No of Respondent	Percentage
Yes	75	75%
No	20	25%
Total	100	100%

Source: Questionnaire

Interpretation:

As observed from the above table, it is interpreted that 25% of the respondents check online advertisements for purchasing, 30% check for information, 20% check for academic purpose, 15% check for job purpose.

Table-11: respondents ranking their preferred Site

Particular	No of Respondent	Percentage
Yahoo	20	20%
Rediff	15	15%
Indiatimes	12	12%
Hotmail	5	5%
Google	40	40%
Others	8	8%
Total	100	100%

Source: Questionnaire

Interpretation:

As observed from the above table, it is interpreted that 20% of the respondents prefer 'Yahoo' as the main site in internet , 15% prefer 'Rediff', 12% prefer 'Indiatimes', 5% respondents prefer 'Hotmail', 40% prefer 'Google', and 8% of the respondents prefer other parameters.

Table-12: Respondents prefer to purchased Online

Particular	No of Respondent	Percentage
Yes	43	43%
No	57	57%
Total	100	100%

Source: Questionnaire

Interpretation:

From the table, it is interpreted that 43% prefer to purchase through online, 57% have said that they do not prefer to purchase through online.

Table - 13: Respondents purchased products through Online

Particular	No of Respondent	Percentage
Vehicles	5	5%
Insurance	20	20%
Electronic items	30	30%
Hotels	15	15%
Education & institution	5	5%
Tour & travels	20	20%
Others	5	5%
Total	100	100%

Source: Questionnaire

Interpretation:

From the table, it is interpreted that 60% of respondents have said that they have purchased products through online, 40% have said that they have not purchased through online.

Table-14: Products and services advertised through online

Particular	No of Respondent	Percentage
Yes	60	60%
No	40	40%
Total	100	100%

Source: Questionnaire

Interpretation:

From the table it is interpreted that, 5% of the respondents say that vehicle industry advertises more on web, 20% of the respondents say that insurance companies advertise more on web, 30% say that 'Electronic items' industry advertises more on web, 15% say that 'Hotel industry' advertises more on web and 20% respondents say that 'tour and travel industry' advertises more on web.

Table-15 : Characteristics of online advertisements which respondents prefer

Particular	No of Respondent	Percentage
Creativity	15	15%
Information	40	40%
Attractiveness	10	10%
Accessibility	10	10%
Others specify	25	25%

Source: Questionnaire

Interpretation:

As observed from the above table it is interpreted that, 40% of the respondents prefer 'information' as the main characteristic in an online advertisement, 15% prefer 'creativity', 10% prefer 'Attractiveness', 10% respondents prefer 'accessibility' and 25% of the respondents prefer other parameters.

Table -16 : respondents feeling about disturbance by Online Advertisements

Particular	No of Respondent	Percentage
Yes	6	56%
No	4	44%
Total	100	100%

Source: Questionnaire

Interpretation:

From the data collected, it is interpreted that 56% of the respondents feel that they get disturbed while browsing and the rest of 44% feel that they do not get disturbed while browsing.

TESTING OF HYPOTHESIS :

Gender	Yes	No	Total
Male	15	15	30
Female	15	5	20
Total	30	20	50

Degree of Freedom

$$\begin{aligned}
 F &= (R-1)(C-1) \\
 &= (2-1)(2-1) \\
 &= (1)(1) \\
 &= 1
 \end{aligned}$$

Level of Significance = 5% Level(0.05)

Observed(O)	Expected(E)	O-E	(O-E) ²	(O-E) ² /E
15	18	3	9	0.5
15	12	3	9	0.75
15	12	3	9	0.75
5	8	-3	9	1.125
Total				3.125

$$X^2_{cal} = \sum(O-E)^2/E$$

$$X^2_{cal} = 3.125$$

$$X^2_{tab} = 4.88$$

So, $X^2_{cal} > X^2_{tab}$

Calculated value is more than critical value, so null hypothesis is rejected.

Conclusion:

From the above calculation it can be concluded that, there is significant relationship between gender specification and awareness of online advertisement.

FINDINGS:

This study was conducted with a view to know that whether Online Advertising is effective. It has been observed that there are many factors, which effect this statement of Problem like Occupation, Age, life style social factor, for this purpose a structured questionnaire had been designed and analyzed. After analyzing the data the following factors have been found out as major causes for the Online Advertisements Effectiveness.

- The percentage of male browsing the net are more than that of female.
- Most of the internet users are in the age group of 20-25 years with (35%) which indicates that youngsters are using more net than that of the other community.
- Most of the internet users are in the education of post graduates (40%) and most of under graduates and graduates (24%).
- Most of the student community use internet more than that of the other occupation as it is a means of entertainment so the advertiser should target the student community to influence their effectiveness.
- Compared to that of the students self-employed business respondents browse more for purchasing products and students browse more for information and entertainment.
- Most of the respondents 75% have own Personal Computer and 35% have internet connection too.
- Almost 40% of the respondents who browse the net in cyber center the online Advertisements while browsing and most of the respondents browse in college 20%.
- Most of the respondents browse the net Daily 48% and some respondents are browsing the net two or three times a week 25%.
- Around 50% of the respondents spend online browsing for 2 hours.
- Most of the respondents 75% of aware of online advertisement.
- Almost 60% of the respondents who browse the net check the online Advertisements while browsing only if they are interesting and informative.
- The study clearly stated that most of the internet users surfing for information rather than for purchasing

on the net.

- Most of the respondents 40% prefer Sites of the Google and most of yahoo 20%.
- Internet with such high penetration still 57% of the respondents have not purchased any products or services online
- Most of the 30% of the respondents purchased electronic items through online.
- Most of the respondents who have purchased online have not involved themselves in purchasing frequently and even the cost of the purchase is also too low where it does not involve much risk.

Suggestions:**• Go International with multiple languages:**

Offer the web site in multiple languages. Like many sites come in Dutch, Spanish, Slovene, French, Czech, German, Russian, and Italian. Translation service on websites is also good which will help retain customers.

• Use of multi-media:

It is seen that the potential for banner and Internet advertisements, informative and creative advertisements are also preferred therefore hot new designs and innovative sales concepts should be developed. Obviously, the biggest bridge to cross is download time. If a little radio-like audio message that plays from the site upon a click of mouse or a T.V. mini commercial that plays at banner on click of a mouse, it will be much more effective and interesting.

• Use Banner Advertisements that Give Viewers Chance to Interact with Banners :

Interactive banner designs can be used wherein the client can print out a product sheet from the banner itself, order a product through a secured order form on the banner itself, click which button is preferred and be directed to a specialized product marketing page.

• Free offers:

The word free is just as effective in advertising online as it is offline. By sponsoring a freebie, a simple name submission drawing can also get viewers to go through advertisements in the process they become aware of the advertisement.

• Sponsor a contest:

Respondents love to win ANYTHING! Offer the product or service as a prize. When a winner is selected, their name web address and a link to the site can be published.

- **Web site testimonials:**

Build trust or confidence in the online business by using testimonials. A direct quote with the permission of the customer is a nice touch. Listing a name and e-mail address it acts as a reference that is easy and quick. Keep the testimonials to one or two sentences and keep it simple.

- **Target Audience:**

Keep the target audience in mind. Business respondents aren't going to have the time or inclination to participate in game-type advertisements. On the other hand, teenagers love them.

- **Include statistics:**

When a sales claim is made, back it up with information, including statistics. It is said "Our saucepans have a non-stick coating that's guaranteed for life. In actual, in-home testing, food did not stick to our saucepans 98.3% of the time."

- **Provide content on your site :**

As the customer surf the Web take note of information that supports the advertising claims. Surveys, research, reports, testimonials, etc. can all provide valuable information that could move a customer from the point-of-decision to the point-of-purchase.

- **Offer a free report :**

Give away information free with a purchase or subscription to your newsletter. Since information is what surfers are looking to receive, it will work as a big incentive.

- **Few tips that will help in making a connection with the clients:**

- 1) Use "you or your" instead of "we or us."
- 2) Include personal examples rather than general examples. If writing to hair stylists, include examples specific to them.

3) Know your target audience very well. This is the only way you will be able to communicate with them on a personal level.

4) Write using the language of your target audience. Include industry buzzwords and jargon when appropriate.

Customers will feel an attraction to copy that reaches out specifically to them. In a world where most advertisers are speaking to the masses, be sure to give yours an advantage by speaking personally to those you wish to do business with.

Conclusion:

This project was conducted with the zeal of finding out the effectiveness of online advertising. Based on this information obtained in the course of the project there is a since are effort to draw a meaningful conclusion. Is Advertising on the Internet a viable option? I have looked at this question in terms of effectiveness, profitability, and marketing methods. Internet advertising offers increased awareness of companies, an easy method to distribute information, advanced methods of targeting consumers, an immediate and direct line to the customers, and reduced costs in performing these tasks. The only negative aspect is that consumers have to conquer their fears of the Internet - the fear that ordering through an on-line advertisement will get lost in the void of cyberspace. Fears always come with new technology, but it does not take long for respondents to adjust. As respondents get more accustomed to finding their product information on the Web, more and more readers will actively seek out Internet advertising sites.

Finally Do not try to do "anything and everything" to get the buyer's attention. Everyone who comes to site isn't going to buy. The harder you try to get their attention and force them to read your advertisements, the harder they will try to escape.

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Relationship between Stress and Coping Strategies among Banking Sector Employees

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Abstract

Stress is a condition of strain that has a direct bearing on emotions, thought process and physical conditions of a person. At one hand we expect positive impact of buoyant growth projections but at other hand it has become critical for the companies to reduce stress and satisfy employees in order to retain them. Thus, at this juncture it is very crucial for organizations to understand coping strategies adopted by employees to reduce stress in the banking sector. The objective of this research paper is to examine coping strategies adopted by employees and how they are associated with different demographic variables. Data was collected from 132 employees of both public and private sector banks. The study shows coping strategies significantly associated with education, age and marital status and years of service of the employees in the organization.

Keywords

Coping, avoidance, attrition, maladaptive

Introduction

Over the past few decades stress is emerging as an increasing organizational issue, especially among the banking personnel. The advent of technological revolution in all walks of life coupled with globalization, privatization policies has drastically changed conventional patterns in all sectors. The banking sector is of no exemption. The 1990s saw radical policy changes with regarding to fiscal deficit and structural changes in India so as to prepare her to cope with the new economic world order. Globalization and privatization led policies compelled the banking sector to reform and adjust to have a competitive edge to cope with multinationals led environment. The implications of the above said transformations have affected the social, economic and psychological domains of the bank employees and their relations. Evidence from existing literature states that more than 60% of the bank employees have one or other problem directly or indirectly related to these drastic changes.

All the factors discussed above are prospective attributes to cause occupational stress and related disorders among the employees. Selye (1936) defines stress as “a dynamic activity wherein an individual is confronted with an opportunity, constraint or demand”. Organisational stress arises due to lack of person-environment fit. When organizational stress is mismanaged, it affects the human potential in the organization. It further leads to reduced quality, productivity, health as well as well being and morale. Thus, Stress is inevitable in our society. Researchers on stress make it clear that, to enter in to the complex area of stress, especially in to the area of occupational stress, is very difficult. Stress is an unavoidable consequence of modern living.

Literature Review

Stress, in general, can be defined as the reaction of individuals to demands (stressors) imposed upon them (Erkutlu & Chafra, 2006). It refers to situations where the well-being of individuals is detrimentally affected by their failure to cope with the demands of their environment. Researchers cannot agree on a single definition for stress due to its complex nature (Salami, et al. 2010). Occupational stress, in particular, is the inability to cope with the pressures in a job (Rees, 1997), because of a poor fit between someone's abilities and his / her work requirements and conditions (HolmlundRytkönen & Strandvik, 2005). It is a mental and physical condition which affects an individual's productivity, effectiveness, personal health and quality of work (Comish & Swindle, 1994, 26). Over the past few decades stress is emerging as an increasing problem in organizations. Stress is vigorous state in which a person is confronted with an opportunity, demand, or resource related to what the individual wishes and for which the outcome is perceived to be both vague and vital. (Selye, 1936) first introduced the idea of stress in to the life science. He defined stress as the force, pressure, or tension subjected upon an individual who resists these forces and attempt to

uphold its true state. The HSE (Health Safety Executive UK) defines stress is an undesirable response people have to tremendous pressures or other types of demands placed upon them. It arises when they worry they cannot deal with.

Stress and Coping strategies

Coping strategies refer to the specific efforts, both behavioural and psychological, that people employ to master, tolerate, reduce, or minimize stressful events. Two general coping strategies have been distinguished: problem-solving strategies are efforts to do something active to alleviate stressful circumstances, whereas emotion-focused coping strategies involve efforts to regulate the emotional consequences of stressful or potentially stressful events. Research indicates that people use both types of strategies to combat most stressful events (Folkman & Lazarus, 1980). The predominance of one type of strategy over another is determined, in part, by personal style (e.g., some people cope more actively than others) and also by the type of stressful event; for example, people typically employ problem-focused coping to deal with potential controllable problems such as work-related problems and family-related problems, whereas stressors perceived as less controllable, such as certain kinds of physical health problems, prompt more emotion-focused coping.

An additional distinction that is often made in the coping literature is between active and avoidant coping strategies. Active coping strategies are either behavioral or psychological responses designed to change the nature of the stressor itself or how one thinks about it, whereas avoidant coping strategies lead people into activities (such as alcohol use) or mental states (such as withdrawal) that keep them from directly addressing stressful events. Generally speaking, active coping strategies, whether behavioral or emotional, are thought to be better ways to deal with stressful events, and avoidant coping strategies appear to be a psychological risk factor or marker for adverse responses to stressful life events (Holahan & Moos, 1987).

Objectives

1. To study the key stressors in the banking sector.
2. To study most frequently adopted coping strategies.
3. To study is there a significant difference in coping strategies adopted by banking employees based on

gender, age, marital status, education and years of service in the organization.

4. To study significant coping strategies that can help reduce stress.

Hypothesis

Reddy and Ramamurthy (1991) analyzed the influence of age on stress experience of a person. The sample consisted of 200 executives. The results revealed that executives in the age group of 41-50 experienced more stress than the age group of 51-60. Moderating variables among executives experiencing stress include not only age but also the years of service in the employment.

Hypothesis 1: There is significant association between coping strategies and stress.

Hypothesis 2a: There is significant association between coping strategies and gender.

Hypothesis 2b: There is significant difference in the coping strategies adopted by employees based on gender.

Hypothesis 3a: There is significant association between coping strategies and age.

Hypothesis 3b: There is significant difference in the coping strategies adopted by employees based on age group.

Education acts as mediator, either increases or reduces stress depending on perspective of the individuals. Ansari (1991) had studied the nature and extent of stress in agriculture university teachers. Chand and Monga (2007) examined the correlates of job stress and burn out. He found that, higher education can combat stress and burn out related problems among the employees.

Hypothesis 4a: There is significant association between coping strategies and marital status.

Hypothesis 4b: There is significant difference in the coping strategies adopted by employees based on marital status.

Hypothesis 5a: There is significant association between coping strategies and education.

Hypothesis 5b: There is significant difference in the coping strategies adopted by employees based on marital status.

Hypothesis 6a: There is significant association between coping strategies and years of service.

Hypothesis 6b: There is significant difference in the coping strategies adopted by employees of different length of employment.

Research Methodology

In order to examine the relationship between coping strategies and stress and other demographic variables survey was conducted among employees in the banking sector of Mumbai. Convenient sampling was adopted. Based on the size of the banking 30 to 50 questionnaires were provided. A total of 180 questionnaires were sent, and 140 returned questionnaires represented 77.7% respondent rate. Eight questionnaires were rejected due to insufficient information.

Instruments

The survey instrument consisted of three sections: general demographic information, work stress and coping strategies.

General demographic information

The survey included five questions covering demographics. Personal information was requested regarding gender, age, marital status, education and length of employment.

Work Stress

To study work stress, EOSS scale developed by Telaprolu and George (2005) was used. It is a self-administering scale, which could be administered individually or in a group. It consist of 40 statements and has a five-point scale such as “always”, “frequently”, “sometimes”, “rarely” and “never” with scoring as 4, 3, 2, 1 and 0 respectively.

Coping Strategy Questionnaire

To measure coping strategies, questionnaire designed by Folkman and Lazarus was used. It is a structured questionnaire to measure coping strategies across eight factors (problem focused coping, escape-avoidance, distancing, seeking social support, positive reappraisal, selfblame, tension reduction, self isolation).

Data Analysis

Table 1: Description of the respondents n=132)

Variables	Number	Percentage
Gender		
Male	75	56.4
Female	57	42.9

Variables	Number	Percentage
Age Under 25		
26-30	54	9.8
31-35	50	42.9
36-40	22	30.1
Above 41	6	15.8
Marital Status		
Single	70	52.6
Married	51	38.3
Divorced	11	8.3
Education		
Undergraduate	77	57.9
Graduate	39	29.3
Post Graduate	16	12.0
Level		
Lower	77	57.9
Middle	39	29.3
Top	16	12.0
Length of employment		
Under 1 years	60	45.1
2-3 years	34	25.6
4-6 years	36	27.1
7-9 years	2	1.5
10-12 years	0	0
Above 12 years	0	0

Table 2 : Descriptive Statistics - Summary of stressors

Variables	N	Min.	Max.	Mean	Std. Deviation
Work stressor	132	1.25	3.75	2.3485	.62834
Role stressor	132	1.75	3.25	2.3750	.36353
Personal development	132	1.25	3.50	2.4716	.66800
Interrelationship stressor	132	2.00	3.50	2.7273	.51731
Organization climate stressor	132	1.00	4.25	2.3504	.93738
Valid N (listwise)	132				

The table 2 shows most frequent stressors for banking employees is Organization climate stressor (M=4.25) followed by Work stressor (M=3.75)

Table 3 : Summary of coping strategies -Descriptive Statistics

	N	Min.	Max.	Mean	Std. Deviation
Problem solving	132	2.33	5.00	3.7291	.75303
Wishful Thinking	132	3.00	5.00	3.8037	.54812
Detach	132	2.67	5.00	3.6522	.72288
Seeking	132	1.67	4.33	3.1752	.74993
focusing	132	2.67	5.00	3.9757	.69554
Self blame	132	2.33	5.00	3.3676	.83326
tension	132	2.33	5.00	3.2959	.64657
Self isolation	132	2.33	3.67	3.0000	.36259

The table 3 shows most frequently used coping strategies by banking employees is Focusing (M=3.9) followed by Wishful Thinking (M=3.8) and Problem Solving (M=3.7).

Table 4: Correlation between coping strategies and stress

		Total coping strategies	Total stress
Total coping strategies	Pearson Correlation	1	-.379(**)
	Sig. (2-tailed)		.000
	N	132	132
Total stress	Pearson Correlation	-.379(**)	1
	Sig. (2-tailed)	.000	
	N	132	132

**Correlation is significant at the 0.01 level (2-tailed)

The above table shows significant ($p=.000$) negative association between coping strategies and stress.

Table 5: Model Summary

Mode l	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.798(a)	.637	.613	.32317

a Predictors: (Constant), selfisolation, wish, selfblame, tension, detach, focusing, prob, seeking

The above table shows R square value is 63.7%. As ANOVA is significant, model is statistically fit and independent variables brings about 64% variation in stress due to coping strategies.

Table 6: ANOVA (b)

Mode l		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	22.537	8	2.817	26.974	.000(a)
	Residual	12.846	123	.104		
	Total	35.382	131			

a Predictors: (Constant), selfisolation, wish, selfblame, tension, detach, focusing, prob, seeking

b Dependent Variable: totalstress

From the above table it could be inferred p value (.000) is less than α . Hence ANOVA is significant. Thus, model is significant. From table 5 it could be inferred, Coping strategies are able to reduce stress by 63.7%

Table 7: Coefficients(a)

Mode l		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	6.052	.804		7.527	.000
	Problem Solving	.287	.093	.416	3.086	.003
	Wishful thinking	.032	.114	.034	.282	.778
	Detachment	-.909	.100	-1.264	-9.096	.000
	Seeking	.701	.107	1.012	6.564	.000
	focusing	.408	.073	-.546	-5.597	.000
	Self blame	-.226	.067	-.362	-3.347	.001
	Tension	-.411	.105	-.512	-3.908	.000
	Self isolation	.014	.137	.010	.104	.918

a Dependent Variable: totalstress

The above table shows problem solving, Detachment, Seeking help, Focusing, Self Blame, tension are significant. Detachment, tension and self-blame have negative sign indicates by reducing these type of maladaptive coping strategies will help reduce stress at workplace.

Relationship between gender and coping strategies**Table 8 :Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi Square	.351(b)	1	.554		
Continuity Correction(a)	.059	1	.808		
Likelihood Ratio	.359	1	.549		
Fisher's Exact Test				.731	.411
Linear-by-Linear Association	.348	1	.555		
N of Valid Cases	124				

a Computed only for a 2x2 table

b 1 cells (25.0%) have expected count less than 5. The minimum expected count is 3.85.

From the above table it could be inferred there is no association between coping strategies and gender of banking employees. as p value ($p = .554$) is more than .05. Thus null hypothesis H_0 is accepted. and there is no association between coping strategies and gender.

Table 10: Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi Square	11.002(a)	3	.012
Likelihood Ratio	10.283	3	.016
Linear-by-Linear Association	.062	1	.804
N of Valid Cases	124		

a 4 cells (50.0%) have expected count less than 5. The minimum expected count is .44.

The above table shows as pvalue (p=.012) is less than .05. Hence there exist significant association between coping strategies adopted by BANKING employees and their age. Hence we reject the null hypothesis

Analysis of variance for coping strategies with different age group

Table 11: ANOVA

Coping Strategies and age

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.741	3	.247	3.895	.011
Within Groups	7.606	120	.063		
Total	8.347	123			

From the above table it could be inferred p value (.011) is less than .05. Hence ANOVA is significant. Thus, there is significant difference in coping strategies adopted by banking employees based on their age (N=132).

Post Hoc Analysis

Table 12: Multiple Comparisons

Dependent Variable: Coping Strategies Tukey HSD

(I) age	(J) age	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval		
					Lower Bound	Upper Bound	Lower Bound
Under 25	26-30	-.09637	.05091	.236	-.2290	.0363	
	31-35	-.11765	.06642	.292	-.2907	.0554	
	36-40	-.21569	.10866	.199	-.0674	.4988	
26-30	Under 25	.09637	.05091	.236	-.0363	.2290	
	31-35	-.02128	.06721	.989	-.1964	.1538	
	36-40	.31206(*)	.10915	.025	.0277	.5964	
31-35	Under 25	.11765	.06642	.292	-.0554	.2907	
	26-30	.02128	.06721	.989	-.1538	.1964	
	36-40	.33333(*)	.11719	.027	.0280	.6387	
36-40	Under 25	-.21569	.10866	.199	-.4988	.0674	
	26-30	-.31206(*)	.10915	.025	-.5964	-.0277	
	31-35	-.33333(*)	.11719	.027	-.6387	-.0280	

* The mean difference is significant at the .05 level.

The ANOVA was significant with p=.011. Thus, there is significant evidence to reject the null hypothesis and conclude that there is a significant difference based on age of employees. The post Hoc analysis shows significant difference in coping strategies adopted by banking employees in the age group between (26-

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi Square	9.396(a)	2	.009
Likelihood Ratio	12.871	2	.002
Linear-by-Linear Association	7.710	1	.005
N of Valid Cases	124		

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.632	2	.316	4.960	.009
Within Groups	7.714	121	.064		
Total	8.347	123			

education level of employees. The post Hoc analysis shows significant difference in coping strategies adopted by undergraduate, graduate and post-graduate employees.

(I) maritalstatus	(J) maritalstatus	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Single	Married	-.14286(*)	.04782	.009	-.2563	-.0294
	Divorced	-.14286	.08251	.198	-.3386	.0529
Married	Single	.14286(*)	.04782	.009	.0294	.2563
	Divorced	.00000	.08409	1.000	-.1995	.1995
Divorced	Single	.14286	.08251	.198	-.0529	.3386
	Married	.00000	.08409	1.000	-.1995	.1995

Relationship between coping strategies and years of service

Table 20: Chi-Square Tests

a 5 cells (62.5%) have expected count less than 5. The minimum expected count is .15.

The above table shows relationship between coping strategies and years of service is significant as p value is (p=.020) less than .05. Thus, we reject the null hypothesis, that there is no significant association between coping strategies adopted and years of service

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi Square	1.410(a)	2	.494
Likelihood Ratio	1.228	2	.541
Linear-by-Linear Association	1.303	1	.254
N of Valid Cases	124		

of employees.

ANOVA

Table 22: Coping Strategies and years of service

From the above table it could be inferred p value (.019) is less than (.005). Hence ANOVA is significant. Thus, there is significant difference in coping strategies adopted by banking employees based on years of service (N=132).

Post Hoc evaluations

Table 23: Multiple Comparisons

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi Square	40.435(a)	2	.001
Likelihood Ratio	32.790	2	.000
Linear-by-Linear Association	25.481	1	.003
N of Valid Cases	124		

Dependent Variable: Coping Strategies

Tukey HSD

* The mean difference is significant at the .05 level.

The ANOVA was significant with p=.019. Thus, there is significant evidence to reject the null hypothesis and conclude that there is a significant difference based on years of service of employees. The post Hoc analysis shows significant difference in coping strategies adopted by employees having less than 1 year of service and 1-3 years of service.

Result and Discussion:

The research shows key stressors experienced by

(I) education	(J) education	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
undergraduate	graduate	.00000	.05390	1.000	-.1279	.1279
	post graduate	.37500(*)	.06528	.000	.2201	.5299
graduate	undergraduate	-.00000	.05390	1.000	-.1279	.1279
	post graduate	.37500(*)	.05018	.000	.2559	.4941
post graduate	undergraduate	-.37500(*)	.06528	.000	-.5299	-.2201
	graduate	-.37500(*)	.05018	.000	-.4941	-.2559

employees of the banking sectors are organization climate stressors followed by work stressors. Key coping strategies adopted by the employees are Focusing (M=3.9) followed by Wishful Thinking (M=3.8) and Problem Solving (M=3.7). The study shows problem solving, detachment, Seeking help, Focusing, Self Blame, tension are significant. Detachment, tension and self-blame are negative indicates by reducing these type of maladaptive coping strategies and enhancing adaptive coping strategies will help reduce stress at workplace. Also the study shows significant difference in coping strategy based

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi Square	9.825(a)	3	.020
Likelihood Ratio	13.247	3	.004
Linear-by-Linear Association	5.518	1	.019
N of Valid Cases	124		

on age, marital status, education and years of service.

Basha and Ushashree (1997) studied on job stress and coping as related to perceptions of organizational climate. Significant negative relationship was found between perception of organizational climate and the amount of stress experienced by the employees.

Newstrom and Davis (1998) found that when job autonomy provided to managers is high, they enjoy their work and have freedom to do the task according to their own will so that they feel less stress. Vashishtha

focus on other sectors to analyze key stressors impacting the employees. Secondly researchers in future can focus on coping strategies adopted by the employees in important sectors contributing to the economy.

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.661	3	.220	3.442	.019
Within Groups	7.685	120	.064		
Total	8.347	123			

and Mishra (2000) found that appraisal support had a partially moderating effect on occupational stress in organizational commitment relationship. The past research by (Folkman & Lazarus, 1980) which indicates that people use both types of strategies to combat most stressful events. The predominance of one type of strategy over another is determined, in part, by personal style (e.g., some people cope more actively than others) and also by the type of stressful event, physical health problems, prompt more emotion-

(I) years service	(J) years service	Mean Difference (I - J)	Std. Error	Sig.	95% Confidence Interval	
		Lower Bound	Upper Bound	Lower Bound	Upper Bound	Lower Bound
Under 1 year	1-3 years	.15625(*)	.05540	.028	.0119	.3006
	4-6 years	.13333	.05659	.091	-.0141	.2808
	7-9 years	.00000	.18191	1.000	-.4739	.4739
1-3 years	Under 1 year	-.15625(*)	.05540	.028	-.3006	-.0119
	4-6 years	-.02292	.06431	.984	-.1905	.1446
	7-9 years	-.15625	.18446	.832	-.6368	.3243
4-6 years	Under 1 year	-.13333	.05659	.091	-.2808	.0141
	1-3 years	.02292	.06431	.984	-.1446	.1905
	7-9 years	-.13333	.18482	.888	-.6149	.3482
7-9 years	Under 1 year	.00000	.18191	1.000	-.4739	.4739
	1-3 years	.15625	.18446	.832	-.3243	.6368
	4-6 years	.13333	.18482	.888	-.3482	.6149

focused coping.

Future Scope of the study:

As stress disturbs the equilibrium of the body. It affects physically, emotionally, and mentally. As banking employees appears When individuals experience stress or face demanding situation, they adopt ways of dealing with it, as they cannot remain in a continued state of tension. How the individual deals o experience maximum organization climate stressor. Management can work in this direction to reduce the stress. As this study is limited to employees working in Banking sector in Mumbai, future study in this direction can

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A Study on “Credit appraisal methods and Credit monitoring practices” at Navanagar Urban Co-operative Bank Limited

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Abstract

The study is to analyse the procedures of sanction the loans, types of loans provided by the Navanagar Urban C-operative banks. To know about their leading to the customer in the annual. Analysing about the NPA in each loans that provided by the banks, the effects of NPA on their profits of the year.

This study is on credit appraisal and the credit monitoring, it is a complete process of lending loan and managing the risk of the advance it is generally carried by the financial intuitions which are involved in providing financial funding to its customers credit appraisal is the pre-qualification screening criteria, collection of the required information on credit and application are screened. Credit appraisal will help the institution from the fraud and misused the purposes.

Credit appraisal involves appraising the debtors payment history and establishing the quality and sustainability of this income. This gave scope for “Study on Credit Appraisal Methods and Credit Monitoring Practices in Navanagar Urban Co-operative Bank Limited”

The study is purely based on descriptive research, it consists both qualitative and quantitative approaches. The qualitative approach includes interviews and the quantitative approach includes the charts, graph, and table.

This study lends the various suggestions and finding the like every audit the bank rating is “A” grade because of doing the statements in Kannada. Bank providing various types of loans on the basis of short term, medium term & long term.

The analysis and interpretations of loans and advance of the bank for 5 year the performances of the bank was good compared to the bank in K. R. Nagar.

The analysing and interpretations of loans and advances of the bank for 5 year the performances of the bank was good compared to other banks in K. R. Nagar

Key word

Loans And Advances, NPA, Financial performance.

Introduction

Credit appraisal and the credit monitoring is a complete process of lending loan and managing the risk of the advance it is generally carried by the financial intuitions which are involved in providing financial funding to its customers. Proper development of the customer is performed in order to measure the financial condition and the ability of the customer to repay back the advance in future.

Credit appraisal is the pre-qualification screening criteria, collection of the required information on credit and applications are screened. Credit appraisal will help the institutions from the fraud and misused the purposes.

Topic Chosen for the Study

Credit appraisal is a process of appraising the credit worthiness of the customers and evaluation of the ability of repayment in the future. Credit appraisal includes appraising the debtor's payment history and establishing the quality and sustainability of his income. This gave scope for the “Study on Credit Appraisal Methods and Credit Monitoring Practices at Navanagar Urban Co-Operative Bank Limited”

Need for the Study

The study helps to get an idea regarding the Navanagara Urban Co-operative Bank activities and it focuses on credit appraisal and credit monitoring. The bank and financial institution have been burdened with ever increasing NPAs.

Obejectives of the Study

- To understand the credit appraisal procedure followed to grant loans and advances at Navanagar Urban co-operative bank.
- To study Non-Performing Assets and its effects on profit derived from various Loans and Advances at Navanagar urban co-operative bank

- To understand the financial performance of NUC Bank

Scope of the Study

The scope of the study is limited to the credit appraisal methods and credit monitoring practise in NUC Bank to analyse the procedures of sanctioning the loans, types of loans, NPA level at Navanagar Urban Co-operative banks. Analysing about the NPA in each loans that provided by the banks, the effects of NPA on their profits of the year.

Methodology

Data collected

The present study is purely based on descriptive research. It consists both qualitative and quantitative approaches. The qualitative approach includes interviews and the quantitative approach includes the charts, graph, and table.

Sources of the data

Primary sources

The sources of the primary data is the information collected from the bank manager and the internal guide for the purpose of conducting study on the credit appraisal and credit monitoring in the NAVANAGAR URBAN CO-OPERATIVE BANK IN K. R. NAGAR.

Secondary sources

The sources of the secondary data collected from the annual report of the bank and the other sources from the internet, reference book, journals

Literature Review

MENKHOFF et al. (2006)

Urged that it is essential to develop cost effective procedures for recognising credit customers, monitoring the status of customers' accounts and income collection procedures for customers with overdue bills as means of ensuring high financial performance. In similar way of ensuring high financial performance of Microfinance intuitions in India. (International Journal of Information Research and Review Vol. 2, Issue, 10, pp.1249-1254, October, 2015)

ACCORDING TO THE WORLD BANK REPORT (1994)in Uganda,

The country's banking industry was defined as tremendously weak with huge non-performing assets and some banks teetering on the verge of failure.

(International Journal of Development Research, Vol. 4, Issue, 6, pp. 1304-1307, June, 2014)

BHATTACHARYA (Volume 7, Issue 11, May 2015)

“Analyses lending strategies, credit appraisal, risk analysis and lending decision keeping in mind the broad framework of corporate banking strategy, and helps us understand better the vast and significant changes in the financial market. Numerous examples from the world of business have been provided to facilitate better understanding.”

SATHYA VARATHAN, PRIYA KALYANA SUNDARAM AND S. TAMILENTHI (Volume 7, Issue 11, May 2015)

“Credit Appraisal is a holistic exercise that starts from the time when a prospective borrower walks in culminates in credit delivery and monitoring with the objective of ensuring and maintains the quality of lending and managing credit risk within acceptable limits. Credit Appraisal determines whether to accept the proposal or not. There are two types of projects that are received by the banks for the funding purpose. The first is starting of a new project or setting up a new company, the second one is for its working capital needs.”

Objectives:

- To understand the credit appraisal procedure followed to grand the loans and advances NUC Bank.

Loans And Advances

The major and primary function of Navanagar Urban Co-operative bank is to grant the loans. It receives the deposits from the customers and it lends major part as the loans and advances, it receives the interest on loans and advances it is a major profit for a bank.

The major contribution of NUC BANK for the economics is providing the loans and advances to self-employees and agricultural sectors.

The word “loan” refers to the amount borrowed by one person to lend for another person. In the simplest, the term “loan” refers to a thing that is borrowed, especially a sum of money that is expected to be paid back with interest. Loans also called as credit, means granted the money is disbursed and its recovery is made in later date.

The act of giving money or providing a material goods to a another party with expectation of the future

repayment of principal amount along with the interest or finance charges is called as loan.

Advances refer to credit facility granted by a bank to its customers for short term purposes. Advance are assets for a bank ,which brings in major share of incomes to the bank.

The loans and advances granted by a bank in the forms terms

- Short term - the durations up to 1 year
- Medium term - the durations between 1 to 5 year
- Long term - the duration beyond 5 years

The loans are granted either against personal security or against the collateral security. The interest will be charges to its amount sanctioned.

General rules that are applicable in the Navanagar Urban Co-operative bank for the loan and advances

1) Applications for the loans and advances:

The Application should be applied in the prescribed way by banks and that should be must submitted to specified persons from the bank. The applications must be filled by the borrowers and also by the guarantors and they should singe where there is necessary. They must give the full information's asked by the bank and they should mentions the propose in the application.

2) Sanctions of loans and advances

While screening the loans applications they can sanctions amount of applied or the can reduce the amount or they could reduce the period of repayment or they alter the conditions of the security or they can reject the applications. The board is not bound to inform their clients about the reasons for rejection of applications but they will inform the client that the application is rejected. Finally the decisions taken by the board members will be the final decision

3) Rules for sanctioning of loans and advances

According to the Reserve Bank and the board members frame the rules governing the procedure of sanction of loans, according to that rules margins should be maintained, and the period of loans, terms and conditions of securities to be accepted for granting loans and advances,

4) Loans for non-members

Loans and advances are granted to the non-members against the security of their term deposits in the bank.

5) Period of loans

Short term loans may be sanctioned up to 15 month, medium term loans from 15months to 5 years, and long term loan for more the 5 years.

6) Loan limits for the members

- As per the guidance's of the RBI the bank fixes the maximum limits for all the types' loans and advances to pay for the members.
- For the joint loan the members should be a surety for another member.

7) Condition for disbursement of loans:

Loans amount shall be disbursement of loans is sanctioned and the applicant executes the loans agreement and other related document in the prescribed form.

8) Furnishing of wrong / false particulars

The board member as full power to reject the loan sanctioned of the member in the case of his security has furnished wrong / false information to the bank in the loan application. In such cases the member will be not eligible for the any borrowing form the bank for 5 years and for any surety for other members.

9) Utilization and Repayment of loan:

- Members should utilize the amount of loan sanction for the proper which it was sanctioned. If the members utilize the loan for different proper's in such case the board have the rights to recall the loans together with interest up to date.
- The duty of the borrower to repay the loans and advance (instalments) with the interest according to the condition of the bank which is mentioned in the applications
- when the loans and advances are repaid by the borrower the overdue instalments and interest towards the instalment interest unsecured loans and advances shall be recovered first and the balance amount shall be adjusted towards secured loan and advances.

10) Insolvency or death of borrowers

In the case of death or insolvency of the borrowers, according to the legal that person is disabled, the surety person must inform to the bank within 15 days in the written format. The bank will take certain actions to recovery the loans and advances.

11) Insolvency or death of the surety

In the case of insolvency or death of the surety, he or she is considered as disabled the borrower should inform the bank within 15 day in the written format. The general manger informs the borrower to provide the other surety person for the bank within 15 days. If borrower fails to get the surety within 15 days bank have the right get back the loans with the interest.

12) Purpose of loans and advances:

The bank sanctions the loans for the propose of promotions of self-employments, developments of small scale industries, transportation, education proposes, buying of the property, housing loans for the staff.

13) Loans and advances for the staff members.

According to rules and regulations of the bank, the board sanctions the loans only for the permanent employees and for the employees who services is more than 5 years in the bank.

14) Repayment period for loans and advances, cash credit

The period of repayment of loans and advances and cash credit shall be linked to the period of repayment of the borrowings of the bank from apex bank of the maturity period of deposits, which the bank receives, and subject to the term and conditions prescribed by reserve bank of India, industrial development bank of the India and small industries development bank of India

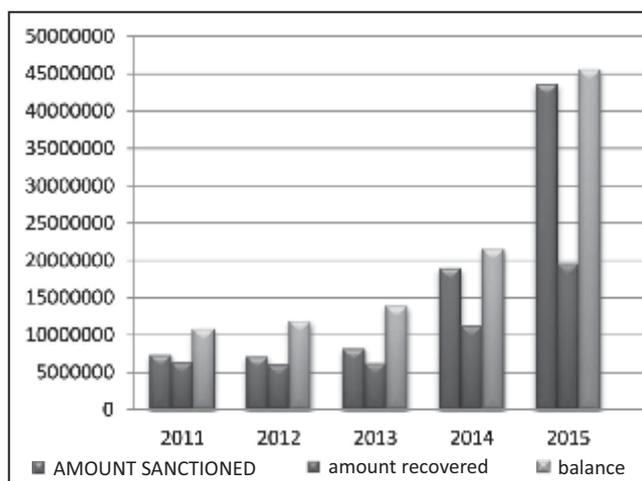
15) Interest rate

- The rate of interest charged on various types of loans and advances according to the guidance's of Reserve Bank India.
- The normal rate of interest is 2 % on bad debt. it considered as profit for the bank
- First the bank should recovery the interest due from the staff at any reason.
- The interest should be charged on every type of loans and advances at end of the month.

TABLE 4.1 Table showing the position of joint loan sanctioned by NUC BANK from 2011-2015

Year	Amount sanctioned	Amount recovered	Balance
2011	71,88,932.00	62,33,747.00	1,07,13,347.00
2012	70,40,050.00	59,91,122.00	1,17,62,275.00
2013	81,19,000.00	61,35,682.00	1,37,45,593.00
2014	1,88,45,000.00	1,11,44,639.00	2,14,45,954.00
2015	4,35,49,000.00	1,94,60,033.00	4,55,34,921.00
TOTAL	8,47,41,982.00	4,89,65,223.00	10,32,06,090.00

CHART 4.1 Chart showing the position of joint loan for 5 year at NUC BANK from 2011-2015

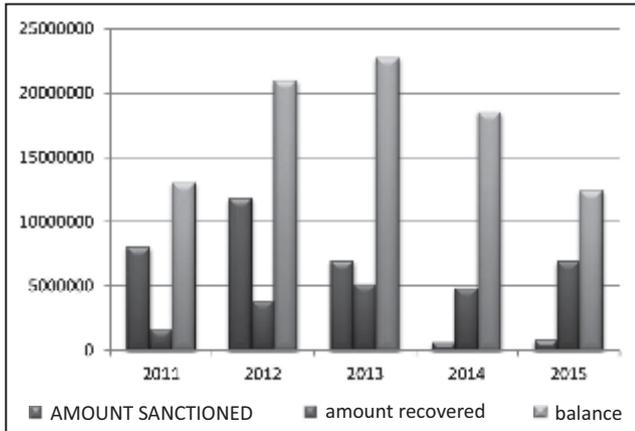


Analysis and Interpretation

From the above table and chart, shows that the total amount sanctioned by Navanagar urban co-operative for the joint loans in the year 2011 Rs. 71,88,932.00 and its compared to the year 2015 Rs. 4,35,49,000.00 is high. The balance of the joint in the year of 2011 is Rs. 1,07,13,347.00 and its compared to the year 2015 4,55,34,921.00 is high. The bank as more demand for the joint loans in 2015 compared to 2011. the bank explored the lending from village 1 to urban.

TABLE 4.2 Table showing the position of business loans sanctioned by NUC BANK from 2011-2015

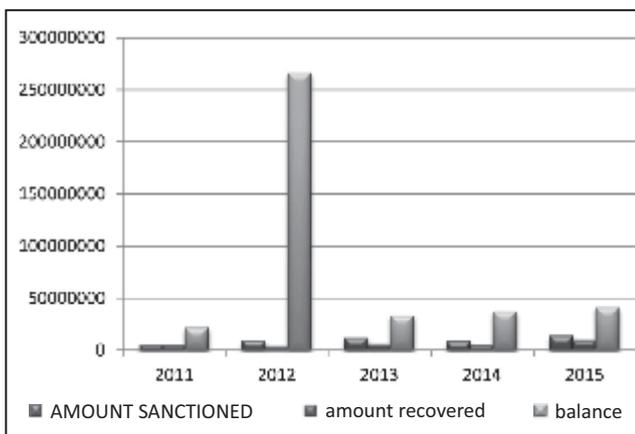
Year	Amount sanctioned	Amount recovered	Balance
2011	8015000.00	1638658.00	1638658.00
2012	11775000.00	3844568.00	3844568.00
2013	6930000.00	5144330.00	5144330.00
2014	600000.00	4838655.00	4838655.00
2015	800000.00	6904244.00	6904244.00
TOTAL	28120000.00	22370455.00	22370455.00

CHART 4.2 Chart showing the position of business loan at NUC BANK for 5 year 2011-2015**Analysis and Interpretation**

From the above table and chart, shows that the total amount sanctioned by Navanagar urban co-operative for the joint loans in the year 2011 Rs. 71,88,932.00 and its compared to the year 2015 Rs. 4,35,49,000.00 is high. The balance of the joint in the year of 2011 is Rs. 1,07,13,347.00 and its compared to the year 2015 4,55,34,921.00 is high. The bank as more demand for the joint loans in 2015 compared to 2011. the bank explored the lending from village 1 to urban.

TABLE 4.3 Table showing the position of housing loan sanctioned by NUC BANK from the 2011-2015

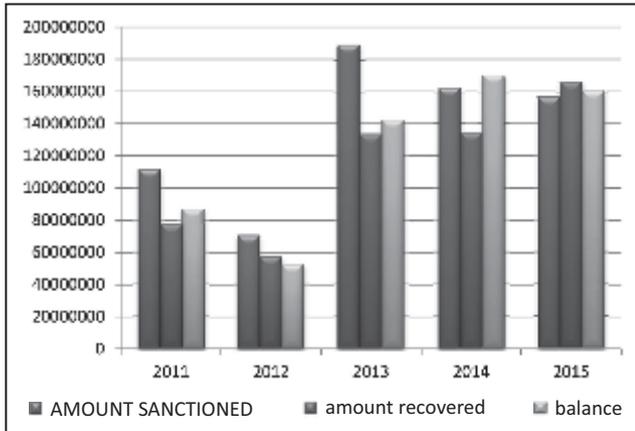
Year	Amount sanctioned	Amount recovered	Balance
2011	5345000.00	4869156.00	21255636.00
2012	9105000.00	3809391.00	265505645.00
2013	11570000.00	5416379.00	32704266.00
2014	8340000.00	4323759.00	36720507.00
2015	13590000.00	9469351.00	40841156.00
TOTAL	47950000.00	27888036.00	397027210.00

CHART 4.3 Chart showing the position of housing loan at NUC BANK for 5 year 2011-2015**Analysis & Interpretation:**

From the above table and chart shows that the total amount sanctioned by the NUC BANK for the housing loan in the year 2011 Rs. 53,45,000 and it is compared to the year 2015 Rs. 1,35,90,000 is high. The balance amount of the loan in the year 2011 Rs. 21,255,636 it compared to the year 2015 Rs. 4,08,41,156 is high. The NUC BANK lends housing loans on the demands. The demand of the housing loans was high in 2015 compared to the 2011 because of the interest rate was low compared to the other bank.

TABLE 4.4 Table showing the position of gold loan sanctioned by NUC BANK from 2011-2015

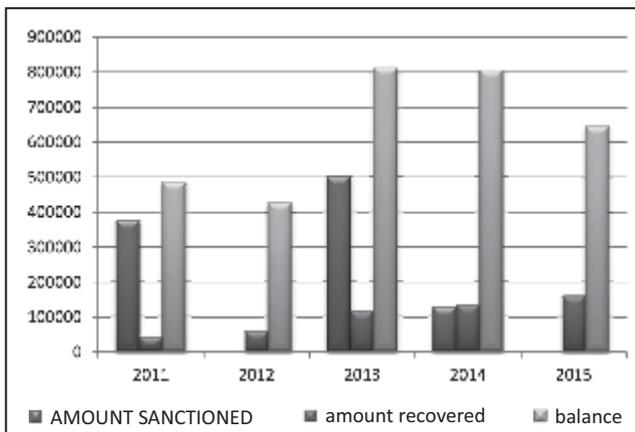
Year	Amount sanctioned	Amount recovered	Balance
2011	111493384.00	77196478.00	86852944.00
2012	70673725.00	57347724.00	52556038.00
2013	189171537.00	133573433.00	142451048.00
2014	162154300.00	134384703.00	170220645.00
2015	156512300.00	166045795.00	160687150.00
TOTAL	690005246.00	568548133.00	612767825.00

CHART 4.4 Chart showing the position of gold loan sanctioned by NUC BANK for 5 year 2011-2015**Analysis and Interpretation**

From the above table and chart shows that the total amount sanctioned by Navanagar Urban Co-operative Bank for the gold loan for the year 2011Rs. 111493384 compared to the year 2015 Rs. 156512300 is high. The balance of the gold loans in the year 2011 Rs. 86852944 compared to the year 2015 Rs. 160687150 is high. The NUC BANK lends the gold loans on the demand in the gold market. The gold loans demand was good in 2015 compared to the 2011.

TABLE 4.5 Table showing the position of agriculture loan sanctioned from 2011-2015

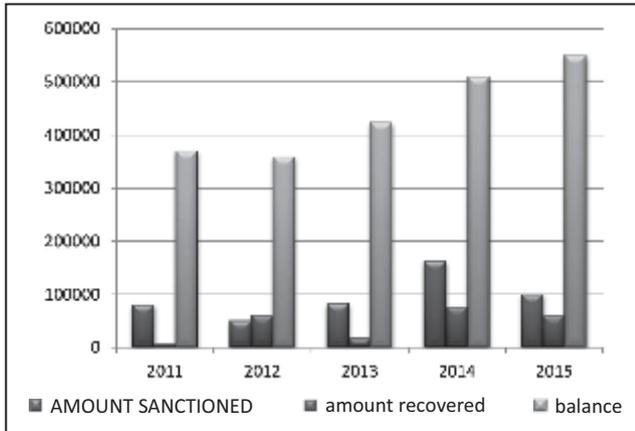
Year	Amount sanctioned	Amount recovered	Balance
2011	375000.00	40155.00	484845.00
2012	-----	57448.00	427397.00
2013	500000.00	114639.00	812758.00
2014	125000.00	132162.00	805596.00
2015	-----	159117.00	646479.00
TOTAL	1000000.00	503521.00	3177075.00

CHART 4.5 Chart showing the position of agriculture loan sanctioned by NUC BANK for 2011-2015**Analysis & Interpretation:**

From the above table and chart that the total amount sanctioned by the Navanagar Urban Co-operative bank for the agriculture loan for the year 2011 Rs. 375000.00 at the year 2015 the as not sanctioned the agriculture loans . The balance of the agriculture loan for the year 2011Rs. 484845.00 its compared to the year 2015 Rs. 646479.00 is high. The NUC BANK lends the agriculture loans in 2011 compared to 2015 were low because the agriculture loans cause more NPAs.

TABLE 4.6 Table showing the position of educational loan sanctioned by NUC BANK from 2011-2015

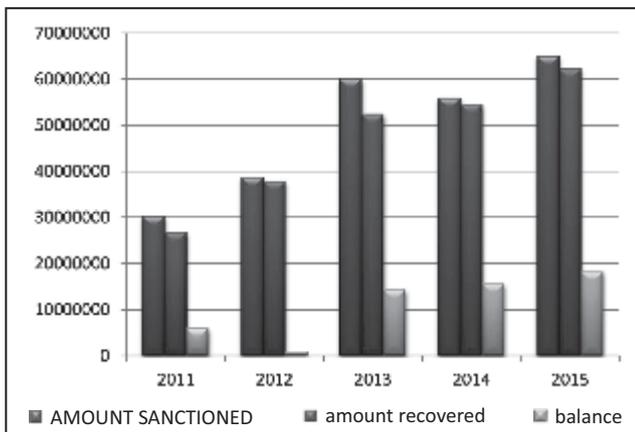
Year	Amount sanctioned	Amount recovered	Balance
2011	80000.00	7338.00	368850.00
2012	50000.00	60293.00	358850.00
2013	82000.00	17561.00	423289.00
2014	162000.00	76500.00	50789.00
2015	100000.00	59702.00	549087.00
TOTAL	474000.00	221394.00	1750865.00

CHART 4.6 Chart showing the positions of educational loan at NUC BANK for 5 years 2011-2015**Analysis and Interpretation**

From the above table and chart shows that the total amount sanctioned by Navanagar Urban Co-operative Bank for the year 2011 Rs. 80000 it compared 2015 Rs. 100000 is high. The balance amount of the educational loans for the year 2011 Rs. 368850 and it compared to the year 2015 Rs. 549087 is high. The NUC BANK lend the loans on the demands. The education loans in 2015 as more demand compared to 2011.

TABLE 4.7 Table showing the position of cash credit loan sanctioned from 2011-2015

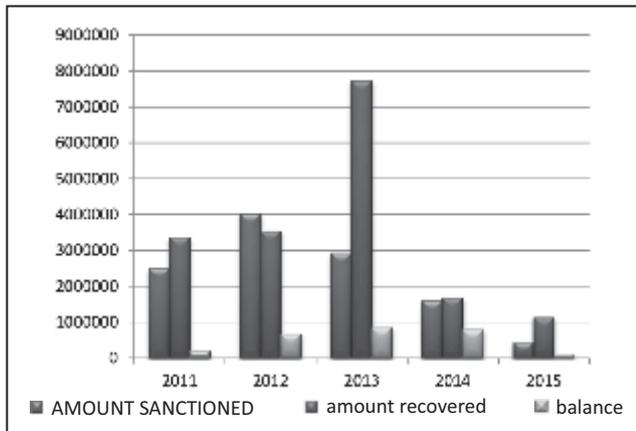
Year	Amount sanctioned	Amount recovered	Balance
2011	30190993.00	26681880.00	5843930.35
2012	38638454.65	37835014.00	666698.00
2013	59960541.00	52373153.00	14214759.00
2014	55861592.00	54561286.00	15515065.00
2015	64950036.00	62244897.00	18220204.00
TOTAL	249601616.6	233696230.00	54460656.35

CHART 4.7 Chart showing the position of the cash credit loan by NUC BANK for 5 year 2011-2015**Analysis & Interpretation:**

From the above table and chart shows that the total amount sanctioned by Navanagar Urban Co-operative bank for the cash credit loan in the year 2011 Rs. 30190993 it compared to the year 2015 Rs. 64950036 is high. The balance amount of the cash credit loans for the year 2011Rs. 5843930.35 it compared to the year 2015 Rs. 18220204 is high. The NUC BANK lend the cash credit on the basis of the account of the customers and the demand

TABLE 4.8 Table showing the position of over draft loan sanctioned from 2011-2015

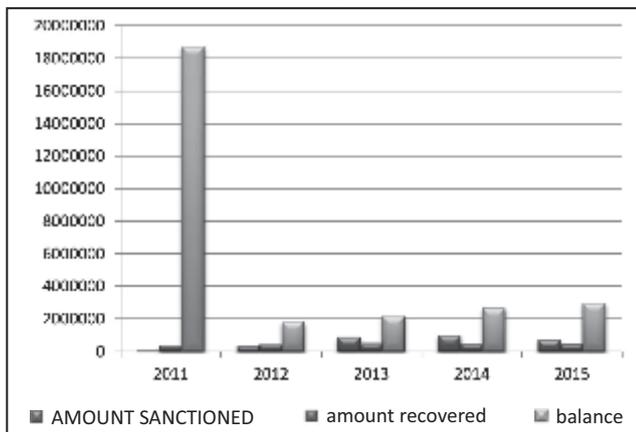
Year	Amount sanctioned	Amount recovered	Balance
2011	2489304.00	3348331.00	196876.00
2012	4008544.00	3538722.00	666698.00
2013	2912160.00	7714399.65	844458.35
2014	1585886.00	1669031.00	781313.35
2015	441899.00	1126625.00	96587.35
TOTAL	11407793.00	17397108.65	2585933.05

CHART 4.8 Chart showing the position of over draft loan by the NUC BANK for 5 year 2011-2015**Analysis and Interpretation**

From the above the table and chart shows that the total amount sanctioned by the NUC BANK for the overdraft loan in the year 2011 Rs. 2489304 it compared to the year 2015 Rs. 196876low. The balance of the overdraft loan for the year 2011 Rs 441899 it compared to year 2015 Rs. 96587.35 is low. The NUC BANK lends the loans on the basis of demands. The demand of the overdraft in 2015 is low compared to the 2011.

TABLE 4.9 Table showing the position of staff loan sanctioned from 2011-2015

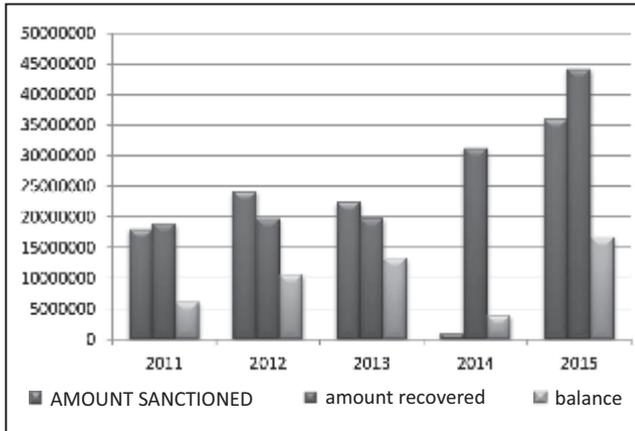
Year	Amount sanctioned	Amount recovered	Balance
2011	32500.00	354777.00	18674906.00
2012	330000.00	390463.00	1807033.00
2013	840000.00	515856.00	2131177.00
2014	965000.00	470229.00	2625948.00
2015	715000.00	411973.00	2928975.00
TOTAL	2882500.00	2143298.00	28168039.00

CHART 4.9 Chart showing the position of staff loan sanctioned by NUC BANK for 5 year 2011-2015**Analysis & Interpretation:**

From the above table and chart, shows that the total amount sanctioned by the NUC BANK for the staff loan in the year 2011 Rs. 32500 it compared to the year 2015 Rs. 715000 is high. The balance amount of the staff loan for the year 2011 Rs. 18674906 it compared to the year 2015 Rs. 2928975 is loan. At NUC BANK the staff loans is limited. The bank lends the loans for the staff is limited according to the management decisions.

TABLE 4.10 Table showing the position of deposit loans sanctioned from 2011-2015

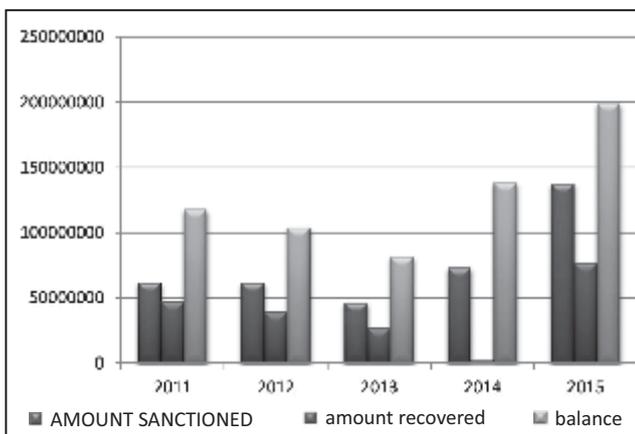
Year	Amount sanctioned	Amount recovered	Balance
2011	17966028.00	18861239.00	6073621.00
2012	24137868.00	19641366.00	10570123.00
2013	22382839.00	19764668.00	13188294.00
2014	965000.00	31176731.00	3932351.00
2015	45973050.00	44111517.00	16594437.00
TOTAL	111424785.00	133555521.00	50358826.00

CHART 4.10 Chart showing the positions of the deposit loans by NUC BANK for 5 years 2011-2015**Analysis and Interpretation**

From the above table and chart shows the positions of the deposit loans sanctioned by the Navanagar Urban Co-operative Bank in year 2011 Rs.17966028.00 it compared to 2015 Rs. 45973050.00 is high. The balance of the deposit loans for the year 2011 Rs. 6073621.00 compared to the year 2015 Rs. 16594437.00 is high. At NUC BANK lends the loans on the basis of the deposits of the customers and demands. The demands of the deposit loans are more in 2015 than the 2011.

TABLE 4.11 Table showing the positions of the personal loans for the year 2011-2015

Year	Amount sanctioned	Amount recovered	Balance
2011	60980000.00	46851355.00	117453573.00
2012	61006000.00	38869152.00	103324928.00
2013	45913000.00	26620094.00	81188080.00
2014	73040000.00	2725072.00	138022424.00
2015	137050000.00	76297666.00	198774158.00
TOTAL	377989000.00	191363339.00	638763163.00

CHART 4.11 Chart showing the position of the personal loans sanctioned by NUC BANK for 5 year 2011-2015**Analysis & Interpretation:**

From the above table and chart showing the total amount sanctioned for the year 2011 Rs. 60980000 it compared to the year 2015 Rs. 137050000 is high. The balance of the personal loans for the year 2011 Rs. 117453573 it compared to the year 2015 Rs. 198774158 is high. The NUC BANK lends the personal loans for the customers on their demands. The demand for the personal loans in 2015 is more than 2011.

Objectives

- To study the non-performing assets and its effects and profit derived from various loans and advances at NUC Bank.

4.2 NPA (non-performing assets)

NON-PERFORMING ASSETS (NPA)

NPA are one of the major concerns for banks of India. NPAs affect the liquidity and profitability, in addition to posing threat on quality of asset and survival of banks. NPAs reflect the performance of banks. The growth of NPA has a direct impact on profitability. The Indian banking sector has been facing serious problems of raising NPAs. A high level of NPAs suggests high probability and net-worth of bank and also erodes the value of the asset.

The bank profits are affected from the NPAs and also it will effect for the whole economy. The level of NPAs reflects the health of the bank.

If the loans are unable to recover by the bank or financing company in 90 and more days than it is treated as Non-performing assets.

Classifications of Non-Performing Asset At Navanagar Urban Co-Operatives Bank

• Standard assets

According NUC BANK standard assets is one which does not disclose any problem and which does not carry more than normal risk attached to the business. Such as assets is not an NPA.

• Sub - standard assets

The assets which are not exceeding 12 months at NUC Bank it is classified as Sub-standard assets. The loan agreement regarding interest and principal has been rescheduled after commencement of production, should be classified as sub-standard and should remain in such category for at least one year of satisfactory performance under the rescheduled terms.

• Doubtful assets.

The period of assets which are exceeding 12 month than it is considered as Doubtful assets at NUC Bank. If the loans which are not paid in the given time or if it is exceeding 12 month it will considered as the Doubtful assets.

• Doubtful assets two

The loan which is due above 1 year to 3 year is known as

doubtful assets. According to NUC BANK the loan which is due for the 1 year and above that it is considered as the doubtful assets two.

• Doubtful assets three

The loan which is due above 3 year is considered as doubtful assets three. According to the NUC BANK the loan which is due for above 3 year is considered as the doubtful three.

• Fully doubtful assets or loss assets.

According to RBI if the loans are not recovered by the bank if the internal or external auditors identified that it is loss assets or fully doubtful. Such amount assets are considered as bad debt in the NUC Ban.

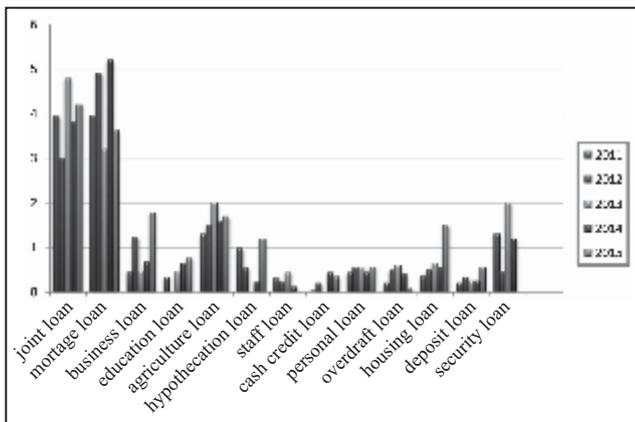
The bank classified the non-performing assets on the standard assets, sub-standard assets, doubtful 1, doubtful 2, and doubtful 3.

Table 4.12

Table show the percentage of NPA at NUC BANK

loans	2011	2012	2013	2014	2015
Joint loans	3.95	3	4.8	3.8	4.2
Mortgage loan	3.95	4.9	3.2	5.2	3.62
Business loans	.45	1.23	.48	.67	1.78
Education loan	.34	.02	.45	0.64	0.76
Agriculture loan	1.3	1.5	2	1.6	1.7
Hypothecation loan	.98	0.54	0	0.23	1.2
Staff loan	0.3	0.23	0.44	0.12	0.02
Cash credit loan	0.03	0.2	.01	.43	0.35
Personal loan	0.34	0.56	0.57	0.43	0.57
Overdraft loans	0.2	0.5	0.6	0.4	0.1
Housing loan	.36	0.49	0.65	.53	1.5
Deposit loan	0.2	0.34	0.25	0.25	0.56
Security loan	1.3	0.45	2	1.2	0
Gold loan	0.35	0.68	1.3	0.45	1.6

Chart 4.12 Chart show the percentages of the NPA of all the loans at NUC BANK



Analysis & Interpretations

From the above chart and table show the percentages of the NPAs of the NUC BANK. The percentage of the NPAs in 2015 for joint loans is 4.2 and the mortgage loans are 3.62. The loans lend on trust of the person so that the bank did screen their customers. It led to more NPAs in the NUC BANK.

OBJECTIVES:

- To understand the financial performance of NUC Bank

4.4 Financial performance of the NUC BANK

Analysis focuses on the following parameters:

1) Capital Adequacy Ratio:

Capital Adequacy is one of the major indicators of the financial health of a banking entity. It is measured by the ratio of banks' own capital and its risk-weighted assets. Capital adequacy plays a vital role in minimizing the cascading effects of banking and financial and financial sector.

• Capital to Risk Weighted Assets Ratio :

It explains the relation between net capital funds and risk-weighted assets. It is calculated by using the following formula.

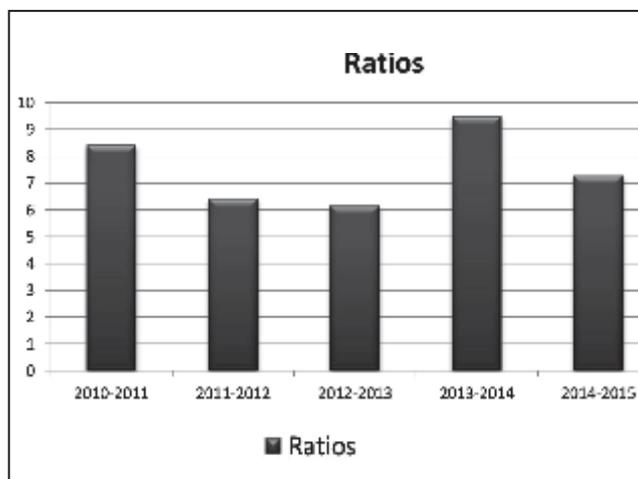
$$\text{CRAR} = (\text{Net Capital Fund} / \text{Risk Weighted Assets}) * 100$$

Table 4.13 Table showing the ratio of the Capital to Risk Weighted Assets Ratio:

Year	Net capital funds (Rs. in lakhs)	Risk weighted assets (Rs. in lakhs)	Ratios (in%)
2010-2011	278.71	3323.99	3323.99
2011-2012	271.18	4240.70	4240.70
2012-2013	381.40	6199.30	6199.30
2013-2014	707.03	7454.36	7454.36
2014-2015	629.80	8671.86	8671.86

CHART 4.13

Chart showing the ratios of capital to risk weighted



Interpretation

From the above table it shows the growth of net capital fund of the NUC Bank in the year 2011 it was Rs. 278.71 lakhs and it increased to Rs. 629.80 lakhs. It shows the progressive growth. The growth rate of risk-weighted assets in 2011 Rs. 3323.99 lakhs it increased in 2015 Rs. 8671.86. It shows that the NUC Bank is not in a good solvency position. All this explains the strength of the NUC Bank of sound capital bases and its adequacy.

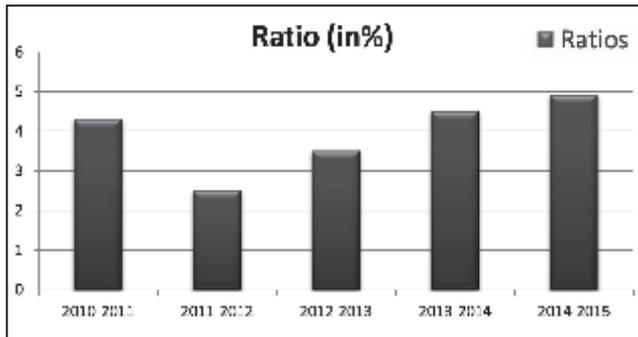
• Non-Performing Assets to Net worth Ratio.

It explains the relation between net non-performing assets to net worth of the organisation. It is an important ratio that indicates the status of capital adequacy is net NPAs to net worth ratio. It is calculated by using the following formula.

$$\text{Net to Net worth ratio} = (\text{Net NPAs} / \text{Net Worth}) * 100$$

Table 4.14 Table showing ratio of the net NPAs to Net worth

Year	Net NPAs (Rs. in lakhs)	Net worth (Rs. in lakhs)	Ratios (in%)
2010-2011	458.54	21964.0	2.08
2011-2012	120.71	3191.43	3.78
2012-2013	227.24	4669.95	4.86
2013-2014	263.71	5817.44	4.53
2014-2015	351.05	7154.54	4.91

CHART 4.14 Chart showing the ratio of net NPAs to net worth**Analysis and Interpretations**

From the above chart and table the show the net NPA and net worth of the NUC BANK. in the year 2011 Rs. 458.54 lakhs and in 2015 Rs. 351.05 lakhs it shows that

Net NPA as gradually improved. Net worth in the year 2011Rs 21964.0 lakhs and in 2015 Rs. 7154.54 the ratio (%) in the 2011 2.08% & in 2015 4.91%. it indicated the a healthy of the financial performance of the NUC Bank.

2. Assets Quality Ratio

It signifies the degree of the risk in a bank's assets and financial strength, mainly investment and loans. The maintenance and evaluation of assets quality it is an important components in assessing the current situations & feature viability of a bank.

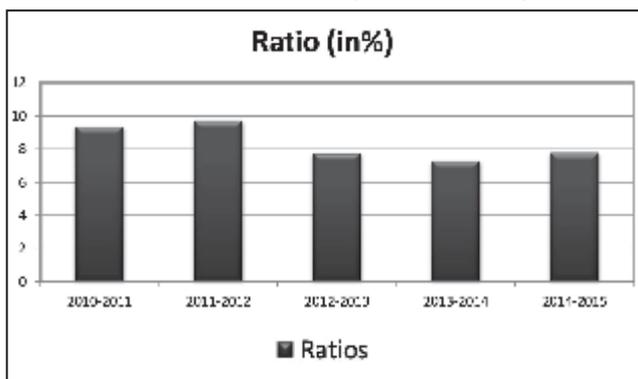
- **Government securities to total investment ratio**

It is calculated by the following formula.

$$= (\text{Government securities} / \text{Total investment}) * 100$$

Table 4.15 Table showing the ratio of government securities to total investments ratio

Year	Government securities (Rs. in lakhs)	Total investments (Rs. in lakhs)	Ratios (in %)
2010-2011	662.82	7098.44	2.08
2011-2012	879.30	9063.20	3.78
2012-2013	136.44	1764.54	4.86
2013-2014	167.32	2303.28	4.53
2014-2015	174.06	2240.63	4.91

CHART 4.15 Chart showing the ratio of government's securities to total investments**Analysis and Interpretations**

From the above table and chart it shows the government's securities in the year 2011 Rs. 662.82 lakhs and 2015 Rs. 174.06 lakhs it show that the NUC Bank are increased their investment in the governments securities but in decline in the year 2013-2014. The total investments form the NUC BANK in the year 2011 Rs. 7098.44 lakhs and in 2015 Rs. 2240.63 lakhs. The ratios (%) in the year 2011 is 2.08% and in 2015 4.91%. It shows the risk involvements in the investments.

• Net Non-Performing Assets (NPAs) to Net advance Ratio

Net non-performing assets to net advances Ratio measures the position of non-performing assets out of total advance sanctioned. It is calculated by the following formula

$$= (\text{Net NPAs} / \text{Net advance}) * 100$$

2. Assets Quality Ratio

It signifies the degree of the risk in a bank's assets and financial strength, mainly investment and loans. The maintenance and evaluation of assets quality it is an important components in assessing the current situations and feature viability of a bank.

• Government securities to total investment ratio

It is calculated by the following formula.

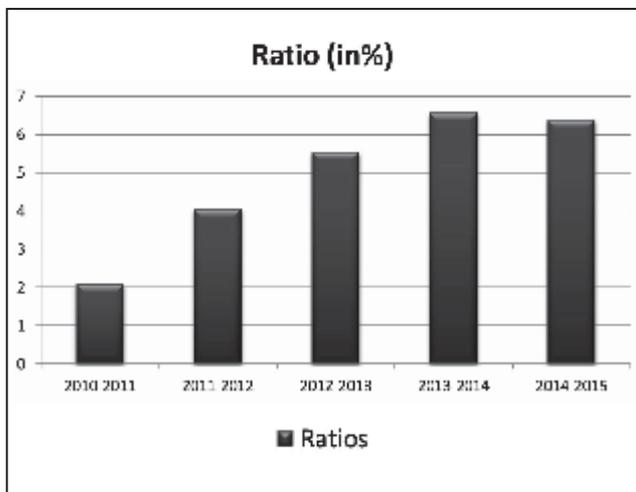
$$= (\text{Government securities} / \text{Total investment}) * 100$$

Table 4.16 Table showing the ratio of the Net NPAs to Net advance

Year	Net NPAs (Rs in lakhs)	Net Advance (Rs. in lakhs)	Ratios (in %)
2010-2011	458.54	21964.1	2.08
2011-2012	120.72	2989.20	4.03
2012-2013	227.24	4106.39	5.53
2013-2014	263.71	4020.64	6.558
2014-2015	351.053	5501.80	6.380

CHART 4.16

Chart showing the ratios of net NPAs to net advance



Analysis and Interpretations

From the above table and chart shows the net NPA to net advance at NUC BANK. The net NPA in year 2011 Rs. 458.54 lakhs and in 2015 Rs 351.053 lakhs. Net advances in 2011 Rs. 21964.1 lakhs and in 2015 Rs. 5501.80 lakhs. The ratios (%) in year 2011 is 2.08 % and in 2015 6.380%. it shows that the increasing net NPA it is not good for the growth the NUC Bank.

• Priority sector advances to total advance ratio

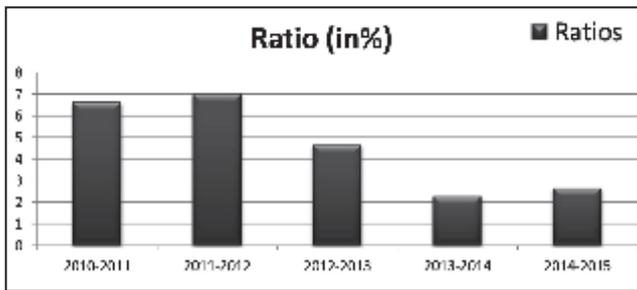
The priority sector advances to total advance helps to know how much does the bank gives importance to the priority sector and how much does the bank sanctioned for that sanctioned form the total advance.

It is the calculated by the following formula

$$= (\text{Priority sector advance} / \text{Total advance}) * 100$$

Tables 4.17 Table showing the ratio of priority sector advance to total advance

Year	Priority sector (Rs. in lakhs)	Total advance (Rs. in lakhs)	Ratios (in %)
2010-2011	138.15	2084.58	6.62
2011-2012	209.3	2989	7.00
2012-2013	190.82	4106.3	4.64
2013-2014	91.02	4106.3	2.21
2014-2015	144.9	5501.8	2.63

CHART 4.17 Chart showing the ratios of priority sectors advances and total advances at NUC BANK**Analysis and Interpretations**

From the following table and chart shows the ratios of priority sectors advances and the total advances at NUC BANK. The advances for the priority sectors in the year 2011 Rs. 138.15 lakhs and it increased in 2015 Rs 144.9 lakhs but it decline in the year 2013-

2014. Total advances of the NUC BANK for the year 2011 Rs. 2084.58 lakhs and in 2015 Rs. 5501.8 lakhs. The ratios (%) in year 2011 are 6.62% and in 2015 2.63%. It shows that the NUC bank as not give more signifies for the priority sectors.

3. Management Quality Ratio.

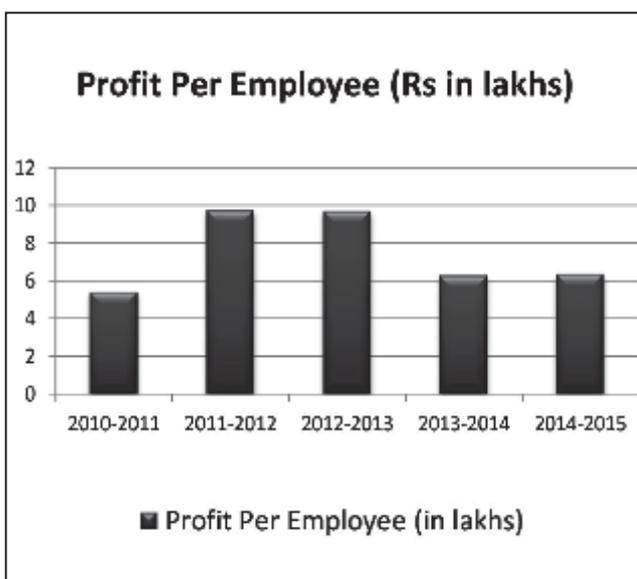
It is another vital component that ensures the growth and survival of the bank. Management quality ration is important to improve and develop the methods of grading the management's efficiency. Management quality ratios are used by the investor to evaluate the management efficiency. Profit per employee.

It is calculated by the following formula

$$= (\text{Net profit}/\text{No. of employer}) * 100$$

Table 4.18 Table showing the ratio of profit per employee

Year	Total income (Rs. in lakhs)	Total employees	Profit per employee (Rs. in lakhs)
2010-2011	59.07	11	5.37
2011-2012	107.01	11	9.72
2012-2013	107.47	11	9.7
2013-2014	125.29	20	6.26
2014-2015	126.48	20	6.32

CHART 4.18 Chart showing the profit per employee**Analysis and Interpretations**

From the above table and chart show the profit per employees at NUC BANK. The total income of the NUC BANK in the year 2011 is 59.07 lakhs and in 2015 is 126.48 lacks. A total employee of NUC BANK in the year 2011 is 11members and in 2015 are 20 members. The profit per employees in the year 2011 is Rs. 5.37 lakhs and in 2015 Rs. 6.32 lakhs. It shows that profit of NUC Bank as increased.

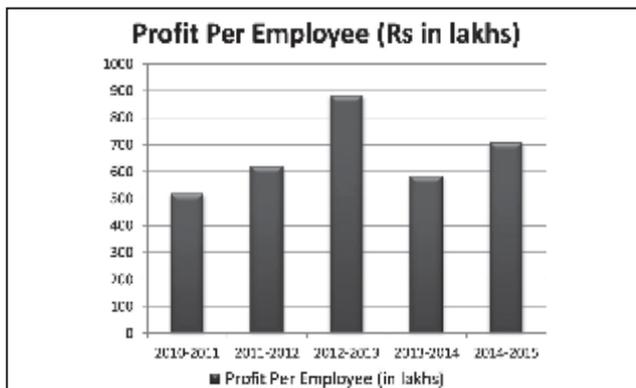
• Productivity per employee

It show that employees contributions towards the total business. It is calculated by following

$$= (\text{Total business}/\text{No. of employees}) * 100$$

Table 4.19 Table showing the productivity per employee

Year	Total Business (Rs. in lakhs)	No. of employees	Per employee productivity (Rs. in lakhs)
2010-2011	5681.15	11	516.47
2011-2012	6792.58	11	618.00
2012-2013	9698.72	11	881.70
2013-2014	11632.06	20	581.60
2014-2015	14146.15	20	707.30

CHART 4.19 Chart showing the per employee productivity**Analysis and Interpretations**

From the above the table and chart shows the employees productivity of the NUC BANK. The total

business in 2011 Rs 5681.15 lakhs and in 2015 14146.15 lakhs. The total members in 2011 are 11 members and in 2015 are 20. The productivity per employees in 2011Rs 516.47 lakhs and in 2015 Rs 707.36 lakhs.

4. Earnings Ratios.

- **Profit margin**

It is calculated by the following formula

$$= (\text{Net profit} / \text{Total income}) * 100$$

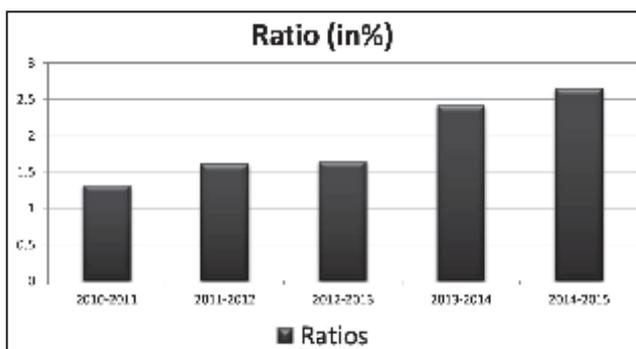
- **Profit margin**

It show that employees contributions towards the total business. It is calculated by following

$$= (\text{Total business} / \text{No. of employees}) * 100$$

Table 4.20 Table showing the profit margin of the NUC BANK

Year	Net profit (Rs. in lakhs)	Total income (Rs. in lakhs)	Ratios (in %)
2010-2011	126.48	9613.47	1.315
2011-2012	125.29	7822.12	1.60
2012-2013	107.47	6546.67	1.64
2013-2014	107.01	4438.32	2.41
2014-2015	877.31	331105.04	2.64

CHART 4.20
Chart showing the ratios of profit margin**Analysis and Interpretations**

From the above table and chart show the profit margin of NUC BANK.

The net profit in year 2011 Rs. 126.48 lakhs and in 2015 Rs. 877.31 lakhs. The total income in 2011 Rs. 9613.47 lakhs and in 2015 Rs. 33115.04 lakhs. Ratio (%) in 2011 is 1.315% and in 2015 2.64%.

5. Liquidity Ratio

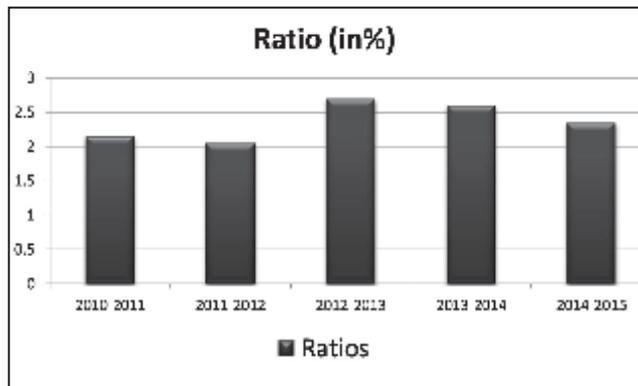
- **Total investment to total ratio.**

It is calculated by the following formula

$$= (\text{Total investment} / \text{Total ratio}) * 100$$

Table 4.21 Table showing the investment to total ratio of the NUC BANK

Year	Total investment (Rs. in lakhs)	Total assets (Rs. in lakhs)	Ratios (in%)
2010-2011	709.84	3311.05	2.14
2011-2012	906.32	4438.32	2.04
2012-2013	176.45	6546.67	2.69
2013-2014	230.32	7822.12	2.59
2014-2015	224.06	9613.47	2.33

CHART 4.21 Chart showing the ratios of total investments**Analysis and Interpretations**

From the above table and chart shows the total investments from the NUC BANK in year 2011 to 2015. The total investments in year 2011 Rs 709.84 lakhs and in year 2015 Rs 224.06 lakhs. The total assets in 2011 Rs 331.05 lakhs and in 2015 9613.47 lakhs. The ratios (%) in 2011 is 2.14 % and in 2015 2.33%.

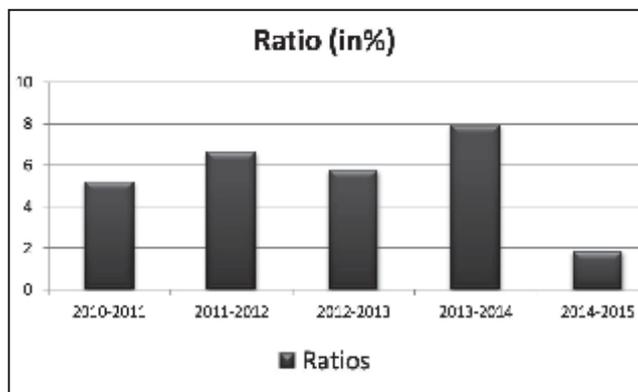
- Cash to total assets ratio

It is calculated by the following formula

$$= (\text{Cash} / \text{Total assets}) * 100$$

Table 4.22 Table showing the cash to total assets ratio of the NUC BANK

Year	Cash (Rs. in lakhs)	Total assets (Rs. in lakhs)	Ratios (in %)
2010-2011	171.80	3311.05	5.188
2011-2012	2940.03	44383.27	6.62
2012-2013	376.57	6546.67	5.75
2013-2014	6210.01	7822.12	7.93
2014-2015	176.50	9613.47	1.83

CHART 4.22 Chart show the ratios cash and total assets at NUC BANK**Analysis and Interpretations**

From the above table and chart show the total cash and total assets in NUC BANK. The total cash in 2011 Rs 171.80 lakhs and in 2015 Rs 176.50 lakhs. The total assets in a year 2011 Rs 3311.05 lakhs and in year 2015 Rs is 9613.47 lakhs. The ratios (%) in year 2011 5.188% and in year 2015 1.83%.

Summary of Findings

- Major part of loan is going out in the form of gold loan, hypothecation loan, cash credit loans, joint loan
- Business loans increased from Rs. 600000 lakhs to Rs. 800000 lakhs.
- Joint loans increased from Rs. 1884500 lakhs to Rs. 43549000 lakhs.
- Education loans increased from Rs. 162000 lakhs to Rs. 100000 lakhs.
- Bank providing various types of loans on the basis of short term, medium term long term.
- In every audit the bank rating is “A” grade because of doing the statements in kannada .
- Bank lend the loans and advances for all the loyal customers
- Interest rate charged by the bank on loans and advances are reasonable to customers compared to the national banks.
- The major profit of the banks comes from the interest from the investments and loans.
- Net profit of the bank is increasing from 12529115.24 to 12648987.92
- Investments of the banks are increased in 3014-2015 Rs. 2240.64
- Total business of the year 2014-2015 is 14146.15 lakhs
- Net owned of the Navanagar Urban Co-operatives Bank for the year 2014-2015 is 758.63 lakhs
- Growth rate of the bank is gradually increasing in the past year
- During the study it was observed that Navanagar Urban Co-operative Bank Ltd., has been functioning effectively
- The NPAs are more in standard assets with 92 %.
- The NPAs are more in the mortgages loans and joint loans.

Suggestions

- To increase the education loans and agriculture loans the bank should promote thorough advertisements for the surrounding places.
- Bank should screen the applicant properly so that it will help for decreasing NPAs and reduces the non-

payments loans.

- Bank should also lend the other loans with the mortgage loans; joint loans so that the NPAs can be reduce.
- The bank should lend the loans with the valuable security and the nominees for the applicants should have the account in the bank so that it will avoid the NPAs and the non-payments of loans.
- The manger should give more publicity about the bank and their special offers, so that it will increases in customers in bank.
- Manger should do the different departments for credit appraisal in bank so that it will help to know the customers better and it decreased the non-payments of loans.
- The bank should introduce their own website.
- The bank should introduce the mobile bank and E - banking for the customers so that it helps for the transitions.
- The procedure to housing loans is very lengthy and its take much of time for getting the loans for the customers. That's why the bank as to simplify the procedures.
- The bank should lend the loans for the priority sectors like educations loans, agriculture loans and business loans.

Limitation of the Study

- The data for the study mainly based on a single branch of Navanagar Urban Co-operative Bank Ltd.
- The information from the bank was in adequate.
- The study is based on the past 2 to 5 years only.
- The study period is limited to 10 week only.
- The study is limited up to primary and secondary collections

Conclusion

The following conclusion is drawn after analysing the data from the bank. The whole study was done on credit appraisal method and credit monitoring at Navanagar Urban Co-operative Bank Ltd, K.R.Nagar

The bank has to take effective measure to extended measure to extend its operations in the field of lending it has created awareness among the need customers about the availability of various loans facilities & recover the same by taking preferable measures.

Credit appraisal is the pre-qualification screening criteria, collection of the required information on credit and applications are screened. Credit appraisal will help the institutions from the fraud and misused the purposes.

The services offered by the bank such as saving bank account current deposit account, recurring deposit account, gold loan facility, safety locker facility, crop loans to farmers, business loan, personal loans, education loan facility to the student, housing loan joint loan, employee loan, cash credit loan facility, hypothecation loan, over draft facility, the facility which are provided by other banks, same facilities are provided this banks also.

By analysing & interpretations of loans and advances of the bank for 5 year the performance of the bank was good compared to other banks in K. R. Nagar.

By analysing and interpretations of loans and advances of the bank for 5 year the performances of the bank was good compared to other banks in K. R. Nagar.

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Profit and loss a/c for the period ending April - 2014 to March - 2015

EXPENDITURES			INCOME		
Particular	Rs. in laks	Rs. in laks	Particular	Rs. in laks	Rs. in laks
Interest on deposits and loans		61289019	Interest on loan		
Staffs salary and allowance			Gold loan	21375841	
Staffs salary	7037754		Property loan	11938071	
Future fund	711557		Personal loan	23863966	
Staff medical allowance	60700		Joint loan	3892783	
Staff training	21950		Home loan	5556931	
Staff excretions	490188		Agrictular loan	74000	
Staff gratuity	250000	8572149	Other loans	7704522	
Adminsation expenses			Penalty interest		
Pigmy commission	1799902		Interest due on	1132736	
Traveling allowance	120820		good loans	3340188	78879038
Building rent	636000		Interest on Investment	1256432	
Post, telephone, electricity	363156	2919878	Interest due on investment	2539844	
Administration office expenses			Interest on M.D.C.C.B	3619837	
Meeting expenses and director fees	64100	64100	despotise		
Insurance and Tax			Profit on investment	607600	19330713
Investment insurance	697629		Non-interest income		
Tax for bank work	5000		Share fees	172247	
Tax for the water and building	30606		Insurance on loans	406423	
Bank indement policy	263554	996789	Rent on lockers		
Income Tax			Recovery Expense on post	107675	
Income tax for 2014-2015	5400000		Recovery cost	32537	
Income tax for 2013-2014	1116979		Recovery cost on	5448	
Income tax for 2012-2013	73432		Legal expense from loan	176553	
Income tax for paying 0n 2014 - 2015	1000000	996789	Other income	1665599	
Audit fee	391500	391500	Enters fees	39890	
Reserves			Bank commission	1467342	
NPA	3000000		Pigmy commission (premature recovery)	960588	
Good will	300000		Arbitation & EP fee	12380	
Special reserves	635000				
Reserves for IFR/IDR	60000	3995000			5046682
Printing, Stationary and advertisement					
Advertisement expenses	264710				
Printing and stationary	772701				
Paper and magazine	18694	1056105			
Bank and cleaning expense	86867	86867			

Profit and loss a/c for the period ending April - 2014 to March - 2015

EXPENDITURES			INCOME		
Deprecations	Rs. in laks	Rs. in laks	Particular	Rs. in laks	Rs. in laks
Furniture's	400000				
Computers	1150000				
Premium on investment (loss)	211339				
Generator	35000				
Bank lease building	40000				
ATM & EP Fee	14870	203633			
Recovery cost on the loans					
Recovery cost	37600				
Legal cost on loans	179212				
Arbitration & EP Fee	14870	231682			
Other expenses					
Expenses on annual meeting	627775				
Yashwini bank	86700				
Improvement	61050				
Computer M.M.C	123000				
Building repairs and construction cost	85436				
Cost on opening of branch	58425				
Other costs	335220	1377606			
TOTAL COST		90607445			
Net profit (2014-2015)		12648987			
Total		103256433	Total		103256433

BALANCE SHEET

Liability	2013-2014	2014-2015
Share Capital	2,22,59,300.00	2,98,48,750.00
Special Reserves & other Funds	3,59,15,174.78	4,60,14,267.02
Deposits	65,24,93,706.29	78,65,62,306.89
Staff, Collections of Pigmy, and Apperceptions	9,04,653.00	11,36,913.00
Borrowings	-----	-----
Suspense Accounts	9,44,051.50	5,19,049.50
Branch Adjustments	-----	2,98,44,416.45
Other Liabilities	28,95,793.22	40,88,843.14
Reserves	5,42,70,736.00	5,06,83,793.00
Net Profit	1,25,29,115.24	1,26,48,987.92
Total	78,22,12,530.03	96,13,47,326.92
ASSETS	2013-2014	2014-2015
Cash in Hand	62,10,009.00	1,76,50,718.00
Cash at Bank	2,21,18,304.70	4,04,67,867.93
Investments	23,03,28,300.00	22,40,63,950.00
Loans	51,07,11,958.35	62,80,52,904.35
Advances	4,22,314.00	1,53,79,44.00
Other Assets	80,24,771.02	6,19,77,32.23
Currents Assets	43,96,686.96	13531793.96
Branch Adjustments	186.00	2,98,44,416.45
Total	78,22,12,530.03	96,13,47,326.45

Information Security through password at Personal level for digital accounts

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Abstract

In 21st century modern world of computer security every website, game and computer requires one important element that's password. Often each password has different requirements of length and complexities either force by application themselves or personal likes. At personal level most users this creates a huge headache of creating & remembering passwords. Hopefully some of the outcome from this paper described and may users to create more secure passwords for protecting of personal information. While choosing a password there are so much to consider. These passwords can often be cracked in seconds with the use of a Dictionary or Rainbow Table attack. This paper made an attempt to find out awareness of attacks.

Key words

Password, Attack, Security, Information, Frequency

Introduction

No matter how easy your passwords are to remember it can still be difficult to remember which password you created for which account. While you could use the same password for every account that can cause very serious issues and limits the overall security of your online accounts & identity. Basically password is useful to secure the content, text or files can be saving from the wrong users. It is a secret word or string of characters that is used for authentication, to prove identity or gain access to a resource. Collection of integrated modular technologies designed specifically to meet the complex and growing compliance and security requirements associated with privileged identity management and privileged access control. In short information security is the practice of keeping data protected from corruption and unauthorized access. The focus behind data security is to ensure privacy while protecting personal or corporate data.

Unauthorized access of your account could lead to numerous problems for the larger corporation or even

the personal home user. Having your bank account details stolen is just as damaging as the system administrator who was just robbed for the client information in their database. Securing stored data involves preventing unauthorized people from accessing it as well as preventing accidental or intentional destruction, infection or corruption of information. Keeping your passwords, financial, and other personal information safe and protected from outside intruders has long been a priority of businesses, but it's increasingly critical for consumers and individuals to heed data protection advice and use sound practices to keep your sensitive personal information safe and secure. There's an abundance of information out there for consumers, families, and individuals on protecting passwords, adequately protecting desktop computers, laptops, and mobile devices from hackers, malware, and other threats, and best practices for using the Internet safely. But there's so much information that it's easy to get confused, particularly if you're not tech-savvy. Passwords grant access to IT resources such as a bank account, computer, email, or a server on a network and are designed to limit access to only those individuals who are authorized. In this way they help protect your privacy and identity. The quality (strength) of your password is an important factor to consider. If passwords are guessed or stolen, someone logging in under

When we talk about information security always consider triangle which is known as CIA

Confidentiality: talk about confidentiality of information, protecting the information from disclosure to unauthorized parties.

Integrity: Integrity of information refers to protecting information from being modified by unauthorized parties.

Availability: Availability of information refers to ensuring that authorized parties are able to access the information when needed.

The single sign-on scheme is also implemented into strong user authentication systems. However, it requires individuals to login using multiple factors of authentication. This may include a password, a one-time password, a smart card or even a fingerprint.

Literature Review

1] Gilbert Notoatmodjo and Clark Thomborson:⁷ the title of the paper was “Passwords and Perceptions”, this research paper found at the Australasian Information Security Conference (AISC2009). The researcher explains the concept of same password. The research sample size was all student located in the at the University of Auckland. Further it was observed that research said that user like to use same password for various accounts though they know the risk behind the digital operation. Many user are not aware of Strong passwords for their accounts. It is necessary that users need be taught that how to identify which digital accounts are really important, and require strong password.

2] D. SanthiJeslet, G. Sivaraman, M. Uma, Dr. K. Thangadurai, Dr. M. Punithavalli:⁵ The research was entitle “Survey on Awareness and Security Issues in Password Management Strategies”, explore the various password management strategy which included management of length of password, how to construct password with mixing of numbers and characters and special symbol, age of password and use non-dictionary word. The main aim of this paper was to judge the respondents attitudes and awareness password security related issues and to obtain some insight for password composition reuse along with management practice. At the end researcher has given recommendation that education towards password management is necessary. The user needs to compose strong password for their various digital account to keep their data secure.

3] YinqianZhang Fabian Monroe Michael K. Reiter:⁸ analysis was on “The Security of Modern Password Expiration: An Algorithmic Framework and Empirical Analysis”, stated that how attackers or hackers are using various password to obtain the information through the algorithms. The study use framework and confirm previous conjectures that the effectiveness of expiration in meeting its intended goal is weak. This study goes beyond and evaluating susceptibility of accounts through the search techniques

4] Butler, R. & Butler, M’ : the paper entitle “The password practices applied by South African online consumers” analysis how people are composing their password many user always keep password as their date of birth wife name daughter name etc. Many times it is dangerous because steal of information may be very easy. At the end study concluded that remembering lot of password is burden on user.

Scope of the research

Scope of the paper is limited to construction of password method, awareness of concept of weak and strong password, habit of frequently changes in the password. This research paper not covered the backup solution and risk assessment of information

Statement of the problem

Password plays vital role in the information security for computer users. Client information, payment information, personal files, bank account details - all of this information can be hard to replace and potentially dangerous if it falls into the wrong hands. Information lost due to disasters such as a flood or fire is crushing, but losing it to hackers or a malware infection can have much greater consequences.

Research Method

This is descriptive and exploratory research. The research used primary and secondary data. The primary data was collected through google form with structured questionnaire. The total sample size was 86. Secondary data was collected from published research paper, articles.

Objective of the study

1. Identify the awareness of various password attracts and concept of weak and strong passwords
2. To study the password change habits of user at personal level
3. Analyze the password edifice method at personal level

Hypothesis

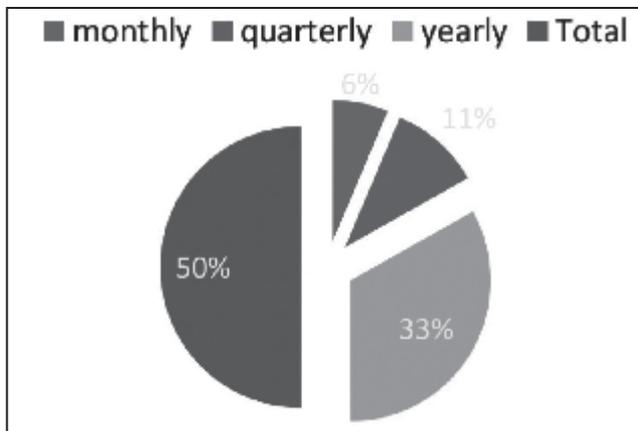
1. There is no positive relationship between age and password edifice.
2. There is no positive relationship between awareness of various password attack and password change habits.
3. There is no positive relationship between age and changing password habit.

Data analysis and findings1

Table no 1.1 frequency of change of password

How frequently do you change your Password?				
	F	%	Valid %	Cumulative %
monthly	11	13	12.8	12.8
quarterly	18	21	20.9	33.7
yearly	57	66	66.3	100
Total	86		100	

Graph 1.1 frequency of change of



Graph 1.2 usages of same password for multiple accounts

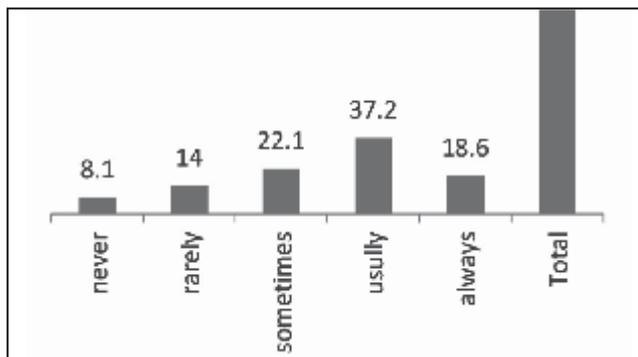


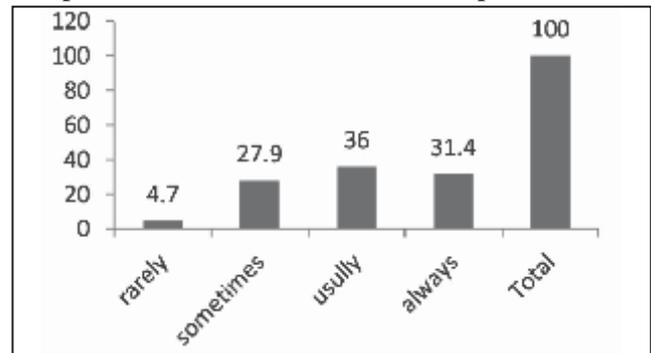
Table 1.2 usages of same password for multiple accounts

Do you use the same Password for multiple accounts?				
	F	%	Valid %	Cumulative %
never	7	8.1	8.1	8.1
rarely	12	14	14	22.1
sometimes	19	22	22.1	44.2
usually	32	37	37.2	81.4
always	16	19	18.6	100
Total	86		100	

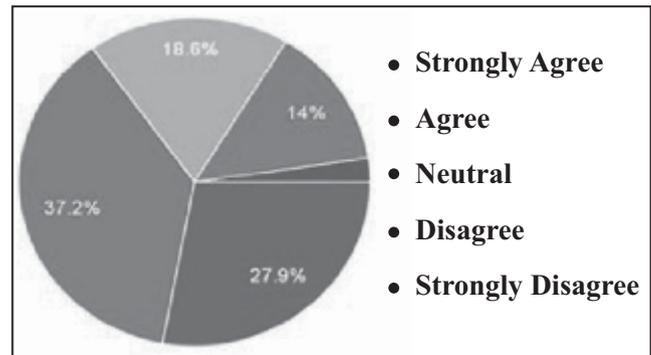
Table 1.3 remembrance of different password

Different Password for different account remembrance is difficult			
F	%	Valid %	Cumulative %
4	4.7	4.7	4.7
24	27.9	27.9	32.6
31	36	36	68.6
27	31.4	31.4	100
86		100	

Graph 1.3 remembrance of different password



Graph 1.4 Do you think password ID safe guard of your all digital information



Graph 1.5 Do you have any idea of password attack?

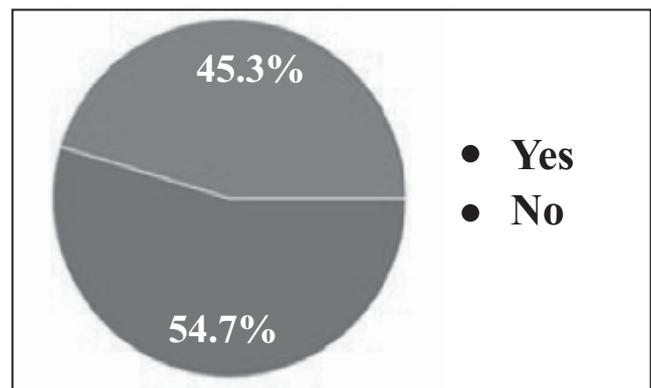


Table Number Graph Number	Elucidation of table and graph
Table 1.1	Shows that 12.8% respondents changes their password monthly and 33.7% quarterly
Graph 1.1	Explain that 66.3% of respondents stated that they change their password yearly means most of the user changes their password yearly
Table 1.2	Stated that 8.1% respondent said that they never use same password for multiple accounts. Further 22.1% of respondents said very rarely, 44.2% of respondents said sometimes
Graph 1.2	From this graph we can conclude that 37% of respondents stated that usually they use same password for multiple accounts an 19% stated always.
Table 1.3	Only 4.7% respondents stated that very rarely they forgot their multiple password and 22.9% of respondents stated that sometimes they forgot it.
Graph 1.3	This graph explain that 31.4% of respondents stated it is difficult to remember the multiple password
Graph 1.4	The graph shows that 37.2% respondents awareness of the role of information and risk management. Further 18.6% respondents do not have any idea about the role password
Graph 1.5	Though the password attack is very common still 45.3% respondents found that they do not have any idea about it

Hypothesis Testing

Table 1.4 Descriptive Statistics for password construction

Descriptive Statistics			
Age	Mean	Std. Deviation	N
password	2.7326	4.47851	86
construction	8.0116	5.34128	86

Table 1.5 correlations between age and password construction

Correlations			
There is no positive relationship between age and password edifice.		Age	Password construction
Age	Pearson Correlation	1	-0.075
	Sig. (2-tailed)		0.495
	Sum of Squares and Cross-products	1704.85	-151.733
	Covariance	20.057	-0.075
	N	86	-0.075
password-construction Habits	Pearson Correlation	-0.075	1
	Sig. (2-tailed)	0.495	
	Sum of Squares and Cross-products	-151.733	2424.988
	Covariance	-1.785	28.529
	N		86

Table 1.6 descriptive statistics for change of password and awareness of password attack

Descriptive Statistics			
	Mean	Std. Deviation	N
How frequently do you change your Password?	Mean	.71452	86
Do you have any idea about Password Attacks?	1.4535	.50075	86

Table 1.7 correlations between awareness of various password attacks and password change habits

Correlations			
There is no positive relationship between awareness of various password attack and password change habits.		How frequently do you change your Password?	Do you have any idea about Password Attacks?
How frequently do you change your Password?	Pearson Correlation	1	.202
	Sig. (2-tailed)		.062
	Sum of Squares and Cross-products	43.395	6.140
	Covariance	.511	.072
	N	86	86
Do you have any idea about Password Attacks?	Pearson Correlation	.202	1
	Sig. (2-tailed)	.062	
	Sum of Squares and Cross-products	6.140	21.314
	Covariance	.072	.251
	N		86

Table 1.8 correlations between age and changing password habit

Correlations			
There is no positive relationship between age and changing password habit		Age	How frequently do you change your Password?
Age	Pearson Correlation	1	.130
	Sig. (2-tailed)		.234
	N	86	86
How frequently do you change your Password?	Pearson Correlation	.130	1
	Sig. (2-tailed)	.234	
	N		86

Sr. No.	Hypothesis	Test	P Value	Status
1	There is no positive relationship between age and password edifice.	Correlations	0.495	As p value is 0.495 means there is no significance relationship between age and password edifice
2	There is no positive relationship between awareness of various password attack and password change habits.	Correlations	0.62	The P value is 0.62 which show that there is no positive relationship between awareness of password attack and password change habits
3	There is no positive relationship between age and changing password habit	Correlations	0.234	Here the result of test show the p value 0.234 it means there is no positive relationship between age and password change habits

Conclusion

The most important thing to consider when creating a password is the length. Make sure you have a password that is at least 8 characters long because each digit you add to your password exponentially increases the difficulty of cracking it. Your passwords would be at least 16 characters, & contain a combination of numbers, symbols, uppercase letters, lowercase letters, and spaces. The password would be free of repetition, dictionary words, user names, pronouns, IDs, and any other predefined number or letter sequences.

For example, create a phrase like "I hope the Giants will win the World Series in 2016!" Then, take the initials of each word and all numbers and symbols to create your password. So, that phrase would result in this: IhtGwwtWSi2016!

Brute force attacks is stealing the password is through

guess. Here hackers try all the possible combinations with the help of personal information of an individual. Hence user should not use a password that represents their personal information like nicknames, phone numbers, date of birth etc. Dictionary attacks also try with all possible dictionary words to crack your password with the help of some software tools. Hence user should not use dictionary words for example animal, plants while creating the passwords for login accounts. Very important sharing the passwords with the strangers may also lead to loss of your personal information. They may get access to your information and can do anything with it. They can copy, modify or delete it. At any cost do not share passwords with strangers. Do not use weak passwords or blank passwords because it most easiest ways to attackers to crack into your system use strong Passwords to protect your personal information.

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Web logy

1. <http://www.cnet.com/how-to/the-guide-to-password-security-and-why-you-should-care/>
2. <https://support.1password.com/secure-by-design/>

*Market Ecosystems, Product Hierarchy
and User Readiness for Wearable
Technology in Diabetes Management:
An Exploratory Study*

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Abstract

Diabetes mellitus (DM), the Type 2 category of diabetes is a major health epidemic that the world population is battling. According to the International Diabetes Federation (IDF) statistics, the current estimated cases of diabetics in the country are approximately 62 million. By the year 2030, over 100 million people in India are estimated to suffer from diabetes. The health care industry in general and medical technology companies in particular are committed to bringing out innovative systems and products that ensure a better management of chronic diseases that require prolonged monitoring and management. Self-monitoring of blood glucose (SMBG) has become an integral part of the diabetes management. Diabetes treatment and patient care is also witnessing advancements in continuous glucose monitoring that requires active participation by patients in management of the condition. A holistic management of DM requires a multipronged approach in terms of lifestyle management, dietary regulation, continuous monitoring and pharmacotherapy.

The current study analysed the breadth and depth of digital disruptions that are redefining diabetes management of patients. Further the research focused on the study of wearable technology. It involved a survey of available options for the estimation and monitoring of vital body parameters in diabetes management. The current study looked at identifying monitoring market ecosystem and its linkages with health care industry. Products hierarchy for wearable monitoring systems were ascertained.

The penetration of wearable devices in patient management depends on positive response and buy-in from health care professionals. The study thus involved in-depth interviews with health care professionals, namely, nutritionists, diabetologists and physicians who are critical opinion makers in the acceptance of digital solutions in diabetes management. The objective of the interviews was to assess their level of

satisfaction with wearable technology as an aid for disease management. An attempt was also made to explore their readiness to incorporate this technology in regular patient treatment and care. Finally the paper aimed to provide recommendations on opportunities for future disruptions.

Keywords

Diabetes management, wearable technology, digital disruptions, market ecosystems, product hierarchy

Introduction

Digital Disruptions have changed the way most businesses happen today. The e-commerce and e-business models have redefined the working of numerous sectors. The wave of digital disruption is also seen slowly but steadily sweeping the health care sector, which is one of the critical sectors for India. According to the Deloitte report on Health care industry (2015), India spent an estimated five percent of gross domestic product (GDP) in 2013 on health care and is expected to remain at that level through 2016. Over the past 3 decades the Indian Health care system has shown appreciable improvement in terms of improved life expectancy, reduced mortality and innovations in medical technology. Currently Indian healthcare market is worth US\$ 100 billion and is expected to grow to US\$ 280 billion by 2020.

In spite of all these developments, the health care sector has shown a comparatively slow adoption rate of digitalization and integration of Internet of things in its diagnosis, treatment and management approach. Digital healthcare promises to address two major issues that the Indian healthcare industry face; accessibility and affordability. The potential services falling under this realm of activity range from digitalization of patient records through an Electro Medical Records (EMR) or Electro Health Records (HER), data capturing through wearable devices and other recorders, real time data analysis for clinical decisions and treatments etc.

This paper makes an attempt to analyse some of the digital disruptions in health care with a specific reference to Diabetes Mellitus (DM) or Type 2 diabetes. Specifically an attempt is made to study the monitoring market ecosystem which assists in the continuous monitoring of vital body parameters in diabetic patients, and its linkages with health care industry. The healthcare professional's acceptance and readiness to use these devices are also explored through in-depth interviews. The main objectives of the study can be summarized as follows:

- Identifying monitoring market ecosystem and its linkages with health care industry
- Developing Products hierarchy for wearable monitoring systems available in the diagnosis and management of Diabetes
- Exploring the readiness of healthcare professional to incorporate this technology in patient management
- Exploring opportunities for future disruptions

Literature Review

Diabetes Mellitus

Diabetes is a serious health condition, which has been declared as a global epidemic by World Health Organisation (WHO). The prevalence of diabetes in the Indian population is growing at an alarming state earning the country the dubious status of the Diabetes capital of the world. This chronic condition is divided in two categories; Type 1 diabetes, a condition in which the body produces insufficient quantities of insulin; and Type 2 diabetes, often known as Diabetes Mellitus (DM), a condition leading to an ineffective use of insulin produced in the body. Commonly diagnosed in the population above the age of 40 years, DM can lead to complications such as blindness, renal failure, limb amputation and high risks of suffering from stroke. Research also indicates that patients suffering from diabetes are two to four times more susceptible to cardiovascular diseases than those without diabetes (IDF, 2001). Tapp (2003) has estimated that 70 and 80% of people with diabetes bear a risk of dying from cardiovascular disease. Given the severity of impact of this metabolic state on the patient, it is looked at as one of the most serious non-communicable disease to be dealt with.

The prevalence of diabetes across the globe is quite alarming. International Diabetes Federation (IDF) had estimated that there were 366 million diabetes cases in

2013 (Guariguata et. al, 2014). The world diabetes cases are estimated to jump up by 55 percent by 2035. According to IDF report, the prevalence of diabetes in the Indian context is around 8.6 % with an estimated rise to 10.5 % by 2035. By virtue of this, the number of diabetic patients in the country would rise from the current 65.1 million to around a 109 million by 2035. Such a wide prevalence of the disease in the Indian population is due to certain specific reasons:

- **Genetic Make-up:** It has been documented that Indians are four times more likely to develop diabetes than European based on heredity (Simmons et al, 1989). Indians seem to have a greater “predilection to diabetes which could well be due to a greater genetic predisposition (Mohan, 1986).
- **Increased Insulin Resistance:** Studies indicate (e.g. Mohan 1986, Yagnik 2000) indicate that higher number Indians suffer from Insulin Resistance Syndrome(URS) which characterizes abdominal obesity, glucose intolerance / Type 2 diabetes mellitus and hypertension.

- **Urbanization / Environmental Factors:** India is witnessing a rapid rise in urbanization for a past few decades. United Nations report on World Urbanization (2014), predicts that taken together, China, India and Nigeria are projected to account for 37 per cent of the increase of nearly 2.5 billion people in the urban population by 2050. Urbanization brings with it sedentary life style and physical inactivity, consumption of processed and high calorie food causing greater chances of obesity. Singh et al (1998) showed that overweight/obesity and central obesity were significantly associated with diabetes. Thus a major cause of high prevalence of DM is largely attributed to lifestyle changes.

- **Dietary shifts:** Urbanization has also brought with it a stark alteration in the dietary patterns of an average Indian. There is rise in the intake refined cereals and carbohydrates (Gopalan, 2001) by the population. Middle income group are seen to develop consumption patterns characterized by high intake of calories, total fat, saturated fat and sugar compared to low income group. This is increasing the prevalence of diabetes in this group as compared to its low income counterpart.

Keeping these facts in mind, health care system needs to come up with effective means of detection, monitoring and management of the disease through innovation and disruption.

The status of Health Care industry in India

In 2013 the estimated spend on health care in India was five percent of gross domestic product (GDP) in 2013 and is expected to remain more or less same through 2016. On the positive side the sector shows a tremendous growth potential. The major facts on the health care services as presented by the Indian Brand Equity Foundation are presented in Fig 2.

Figure 2: Facts of the Healthcare sector in India

Sixth largest in the world	<ul style="list-style-type: none"> India is expected to rank amongst the top three healthcare markets in terms of incremental growth by 2020 India was the sixth largest market globally in terms of size in 2014
Impressive growth prospects	<ul style="list-style-type: none"> India healthcare sector, one of the fastest growing industry, is expected to advance at a CAGR of 22.87 per cent during 2015-20 to reach USD 280 billion.
Strong fundamentals	<ul style="list-style-type: none"> Rising income levels, ageing population, growing health awareness and changing attitude towards preventive healthcare is expected to boost healthcare services demand in future.
Cost advantage	<ul style="list-style-type: none"> The cost of medical services has resulted in the country's medical tourism, attracting patients from across the world. Moreover, India has emerged as a hub for R & D activities for International players due to its relatively low cost of clinical research.
Favorable investment environment	<ul style="list-style-type: none"> Conducive policies for encouraging, FDI, Tax Benefits, favorable government policies coupled with promising growth prospects have helped the industry attract private equity, venture capitals and foreign players.

Source: **Indian Brand Equity Foundation (2015)**

On the negative side, according to the report published by McKinsey in 2012, the Indian health care services and outcomes are far below the standards provided by WHO. WHO recommends an average of 2.5 doctors and nurses per 1,000 people. However the current ratio seen in India is 0.7 doctors and 1.5 nurses per 1,000 people. Finally while most facilities are targeted towards the affluent population, the cost of diagnosis and treatment may become a deterrent for people belonging to the lower socio economic strata.

Digital Health Care a game changer

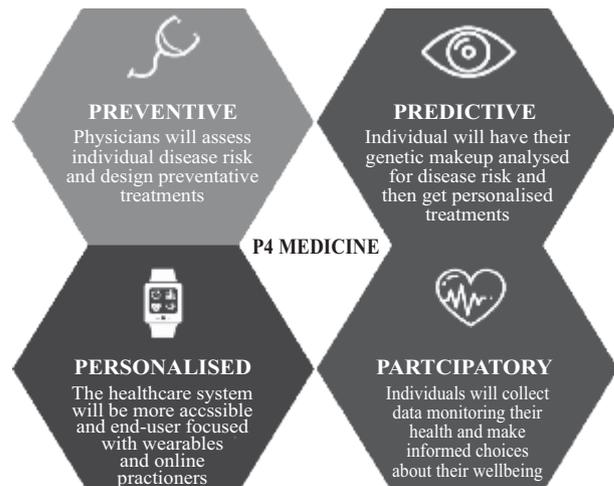
One solution directed to meet the challenges faced by Healthcare in India is to adopt digital healthcare solutions. The digitization of the healthcare largely falls under the realm of Internet of Things (IOT), with specific focus on devices that are connected via the internet in patient monitoring and clinical decision making. Goldman Sach's report defines Digital

Healthcare as, "a platform that creates actionable patient data to aid in the treatment or prevention of diseases outside of traditional care settings, often reducing the cost of this process". Research by IDC Insights indicates that by 2018, 70% of healthcare organizations worldwide will invest in consumer-facing technologies, including apps, wearables, remote monitoring, and virtual care. It may largely be used in the following areas:

- Remote Patient diagnosis and Monitoring: Wearable patches, sensors and glucose monitoring devices and applications
- Telemedicine: Seeking dosage adjustment and doctor's advice on the internet.
- Behaviour Modification: Platforms that would encourage more positive health habits and lifestyles through personalized diet coaching

Keeping the advancements in digital health care in mind, the Institute for Systems Biology in Seattle suggests that healthcare will be follow the 'P4 Medicine' model (presented in figure 3) with predictive, preventive, personalised and participatory medicine as its four arms. From both a clinical as well as commercial point of view, the digitalization in each of these arms opens up myriad opportunities for the management of chronic diseases such as diabetes. The current paper focuses on the personalized aspect of the P4 model with specific reference to wearable devices useful for the monitoring of diabetes patients.

Figure 3: The P4 Medicine model envisaged by the Institute for Systems Biology



Source: The Digital Disruption of Healthcare, report powered by Gilbert Tobin

Research Methodology

Research Design: Exploratory Research Design

An exploratory research design using secondary data covering 20 products was adopted. Data was analyzed to create product hierarchy for existing wearable devices.

The product hierarchy and the monitoring market ecosystems were studied using various secondary data sources:

- Paper based sources such as journals, research reports, white papers, periodicals, newspaper articles and magazines
- Electronic sources such as On-line databases and journals.
- Health care professionals' views were analysed through in-depth interviews as a primary data source

Findings And Analysis

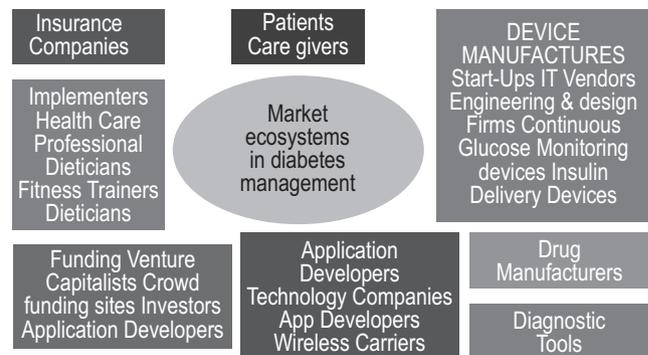
Wearable Technology

The terms “wearable technology“ or “wearable devices refer to computer devices or electronic systems that embedded in accessories such as wrist bands, or clothing such as waists that are easily worn by an individual. These devices are used to track and measure various vital physiological parameters that can help in accurate and continuous monitoring in chronic cases such as diabetes. Wearable market has been growing both in India as well as abroad. International Data Corporation's (IDC) statistics suggests that in 2015 vendors shipped a total of 45.7 million units of wearable devices worldwide. 2019 foresees a whopping increase in the shipment volumes up to 126.1 million units. Gartner (2014) predicts that by 2016, smart watches will constitute about 40% of wearable devices. The acceptance and adoption of wearable technology in India is ever increasing. In a Digital Consumer Tech survey conducted in 2014, 80% of Indians were interested in buying fitness monitors for tracking physical activity and managing their personal health followed by smart watches (76%) and Internet-enabled eyeglasses (74%).

Market Ecosystems

The wearable devices ecosystem majorly includes app developers, technology providers, software providers and original equipment manufacturers. The major stakeholders in this ecosystem are the device manufacturers and developers supporting this

technology. Wearables have a B2C appeal, that enhances the control and active participation of the consumers in their own medical condition management, as well as a B2B appeal, wherein the doctors can enhance the quality and the speed of



marketer to look at the user's total consumption system i.e. the way the user performs the tasks of getting, using, fixing and disposing of the product.

As Theodore Levitt pointed out, the real competition is not what the companies have manufactured in the factories, but between what they add to their factory output in the form of packaging, services, advertising, customer advice, financing, delivery arrangements, servicing and other things that people value.

v. **Potential Product:** “products of the future”: which drives marketers to search for new ways to satisfy the customers and distinguish their offer that not only satisfy customers, but also surprise and delight them.

Table 1:
Product Hierarchy of Wearable Technology available for Diabetes management

S. No.	Brand	Company	Product Description	Product hierarchy level (considering the disruption potential over currently available monitoring devices)
1	Helius Smart Pill	Proteus Digital Health	World's first smart pill with an ingestible sensor linked to a wearable patch that can record when a pill is actually taken.	Expected
2	Google smart Lens	Google + Novartis	Sensors sandwiched between two soft layers to measure the glucose levels in the wearer's tears, transmitting this information wirelessly to connected smartphones.	Potential
3	Vitality	Cloud DX	Uses cloud based technology to allow for a person to access a companion app that keeps track of all of your vitals. The Vitaliti drapes across a person's neck and has two sensors that attach to the front that record information.	Augmented
4	Free Style Libre System	Abbott Diabetes Care	Has sensor that is placed on the back of the upper arm for 14 days which reads glucose information. It eliminates the need for the finger prick system that everyone is so used to when it comes to glucose testing. Also available with a companion app to record information	Expected
5	Apple Watch	Apple + DexCom.	Continuous glucose monitoring device that can be incorporated into the Apple Watch and linked up with an app on the device. Places a sensor that's as wide as a human hair under the skin to measure glucose every five minutes. The company's app then converts all the data collected to a simple graph that illustrates blood sugar levels,	Augmented

S. No.	Brand	Company	Product Description	Product hierarchy level (considering the disruption potential over currently available monitoring devices)
6	Flash Glucose Monitoring System	Abbott	The system consists of a round sensor that will remain on the back of the arm for up to 14 days, continuously measuring glucose in interstitial fluid (just under the skin) through a small filament that is inserted just under the skin. It records glucose levels every 15 minutes, capturing up to 1340 glucose readings over 14 days. The doctor after two weeks, the doctor uses a Flash Glucose Monitoring reader to scan the sensor and download the glucose results that are stored in the sensor to assess the data (Ambulatory Glucose Profile or AGP graph) using a software.	Expected
7	Needle-Free Tattoos Can Check Diabetics' Sugar Levels	Lead study author Amay Bandodkar, University of California at San Diego,	A flexible device that sticks to skin like a rub-on tattoo and sends a mild electrical current over the skin to detect a person's blood sugar levels, without needles. The new device consists of electrodes made of silver and silver chloride ink, and a blood glucose sensor made of a glucose-sensitive enzyme and another type of ink. To check the blood sugar, the electrodes apply a very mild electrical current to the skin for 10 minutes	Potential
8	MiniMed® Connect		MiniMed Connect links to an app on iPhone® or iPod touch®, making it easy to see insulin pump and glucose details. The uploader sends updates from the MiniMed system to app on iPhone® or iPod touch® about every five minutes. MiniMed Connect can send automatic text messages to those closest to the patient	Augmented
9	Explore MiniMed	Medtronic + Samsung	MiniMed 530G is an insulin pump that's fully integrated with a glucose sensor to give advanced diabetes control. It can pause insulin delivery if glucose level goes below a preset limit. MiniMed Connect device, which allows users of Medtronic's continuous glucose monitor (CGM) and insulin pump to view data from those devices on their smartphone.	Potential
10	CMG	Medtronic	CGM is a way to measure glucose levels in real-time throughout the day and night. A tiny electrode called a glucose sensor is inserted under the skin to measure glucose levels in tissue fluid. It is connected to a transmitter that sends the information via wireless radio frequency to a monitoring and display device. The device can detect and notify you if your glucose is reaching a high or low limit.	Augmented
11	The Gluco(M) Wristband		The Gluco(M) Wristband is a concept medical device that offers three major functions to diabetics: non-invasive and instant glucose reading, storing previous readings history with averages, and an extremely useful insulin chamber with loaded syringe cartridge.	Expected
12	Wearables for the ear		Wearable device just might be hooked around the ear. Due to the proximity to the temporal artery, devices worn on the ear can conduct completely unobtrusive, passive monitoring devices worn on the ear can conduct completely unobtrusive, passive monitoring and offer far more precise measurements	Augmented

S. No.	Brand	Company	Product Description	Product hierarchy level (considering the disruption potential over currently available monitoring devices)
13	Prescription-only apps		The prescription-only app allows people to input data about their glucose levels, diet, exercise, well-being & other factors, which BlueStar automatically analyses to give the patient immediate guidance and feedback.	Expected
14	iBGStar®		Integrated Application-iBGStar will automatically sync data with the iBGStar® Diabetes Manager when connected with your iPhone or iPod touch. The app tracks glucose, insulin and carbs-and charts individualized glucose patterns over time. Discreet Design - *Personalized Notes-	Augmented
15	The Accu-Chek® Aviva Connect		The Accu-Chek® Aviva Connect meter can send test results to an app on ones smartphone, as well as an online portal, so one can log, view and share data automatically.	Basic
16	The Diabetes Tele Management System (DTMS®)	Jothydev's Diabetes Research Centre at Trivandrum South India in 1998	The Diabetes Tele Management System (DTMS®) is a telemedicine based follow-up program which enables patient to interact with a professionally trained multi disciplinary team comprising of diabetes educators, nurses, dieticians, pharmacists, psychologists, physicians, etc., in modifying the dosages of medications, diet, and physical activity either through telephone/email/secure website.DTMS is designed to provide individualized therapy advices on glycosylated haemoglobin, blood pressure, and low density lipoprotein customized to multiple patient characteristics which help attain goals of therapy.	Basic
17	Glooko	Samsung supported	The actual device, Bluetooth enabled hardware, sold by Glooko are b2b rather than b2c which are used by the sufferers of diabetes. Their b2b platform is for those in the field (doctors and medical professionals) who need to analyse their patients' blood sugar data. MeterSync Technology by Glooko is capable of supporting data that has been downloaded form a great number of glucose meters - more than 30 different brands. Glooko charges per patient per month is 'subscription' model.	Augmented
18	Fitband		It's currently available on iOS and via web browsers, and offers premium subscriptions at Rs. 490 a month or Rs. 2,500 for a year.	Basic
19	GOQii		Integrates human coach and hardware to offer an innovative coaching platform, where in users pay subscription of services from qualified coaches who can access entire data generated by a user through various technologies like accelerometers, GPS, mobile network, etc., and use this data to help them achieve their health and fitness goals.	Expected

Healthcare Professionals Views On Wearable Devices

Acceptance of Digital Healthcare solution by consumers is largely driven by its endorsements and prescriptions by healthcare professionals. Past research have studied Physician's potential to use the wearable devices using the Technology Acceptance Model (TAM), (e.g. Yi & Jackson, 2006; Wu and Wang, 2005; Chae, 2009; Turhan, 2012). The current study carried out in depth interviews with 16 health care professionals to explore their views about the usefulness of wearable devices & their readiness to make the technology an integral part of their treatment plan.

Research Design:

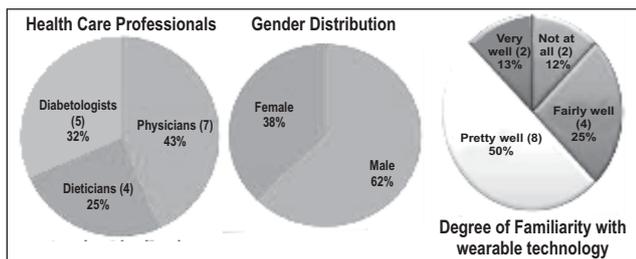
QUALITATIVE RESEARCH

A qualitative research using in-depth interview, with a sample size of 16 health care professionals as a measure was adopted to assess their readiness to use wearable devices in patient care.

Demographic Description of the sample

As seen in figure 5, the sample involved 7 physicians, 5 diabetologists and 4 dieticians involved in treating patients with Diabetes Mellitus with an average experience of 19.43 years. The average age of the sample was 44.5 years. 10 participants were males and 6 participants were females. All the professionals had a fair idea of wearable devices available for diabetes management. The most recognised system was the Abbott Diabetes Care. Almost all the professional were aware of the Google smart lens and Apple watch as potential wearables that could be put to good use in future. Interestingly many were aware of the mobile apps that help in improving adherence to diet regime and exercise and healthy habits.

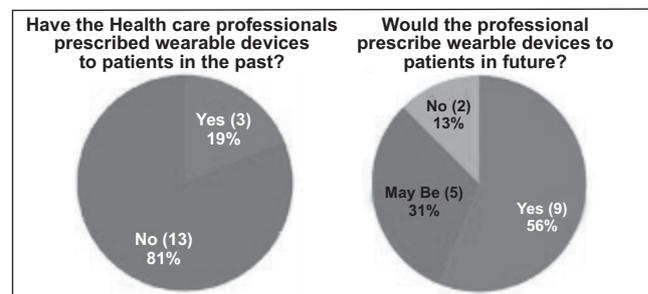
Figure 5: Demographic details of the sample of health professional approached



As seen in figure 6 however, only 3 professional had actively prescribed the devices to their patients. The 3 key reasons indicated by the 13 not using the devices currently were; affordability, accessibility and lack of

enough educational material to impart to patients. Most seem to believe that the conventional manner in which data is reported is good enough to treat most patients. However all of them endorsed the fact that as the patient profile in terms of exposure and inclination towards smart technology is increasing, patients want to exercise greater control in their management. Thus most professionals seem to be inclined towards the inclusion of wearables in the near future.

Figure 6: Health Care professionals & use of wearable Devices



Most of the professional endorsed the use of wearables as an effective means to improve remote accessibility, especially keeping the rural areas in mind. They also seem to endorse the fact that with the ease accessibility of smart technology the health care landscape is on a brink of change. They however felt that wearables would continue to be a luxury for classes than masses. Mobile apps and Mhealth solutions however, in their opinion, are more likely to disrupt the health care services and act as a major boon in ensuring easy, quick and affordable health care services to patients.

Considering the responses of the current sample of health care professionals, the perceived value of wearable technology in diabetes management is high. However the readiness to use the technology in active patient management seems to be low. This could be attributed to a number of factors such as lack of persuasive information, low technology acceptance of service providers, perceived element of non affordability associated with the technology to name a few. Device manufacturers need to bear this reality in mind and intensify their promotional activities to convince this critical mass. Further, this is a unique scenario wherein the health care professionals are not a prototype of the millennial generation which takes on to technology very easily. So start-ups as well as Digital health disruptors would have to take special efforts to sell the value proposition to the health care professionals.

Limitation of the primary study

The sample of healthcare professional is not a representation of the entire health care fraternity catering to the type 2 diabetes patients. They are simply an indicative sample approached to explore the ground realities of acceptance of wearables on field. The small sample size further imposes limitations on generalizability of the conclusions.

The scope for future research could be to keep the Total Cost of Operating as the most significant attribute to re-examine the product hierarchy and disruption potential of the innovations.

Conclusion

A digital disruption in healthcare has led to the emergence of numerous avenues and business models in management of diabetes. Social, Mobile, Analytics

and Cloud (SMAC) coupled with smart wearable technology provides a number of affordable and accessible monitoring, diagnostic and treatment options to physicians' well as patients. Wearable devices hold much promise not only in alleviating patients concerns in Self-Monitoring of blood glucose but also provide a patient-friendly technology that does not require a needle and even eliminate the need to send specimens to a medical laboratory. Thus creating a seamless flow of useful diagnostic data reported to clinical laboratories in real time. This would create the opportunity for pathologists and lab scientists to consult with the patients' physicians, and also ensure that a complete longitudinal record of patient tests results is available to all the physicians and hospitals. Such wearable devices would enjoy strong consumer acceptance, along with favourable coverage decisions.

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- <http://www.ibgstar.us/>
- <http://www.medtronicdiabetes.com/home>
- <http://www.proteus.com/>

APPENDIX 1

Mobile apps to support diabetes management

Diet	Physical activity	Blood glucose e-log book
Healthy out	Track 3	Diabetic
Foodily	My Fitness pal	Diabetes in check
Whole food market recipe	Moves	Diabetes companion
CarbControl	Nike + running	My sugar Junior
Lose it	Strava	Go meal
Weight watchers	UP by jawbone	Glooko
Daily burn	Endomondo	Glucose buddy
Calorie counter PRO	GymPact	DiabetesApp lite
iCookbook diabetic	FitnessFast	My net diary
Fooducate	Pacer	Glucose companion
EatLocal		
Calorie king		
HEALTHeDiabetes		
Glucose monitoring	Insulin dose calculators	Relaxation and meditation
iBGStar	Insulin calculator	Calm
Telcare	iBolus calc	Sleep cycle
	Insulin dose calculator pro	Equanimity
	Diabetes personal calculator	
Diabetes education	Rapid calc diabetes manager	Medication adherence
WebMD	PredictBGL	MyMedSchedule
Diabetes insight	EZ insulin calculator	MyMeds
Up to date	Insulin units	MedSimple
Managing type 1 Diabetes		Pillmanager
Diabetes EDC		Pill reminder
Diabetes @point of care		RxmindMe Prescription
		Pillboxie

Source: Shah. V. N. & Garg. S. K (2015). Managing diabetes in the digital age. Clinical Diabetes and Endocrinology 20151:16 DOI: 10.1186/s40842-015-0016-2

Trade off between Liquidity and Profitability: A Study on Selected Infrastructure Companies in India

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Abstract

This Liquidity and profitability are two sides of a coin. Every firm wants to maximize the profit but too much profit at the cost of liquidity may lead the firm to face the problem of insolvency or bankruptcy. In this way, the objective of this paper is to find out the cause and effect relation between liquidity and profitability. The study cover infrastructure companies of India listed in Bombay Stock Exchange (BSE) over a period of past 5 years from 2010-2014. Correlation, regression and Descriptive statistics were used in the study and findings suggests there is a significant relation exist between liquidity and net profit among the infrastructure firms of India. it also shows insignificant relationship between liquidity and ROI of companies in infrastructure sector.

Key words:

Liquidity, Profitability, Infrastructure, Correlation and Regression analysis.

Introduction

Liquidity and profitability are the two sides of any coin .The main objective of any firm is to maximize the profit. But, preserving liquidity of the firm is also an equally important objective. The problem is that increasing profits at the cost of liquidity can bring serious problems to the firm. Therefore, there must be a tradeoff between these two objectives of the firms. Both objectives should be given an equal priority in any firm, One objective should not be at cost of the other. Profit is essential for long run survival. On the other hand, maintaining the liquidity is also essential to avoid the risk of insolvency or bankruptcy.

In order to maintain the adequate liquidity not at the cost of profitability, financial managers should spend large chunk of their time in managing current assets and current liabilities of the company. Excessive level of current assets means less return on investment. However, too less current assets may lead a difficulties in maintaining smooth operations for any firm. Profitability is the difference between the revenue and

expenses of the company. Maintaining high profitability ratios are also essential for the firms because of the interest of the internal and external parties lying in the firm profits. Investors are interested in dividends and increasing market price of the stocks. Less profitability, hesitates investors to invest in the particular firm. On the other hand, managers are interested in knowing operating performance in terms of profitability. Low profitability reflects the inefficient management. Therefore, the paper attempt to study the relationship between the two components liquidity and profitability in infrastructure firms listed in BSE.

Literature Review

Deloof (2003) conducted study on the sample of 1009 firms of Belgian for the period of 4 years to know the relation between working capital management and corporate profitability. Descriptive statistics and financial tools were used for analysis. The result corporate profitability can be increased by reducing the number of days, accounts receivable and inventories. The negative relationship between accounts payable and profitability depicts that less profitable firms have to wait longer to pay their bills.

Eljelly, (2004) conducted the study on the sample of joints stock companies in Saudi Arabaia. Correlation and Regression analysis is used. The study found significant negative relation between the firm's profitability and its liquidity level, as measured by current ratio. Narware (2004) carried out the study on NFC ,the fertilizer company and his results disclosed both positive and negative association between liquidity and profitability. Amit et al (2005) conducted the study on Indian Pharmaceutical Industry to study the relationship between liquidity and profitability and concluded that there is no definite relation that can be established between the two. Shah and Sana (2006) analyzed the effect of working capital management on the profitability of 7 oil and gas companies listed with Karachi Stock Exchange for the period of 4 years ratio analysis and statistical techniques were used. Results show a negative relationship between gross profit

margin and number of days inventory and number of days accounts receivable, cash conversion cycle and sales growth whereas there is a positive relation between gross profit margin and number of days accounts payables. Vishanani and Shah(2007) studies the relationship between liquidity and profitability. Current ratio is used as a measure for liquidity and return on investment for profitability. He depicted a direct relation between the current assets and return on investment. Higher current ratio means large investment in current assets which means low return for the firms. However a very low investment in current assets can disrupt the production process and paying ability of the firm to pay its creditors. Walt(2009) concluded that liquidity is important but that doesn't mean company is profitable while profit is more important because it can usually be turned into liquid assets . Aloy Niresh (2011) conducted the study on the 31 listed manufacturing firms in Sri Lanka over a period of 5 years. The study found there is no significant relation between liquidity and profitability. Quayyum (2011) conducted the study on the listed manufacturing companies in Dhaka Stock Exchange for 5 years revealed that there is a significant relationship between the profitability measures and various liquidity measures as well as working capital components. J. Daniel Mogaka Makori (2012) conducted the study on 5 manufacturing firms listed in Nairobi Stock Exchange (NSE) for the period of 10 years. The study finds a negative relation between the profitability and number of days account receivable and cash conversion cycle, but a positive relation between profitability and number of days inventory and number of days account payable. Ajanthan (2013) carried out the study on the trading companies of Srilanka to examine the nature and extent of relation between liquidity and profitability .

Objective of the study.

The main objective of the study is to find out the relationship between liquidity and profitability in infrastructure firms listed in Bombay stock Exchange (BSE). To achieve the general objective, the following sub objectives are used:

- To determine the impact of current ratio on net profit of firms in the infrastructure.
- To determine the impact of quick ratio on net profit of firms in the infrastructure.
- To determine the impact of current ratio on return on Investment in the infrastructure.

- To determine the impact of quick ratio on net profit of firms in the infrastructure.

Research Methodology

The present study was basically conducted to investigate the hypothesis relationship through correlation and regression analysis using statistical Package for social science (SPSS Version 20.) : first: correlation model is used to measure the degree of association between dependent and independent variables used in the study. Second: Regression model is used to study the cause and effect relationship between profitability variable and liquidity variables.

Since the purpose of the study is to examine the relationship between liquidity and profitability, the study developed the following Hypothesis:

Hypothesis developed is as follow:

H1: Current ratio has no significant impact on Net profit of infrastructure companies listed in BSE.

H2: Quick Ratio has no significant impact on Net profit of Infrastructure companies listed in BSE.

H3: Current ratio has no significant impact on Return on Investment of infrastructure companies listed in BSE

H4: Quick ratio has no significant impact on Return on Investment of infrastructure companies listed in BSE.

Sample Size

The sample of the study consist of all the firms in infrastructure sector listed in Bombay stock exchange (BSE). In India there are total 29 infrastructure firms registered in BSE. Sample size of 17 firms are taken to study the relationship between profitability and liquidity.12 firms are to be ignored since there data for the period of study was not available.

Data Collection

The present study is based on secondary data. The data is collected from income statement and balance sheet of the following firms obtained from

www.moneycontrol.com

Period of the study

From 2010-2011 to 2014-2015 for the period of 5 years.

Selection of Variables

Liquidity ratios are ratios which indicates the ability of the company to pay its short term liabilities when it becomes due. Several type of liquidity ratios are current ratio, quick ratio, cash ratio, working capital ratio etc

and Gross profit ratio, net profit ratio, return on equity, return on assets, earning per shares etc. Several profitability ratios are Gross profit ratios, net profit ratio, return on capital employed, return on assets, return on equity etc.

For the purpose of study the current ratio and quick ratios will be compared with net profit ratio, return on investment to find the relation between the two. Current ratio shows the relationship between current assets to current liability. Ideal ratio for any company is 2:1 to 3:1. Quick ratio shows the relationship between current assets excluding inventories to current liabilities. Ideal Quick ratio for any company is 1:1 to 1.5:1. Profitability ratios are the ratios which show how well the companies can achieve their profits from their operations.

For the purpose of the study Net profit ratio and Return on investment and are taken as measure of profitability to represent dependent variables. Current ratio and quick ratio are studied as independent variable.

Net profit Ratio = Net Profit/Net Sales

ROI = Profit before Interest and Tax/Capital Employed

Current Ratio = Current Assets/Current Liability

Quick Ratio = Quick Assets /Current Liability.

Here, Profitability is dependent variable while liquidity is independent variable. Therefore we can say $P = F(L)$. Where P = Profitability and L = Liquidity. The following models are formulated to study the relation between liquidity and profitability

$$\text{Net profit} = \beta_0 + \beta_1 \text{ CR} \dots\dots\dots(1)$$

$$\text{Net profit} = \beta_0 + \beta_2 \text{ QR} \dots\dots\dots(2)$$

$$\text{ROI} = \beta_0 + \beta_1 \text{ CR} \dots\dots\dots(3)$$

$$\text{ROI} = \beta_0 + \beta_2 \text{ QR} \dots\dots\dots(4)$$

Where $\beta_0, \beta_1, \beta_2$ are the regression co-efficient

ROI -Return on investments

CR -Current Ratio

QR -Quick Ratio

Data Analysis

The Descriptive statistic shown in the table 1 below depicts that mean value of net profit ratio 10.4144 and return on investment is 10.9588 percent with standard deviation of 20.12011 and 7.95263, the mean value of current ratio and quick ratio for all the sample infrastructure companies together is 2.1009 and 1.8573

with a standard deviation of 3.16311 and 3.2173. The range of current ratio is 1.5:1 to 2.5:1 and for quick ratio is 1:1 to 1.5:1. Current ratio is in line with those of standard range while quick ratio is going beyond the range, which is not a good sign for the company.

Table 1: Descriptive Statistic of Variables

	N	Minimum	Maximum	Mean	Std. Deviation
Current Ratio	17	.60	14.23	2.1009	3.16311
Quick Ratio	17	.45	14.23	1.8573	3.21730
NET Profit Ratio	17	-10.52	73.48	10.4144	20.12011
ROI	17	.27	25.62	10.9588	7.95263
Valid N (listwise)	17				

Table 2: Correlation Analysis

		Current Ratio	Quick Ratio	Net Profit	ROI
Current Ratio	Pearson Correlation	1	.994**	.822**	-.054
	Sig. (2-tailed)		.000	.000	.837
	N	17	17	17	17
Quick Ratio	Pearson Correlation	.994**	1	.840**	-.005
	Sig. (2-tailed)	.000		.000	.986
	N	17	17	17	17
Net Profit	Pearson Correlation	.822**	.840**	1	.395
	Sig. (2-tailed)	.000	.000		.116
	N	17	17	17	17
ROI	Pearson Correlation	-.054	-.005	.395	1
	Sig. (2-tailed)	.837	.986	.116	
	N	17	17	17	17

Testing of hypothesis

H1: Current ratio has no significant impact on Net profit of infrastructure companies listed in BSE.

H2: Quick Ratio has no significant impact on Net profit of Infrastructure companies listed in BSE.

Correlation - current ratio and net profit

The correlation results between current ratio and net profit of infrastructure companies in India indicates that both these variables are highly correlated with r-value as .822 (Refer table 2) That means if the current ratio increases, than a high increase will be seen in the net profit of infrastructure companies in India. On interpretation of the significance (2- tailed) value, which came out to be .000, it can be concluded that there is statistically significant correlation between current ratio & net profit of infrastructure companies in India. That means, increases or decreases in one variable do significantly relate to increases or decreases in other variable (refer Table 2)

Correlation - quick ratio and net profit

The correlation results between quick ratio and net profit of infrastructure companies in India indicates

that both these variables are highly correlated with r-value as .884 (Refer table 2). That means if the quick ratio increases, than a high increase will be seen in the net profit of infrastructure companies in India. On interpretation of the significance (2- tailed) value, which came out to be .000, it can be concluded that there is statistically significant correlation between quick ratio and net profit of infrastructure companies in India. That means, increases or decreases in one variable do significantly relate to increases or decreases in other variable. (refer Table 2)

Regression - current ratio and net profit

The results of R square indicate that independent variable current ratio has moderate relationship with dependent variable net profit signified by the R² that is 67.5 % (refer table 3). It shows that 67.5% of net profit change is because of current ratio change in the infrastructure sector in India.

Table 3: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.822a	.675	.654	11.84335

a. Predictors: (Constant), CR

Table 4: Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.566	3.481		-.163	.873
	CR	5.227	.936	.822	5.584	.000

a. Dependent Variable: NP

Net profit = $\beta_0 + \beta_1 CR + e$ (1).

NP = $-.566 + 5.227CR$

Where

CR = current ratio (independent variables)

The linear regression was applied using the Statistical Package for Social Sciences (SPSS) between current ratio (independent variable) and net profit (dependent variable) of infrastructure companies in India. The results show that there is a strong relationship between current ratio and quick ratio with net profit of infrastructure companies in India signified by coefficient of Beta value that is .822 (refer table 4). Thus, a one standard deviation increase in current ratio leads to a .822 standard deviation increase in predicted net profit.

Also, the t-value is significant at 0.000(refer table 4), indicating significant relationship between the independent and the dependent variables and it can be said that there is impact of current ratio on the net profit of infrastructure companies in India.

$0.000 < 0.05$ ---- Ho is not accepted.

Regression – quick ratio and net profit

The results of R square indicate that independent variable quick ratio has moderate relationship with dependent variable net profit signified by the R² that is 70.5 % (refer table 5). It shows that 70.5% of net profit change is because of quick ratio change in the infrastructure sector in India.

Table 5: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.840 ^a	.705	.685	11.28971

a. Predictors: (Constant), QR

Table 6: Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	.663	3.186		.208	.838
	QR	5.250	.877	.840	5.985	.000

a. Dependent Variable: NP

Net profit = $\beta_0 + \beta_2 QR$ (2)

NP = $-.663 + 5.250QR$

Where

QR = quick ratio (independent variables)

The linear regression was applied using the Statistical Package for Social Sciences (SPSS) between quick ratio (independent variable) and net profit (dependent variable) of infrastructure companies in India. The results show that there is a strong relationship between quick ratio with net profit of infrastructure companies in India signified by coefficient of Beta value that is .840 (refer table 6). Thus, a one standard deviation increase in current ratio leads to a .840 standard deviation increase in predicted net profit.

Also, the t-value is significant at 0.000(refer table 6), indicating significant relationship between the independent and the dependent variables and it can be said that there is impact of quick ratio on the net profit of infrastructure companies in India.

$0.000 < 0.05$ ---- H_0 is not accepted.

H_3 : Current ratio has no significant impact on Return on Investment of infrastructure companies listed in BSE.

H_4 : Quick ratio has no significant impact on Return on Investment of infrastructure companies listed in BSE.

Correlation –Current ratio and ROI

The correlation results between current ratio and ROI of infrastructure companies in India indicates that both these variables are negatively lowly correlated with r-value as -0.054 (Refer table 2). That means if the current ratio increases, than a low decrease will be seen in the ROI of infrastructure companies in India. On interpretation of the significance (2- tailed) value which came out to be $.837$, it can be concluded that there is no statistically significant correlation between current ratio and ROI of infrastructure companies in India. That means, increases or decreases in one variable do not significantly relate to decreases or increases in other variable.(refer Table 2)

Correlation –Quick ratio and ROI

The correlation results between quick ratio and ROI of infrastructure companies in India indicates that both these variables are negatively lowly correlated with r-value as -0.005 (Refer table 2). That means if the quick ratio increases, than a low decrease will be seen in the ROI of infrastructure companies in India. On interpretation of the significance (2- tailed) value which came out to be $.986$, it can be concluded that there is no statistically significant correlation between quick ratio and ROI of infrastructure companies in India. That means, increases or decreases in one variable do not significantly relate to decreases or increases in other variable.(refer Table 2)

Regression –current ratio and ROI

The results of R square indicate that independent variable current ratio has very low relationship with dependent variable ROI signified by the R^2 that is only 3 % (refer table 7). It shows that only 3% of ROI change is because of current ratio change in the infrastructure sector in India.

Table 7: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.054 ^a	.003	-.064	8.20148

a. Predictors: (Constant), CR

Table 8: Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	11.244	2.411		4.664	.000
	CR	-.136	.648	-.054	-.209	.837

a. Dependent Variable: ROI
 $ROI = \beta_0 + \beta_1 CR$
(3).

$$ROI = 11.244 - .136CR$$

Where

CR = current ratio (independent variables)

The linear regression was applied using the Statistical Package for Social Sciences (SPSS) between current ratio (independent variable) and ROI (dependent variable) of infrastructure companies in India. The results show that there is a weak relationship between current ratio and with ROI of infrastructure companies in India signified by coefficient of Beta value that is -0.054 (refer table 8). Thus, a one standard deviation increase in current ratio leads to a -0.054 standard deviation increase in predicted ROI.

Also, the t-value is insignificant at 0.837 (refer table 8), indicating insignificant relationship between the independent and the dependent variables and it can be said that there is no impact of current ratio on the ROI of infrastructure companies in India.

$0.837 > 0.05$ ---- H_0 is accepted.

Regression quick ratio and ROI

The results of R square indicate that independent variable quick ratio has very low relationship with dependent variable ROI signified by the R^2 that is 0 % (refer table 9). It shows that 0% of ROI change is because of quick ratio change in the infrastructure sector in India.

Table 9: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.005 ^a	.000	-.067	8.21336

a. Predictors: (Constant), QR

Table 10: Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	10.980	2.318		4.737	.000
	CR	-.011	.638	-.005	-.017	.986

a. Dependent Variable: ROI

$$\text{ROI} = \beta_0 + \beta_1 \text{QR} \dots\dots\dots(3).$$

$$\text{ROI} = 10.980 - .011\text{QR}$$

Where

QR = quick ratio (independent variables)

The linear regression was applied using the Statistical Package for Social Sciences (SPSS) between quick ratio (independent variable) and ROI (dependent variable) of infrastructure companies in India. The results show that there is a weak relationship between quick ratio and with ROI of infrastructure companies in India signified by coefficient of Beta value that is -.005 (refer table 10). Thus, a one standard deviation increase in quick ratio leads to a -.005 standard deviation increase in predicted ROI.

Also, the t-value is insignificant at 0.986(refer table 10), indicating insignificant relationship between the independent and the dependent variables and it can be said that there is no impact of quick ratio on the ROI of infrastructure companies in India.

0.986 > 0.05 ---- Ho is accepted.

Conclusion

The study reveals that liquidity and profitability are related but only absolute term and not in the real term.

The results revealed that when liquidity was tested with net profit (absolute term), than a strong relationship is seen between the two as far as infrastructure sector is concerned. It could be conclude that both current ratio and quick ratio have strong impact on the net profit of the companies of infrastructure sector. The study also concludes that the relationship between liquidity and return on investments (real term) is weak in case of companies in infrastructure sector. The null hypotheses is accepted for the later showing no impact of current ratio and quick ratio on the return on investments of companies in infrastructure sector.

Recommendation for Further study

Given the time and resources, the study could cover the relation between liquidity and profitability only on infrastructure companies listed in Bombay Stock Exchange for the period of five years. Others researches could carry out study on some other listed companies in India over a long period and using different statistical tools in order to have more comprehensive results, Based on the summary, conclusion and recommendation in this research work, this study shows there are other factors than the liquidity as independent variable which affect the profitability. Researchers could identify those other factors, which affect the company profitability to enhance its profit.

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MSMEs in Economic Development – A Case Study on Indian Initiative, a Current Scenario

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Abstract

Gro In India, MSME sector have been accepted as the engine of economic growth and for promoting equitable development. The major advantage of the sector is its employment potential at low capital cost. The labor intensity of this sector is much higher than that of the large enterprises. It is a nursery of entrepreneurship, often driven by individual creativity and innovation. It contributes 8 percent of the country's GDP, 45 percent of the manufactured output and 40 percent of its exports. It provides employment to about 60 million persons through 26 million enterprises.

The paper focuses on the 'Make in India', Confederation of Indian Industries (CII), and other initiatives framed by the central government which will help for the better policy framework and investment commitments to bolster MSME sector into a major manufacturing hub and the contribution of the Indian government and the state government of Maharashtra towards the development of MSME sector.

Objective of the Study

The study is based on the evolving development of the MSME sector and its potential across the nation for boosting the business confidence in India. The study has also touched the various development programmes designed by the state government of Maharashtra and the central government for fostering entrepreneurship development in the country.

Constriction of The Study

The arena covered for the study is restricted to the state of Maharashtra and the central government initiatives. It only covers the initiatives like 'Make in India', Confederation of Indian Industries (CII), Pradhan Mantri Kaushal Vikas Yojna and Pradhan Mantri Mudra Yojna.

Research Methodology

For the study, secondary data such as SME White book

2015 – 16, Fiscal Budget report 2016 and data available from internet etc. are been used. The secondary data also includes publications in the forms of books and journals also.

SME - The Future of Indian Economy

The small and medium sized enterprises (SME) pay a central role in driving India's economic growth and development at the regional, national and global platforms. The SME sector in India has demonstrated remarkable resilience in the last few years to sustain an annual growth rate of over 10% even in the face of the global and domestic economic slowdown.

The sector plays a pivotal role in employment generation usage of technology, industrial development across rural regions, use of traditional and inherited skills, mobilization of local resources, and has low capital requirements. As more than 65% of population resides in rural and semi-rural areas, small businesses are a major source of income for local residents and after agriculture, small businesses in India is the second largest employer of human resources generating over 100 million jobs across the 46 million units in India employing nearly 40 percent of India's workforce and contribution 45 percent to country's manufacturing output.

The manifest capacity of Micro, Small and Medium Enterprises (MSMEs) around the world for driving economic growth and development at regional, national & global levels cannot be overemphasized. As India gears up to retrace the high growth path, the MSME sector assumes a pivotal role in driving the growth engine. The MSME sector in India continues to demonstrate remarkable resilience in the face of trialing global and domestic economic circumstances. The sector has sustained an annual growth rate of over 10% for the past few years. With its agility and dynamism, the sector has shown admirable innovativeness and adaptability to survive economic shocks, even of the gravest nature. The significance of

MSMEs is attributable to the caliber for employment generation, low capital and technology requirement, promotion of industrial development in rural areas, use of traditional or inherited skill, use of local resources, mobilization of resources and exportability of products. According to the estimates of the Ministry of MSME, Government of India, the sector generates around 100 million jobs through over 46 million units situated throughout the geographical expanse of the country. With 38% contribution to the nations GDP and 40% and 45% share of the overall exports and manufacturing output, respectively, it is easy to comprehend the salience of the role they play in social and economic restructuring of India. Besides the wide range of services provided by the sector, the sector is engaged in the manufacturing of over 6000 products ranging from traditional to high-tech items.

Performance of Indian MSME sector

The Indian MSME sector provides maximum opportunities for both self – employment and wage – employment outside the agricultural sector and contributes in building an inclusive and sustainable society in innumerable ways to creation of non – farm lively hood at low cost, balance regional development, gender and social balance, environmentally sustainable development, etc.

The diversity of the Indian MSME sector

The MSME sector in India boasts of diversity in terms of its size, level of technology employed, range of products and services provided and target markets. MSME tool rooms have been credited to provide at least 10 components that were used in India's 'Mangalyaan' (Mars Orbiter Mission probe), the Indian Space Research Organizations (ISRO) most ambitious mission till date, which is the country's first inter planetary space mission. The sector has also contributed vital inputs for other space satellites such as the Chandrayan. India's second moon mission, Chandrayan – II set to be launched in 2016 – 17, will have a soft land over a wheeled robotic vehicle to explore the landing area. India seeks to launch the other ambitious projects like global sea traffic monitoring system and an earth observation satellite, in cooperation with the EU. The projects envision significant contribution and convergence opportunities from the Indian MSME sector.

India is one of the world's top 10 countries in terms of military expenditure. According to the data base

prepared by the Stockholm International Peace Research Institute, which as listed the countries of the world in terms of their military expenditure at current US \$ millions in 2013, India ranks ninth.

With spending in Defense and Aerospace on the rise in India, it is estimated to become the third largest market by 2020, after the US and China. Increasing passenger traffic and military expenditure are expected to boost demand for new aircrafts. Investment opportunities of US \$ 110 billion are anticipated with US \$ 80 billion in new aircraft and US \$ 30 billion in the development of airport infrastructure by 2020, according to the Investment Commission of India. Many global companies are increasingly looking to Indian MSMEs for strategic partnerships of mutual benefits due to the innovative capabilities in niche manufacturing, comparative advantages of advanced engineering, low – cost manufacturing and overheads, ability to speedily absorb new technologies and local skills and capabilities that set these enterprises apart from other national and international players in the sector.

With its vast resource pool of engineering talent and high skilled labor at competitive cost, India has the potential to become the significant player in the global auto industry, especially in engineering and component manufacturing. India's close proximity to key automotive markets like the ASEAN, Japan, Korea and Europe provide an added fillip to the sector. Exports of auto components increase at a CAGR of 17% during 2008 – 13, reaching USD 9.7 billion in 2012 – 13. MSMEs assume a dominant position in the automotive and auto components sector.

Many more lucrative opportunities can be tapped by Indian MSMEs in foundry industry, electronic industry, chemicals, leather, textile, agro and food processing, pharmaceutical, transport and tourism industries, etc. The globalization of businesses as increasingly drawn SMEs into global value chains through different types of cross – border activities. Many entrepreneurs are recognizing the opportunities that this advent ushers and gaining access to global markets as becomes a strategic instrument for their future development. These opportunities have arisen as a result of the governments increased focus on the MSME sector, larger investments in research and development, technological up gradation, thrust towards international collaboration and measures to boost competitiveness and propel growth.

Supportive role of Government of India

Recognizing the potential of this sector for the nation's development, the Government of India, through its various agencies, has taken many key steps to strengthen the MSME sector and promote innovation and capacity building in this sector. Regular dialogue is facilitated between various stakeholders through the constitution of specific task forces and inter – ministerial committees. The Micro and Small Enterprises – Cluster Development Programme is being implemented by the government for the holistic and integrated development of these enterprises in clusters through soft interventions, hard interventions and infrastructure up gradation for enhancing their productivity and competitiveness. During the year 2014 – 15, 43 new clusters have been taken up for various interventions. So far, around 966 clusters and 171 infrastructure development programmes have been initiated by the government. Provisions are also being made to strengthen the framework of virtual clusters with the aim to assist MSME accessibility of the Ministry from the remote location of their operation. The Credit Linked Capital Subsidy Scheme also assists in the technological up gradation on MSMEs. The National Manufacturing Competitiveness Programme is another flagship programme of Ministry of MSME which endeavors to equip these enterprises with the technology – based tools in the areas of quality up gradation, productivity, design development, energy efficiency and marketing. To ensure better flow of credit to SMEs, the Ministry has introduced a Policy Package for Stepping up Credit to Small and Medium Enterprises (SMEs) under which it operates schemes like the Credit Guarantee Fund Scheme and the performance and Credit Rating Scheme.

Initiatives for Nurturing Indian MSMEs by Confederation of Indian Industry (CII)

For over 120 years, Confederation of Indian Industry (CII) has been persistently engaged in creating and sustaining an environment conducive to the development of Indian industry through advisory and consultative processes. Confederation of Indian Industry has undertaken a slew of measures for supporting the development of the Indian MSMEs and enhancing their global competitiveness. The Indo – German Manager Training Programme (IGMTP), run with support from Government of India and Germany, aims at enhancing the international businesses and economic potential of Indian enterprises by bringing

them in contact with German enterprises. MSMEs have been guided to enhance their competitiveness through the time – tested techniques of the Cluster Approaches. Along with its strategic partners, about 245 clusters have been constituted by far impacting over 3000 MSMEs. In partnership with Overseas Human Resources Development Association (HIDA), Japan, Confederation of Indian Industry is operating a training programme on Production Management for Manufacturing in India to enhance production management capability in Indian manufacturing industry in order to achieve the idea of 'Make in India' through Japanese style Management.

To enhance their leadership skills and awareness on diversity management as well as to provide them with networking opportunities, Confederation of Indian Industry also runs a training programme on the Empowerment of Women Leaders with HIDA. Confederation of Indian Industry has set up an online SME Finance Facilitation Centre to provide advisory and credit facilitation support to SMEs.

'Make in India' a national transforming initiative

'Make in India' is a national – transforming initiative which has helped to boost the business confidence in India. With timely policy intervention and support, India is now ready for larger share of global business. The 'Make in India' initiative has the potential to transform the country into a major manufacturing hub and has already attracted investment commitments to the tune of Rs. 15.2 trillion and has received investment enquiries of about 1.5 lakh crore in its first year.

Even at the state levels, the 'Make in India' initiative is taking roots with the example of Maharashtra government asking SMEs to set up plants in the land at half the market price in various industrial clusters. Under this initiative, the SMEs are free to apply for two – acre land anywhere falling under MIDC areas across the state for setting up a plant and the Maharashtra government will provide 50 percent subsidy on those plots of land.

Recognizing the potential of the SME sector, the Fiscal Budget this year had a series of policy initiatives and schemes that were aimed to boost the start – ups and MSME sector. The budget took into consideration various measures for improving the ease of doing business, simplifying of the tax structure, manufacturing competitiveness, conducive policy regime for Industrial Parks, power and land availability,

infrastructure development, labor laws reforms, good governance and focusing on massive skill development programmes like Skill India Mission and macro – economic stability.

The two important initiatives – Pradhan Mantri Kaushal Vikas Yojna aiming at setting up over 1500 skill training institute across India for training over 1 crore youths in the next 3 years, and the Pradhan Mantri Mudra Yojna that focuses on self – employed people that help in providing jobs to nearly 12 crore people are laudable and will have a huge positive impact on the SME sector in the coming years. Similarly, the provision to enable registration of a company in one day for start – ups is a very important initiative to boost aspiring entrepreneurs.

Pradhan Mantri Kaushal Vikas Yojna (PMKVY)

Indian government has launched Pradhan Mantri Kaushal Vikas Yojna (PMKVY) with an objective of making India the skill capital of the world. Approval to the scheme was given in March, 2015 and has been implemented by Ministry of Skill Developmental and Entrepreneurship. This would be done by providing training to the country's youth on various jobs specific skills which would be utilized under schemes such as 'Make in India', Clean India Mission, Digital India and others involving various industries such as construction, manufacturing, etc. After Jan Dhan Yojana and Sukanya Samridhi Yojana, PMKVY is also expected to benefit many Indians.

Skill gap analysis was recently done for the period 2013 - 17 under various government schemes based on the result it was found there is a shortage of skilled labor in India.

So here are the details of the soon to be launched Pradhan Mantri Kaushal Vikas Yojna (PMKVY)

Features and benefits of PMKVY

- Objective is to train 24 lakhs youths with an estimated training cost of Rs. 1,500 cr.
- To create registry of skills
- Increase in the productivity of the skilled individuals which would be used for nation's development.
- On an average trainee will get Rs. 8,000/- as a reward (one time only). This would be given by third party assessment body. However, in order to receive the reward, trainee will have to appear for assessment test and based on the test results, reward would be given.

This money will be directly credited to the bank account of the candidate.

- In order to cross – check whether candidate has already been paid Rs. 8,000/- reward, use of Aadhar number will be made. So that is why Aadhar number is must for receiving the reward.
- Training would be provided based on the National Skill Qualification Framework (NSQF) and industry led standards and it would be need based training.
- Most of the skills do not require any educational qualification or experience.
- Feedback would be collected by all the trainees to undergo assessment. This will help in calculating the effectiveness of Kaushal Vikas Scheme.

Pradhan Mantri Mudra Yojna (PMMY) - Mudra Bank

Pradhan Mantri Mudra Yojna under the Micro Units Development and Refinance Agency (MUDRA) Bank is a new institution been set up by Government of India for development of micro units and refinance of MFIs to encourage entrepreneurship in India and provide the funding to non – corporate small business sector.

MUDRA Yojna had announced by the Finance Minister in Parliament during Union Budget for FY 2016.

MUDRA Bank will need two type of product like refinance for the micro units having loan requirements from Rs. 50,000/- to 10,00,000/- and support of Micro Finance Institutions (MFI) for on landing. MUDRA will refinance to micro business under the scheme of Pradhan Mantri MUDRA Yojna

The Prime Minister's Start - Up India initiative

The Prime Minister's Start Up India initiative announced few months earlier is also an encouraging step for budding entrepreneurs that eases out the startup process from one point online registration, funding provision (a corpus of Rs. 10,000/- crore has been announced), patent and legal support, credit guarantee to tax exemptions. It is clear indication that the present government is looking at creating a conducive environment for start – ups and help create millions of job opportunities across sectors.

E – Commerce has now become the new driving force of growth for small and medium enterprises in India and has been a major contributor to new job opportunities and to the GDP. As per available data, the

e – commerce sector in India is projected to cross \$80 billion by 2020 and will account for 2.5 percent of India's GDP by 2030.

As per an earlier study, nearly 60 percent of the SMEs in India fall within the unorganized sector. With the recent policy and support initiatives announced by the government through initiatives like 'Make in India' and in the fiscal budget for start – ups and SMEs, the stronger pace and is expected to contribute around 22 percent to GDP in the next 3 years.

With important initiative like 'Make in India', easing the policy framework, overall focus to strengthen the SME sector and investment commitment to the tune of trillion rupees, India is soon poised to become manufacturing hub for the world. The setting up of manufacturing hubs will boost employment, improve social and technology infrastructure across states in the country and will create a new pathways for start – ups to provide services on a national platform.

For any aspiring entrepreneur, his belief, his passion and a resolution to succeed against all odds are the most important ingredients to his success. The government has and is continuously working on various initiatives to help him transform his vision into reality but it is equally important for him to build inroads to his vision of success.

Conclusion and Findings

The Make in India Strategy adopted by the Indian Prime Minister Shri Narendra Modi aims to facilitate investment, foster innovation, enhance skill development and build a sustainable eco – system for the manufacturing infrastructure in the country. These measures have succeeded in raising the business confidence in India. The stage has been set through these industry and MSME interventions for a larger share of global business in India which presence opportunities for MSME integration in almost all industry sectors. The Indian MSME sector is poised for rapid growth integration with major global value chains. Timely policy intervention and due support have promptly resulted in rendering the Indian MSMEs globally competitive.

Scope for Further Study

The paper has covered to the restricted showground of MSME through the initiatives made by the 'Make in India', CII and other initiatives made by the central government of the country. The researcher can further make research on the initiatives made by the various state governments in the country for the development of MSME sector in the state. The researcher may also research on the rationale of small industries, regulation of venture capital funds in small industries, SME Stock Exchange, etc.

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Management of Yoga, the only definite way for Bliss

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Abstract

Due to evolution and civilization man has grown with respect to the innovations and technological comforts. The comforts and the innovations have brought comforts and luxury to human life. It has made him more valuable and he has proved a point that he is the superior creation of God. The innovations and technology have also brought the discomforts, new diseases and the stress and tension. Now he thinks that we need peace. Money and materialistic comforts have started bothering him. This article tries to find out the impacts of yoga for better human life and management of yoga could prove to be his find for attaining the internal bliss and balance.

In general terms Management is the sum total of all the activities like organizing, planning, staffing, controlling etc. If one can control the self he can control a team and could be successful. Yoga directly impacts the behaviour of man and in turn helps the best management practice, leading to meeting the objectives.

Key words: Yoga, Management, Yogic body, health

Introduction

Man is a social animal. He used to be very happy once upon a time. There has been a tremendous impact of modernization and evolution on human beings. The evolution has brought in many changes with respect to the living style, food habits, value system, and beliefs and over all the very concept of living. Over a period of time man has increased his greed, ambition, emotions, hatred and many inhuman qualities. The wants have grown leaps and bounds. All these have resulted in the negative impacts and it has directly impacted the happiness of man. The change and the fast life also have brought in many problems in the social life and even have brought in many diseases. The article looks in to the problems and tries to look at Yoga as a solution to bring the human back on track and ultimately lead a happy life.

Objectives of the study:

This is a conceptual article. Following are the objectives for the study.

1. To understand the concept of yoga
2. To know the concept of health.
3. To find out the significance of yoga to attain good health.
4. To discuss the concept of human body as per yoga.

Research Methodology

As the article is based on the secondary data the information is collected from various literatures available. Related books and scriptures are referred to conceptualize the idea. Apart from the available source the author intends to use his personal experience in the field of yoga as the author himself a yoga guru for almost two decades with a postgraduate degree in yoga science from a reputed University.

Meaning of "Yoga"

The word "yoga" is derived from a Sanskrit word "yuj", which means "to join" or "to yoke".

Yoga is practiced since ages and it is considered as an ancient art based on a harmonizing system of development for the body, mind, and spirit. The continued practice of yoga will lead one to a sense of peace and well-being, and also a feeling of being at one with their environment.

The practice of yoga makes the body strong and flexible and it also improves the functioning of the respiratory, circulatory, digestive, and hormonal systems. Yoga brings about emotional stability and clarity of mind.

Yoga background

Yoga is more than mastering physical postures and increasing the flexibility and strength. "The traditional purpose of Yoga, however, has always been to bring about a profound transformation in the person through the transcendence of the ego," In Hinduism, Buddhism

and Jainism the word yoga gives a common meaning called as "spiritual discipline". People often associate yoga with the physical postures and stances that make up the physical activity of the exercise, however after understanding it thoroughly one can be clear that there are many more aspects of yoga. Yoga is an activity that has been practiced for thousands of years, and it is something that has evolved and changed overtime. Different factions of yoga have developed since its conception.

The exact history and origins of yoga is uncertain. However, there are pieces that have been connected and allow us to make some conclusions. It is known that yoga originated from the East. Evidence of yoga postures were found on artifacts that date back to 3000 B. C. Evidence of yoga is found in the oldest-existing text, Rig-Veda. Rig-Veda is a composition of hymns. Rig-Veda includes prayer, divine harmony, and greater being.

Yoga originally focused on applying and understanding the world. Its focus later changed to the self. Self-enlightenment became the ultimate goal. It was not until the sixth century B.C. that the poses and meditation became a critical element. They were even implemented by Buddhist teachings. The ancient scriptures believe that the father of yoga is the saint Pathanjali. The details of it are available through his famous aphorisms or the yoga sutras. The saint propagated the "Astanga yoga" or the "raja yoga". In other words it is called as the king of yoga.

What is health and happiness?

As per World Health Organization "Health" is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.

Happiness is state of mind and a sense of well-being, joy, or contentment. When people are successful, or safe, or lucky, they feel happiness. Happiness is different for different reasons. Whenever doing something causes happiness, people usually want to do more of it. No one ever complained about feeling too much happiness.

Yoga and health

Yoga is not only just a physical exercise but it is also a way to develop holistic personality development. There are certain basics of yoga which will make one very healthy. The following are these points to remember.

1. Right food

2. Right sleep / relaxation

3. Right exercise

4. Right thoughts

5. Right intake of water

Right quality and quantity of food

The food we eat not only satisfies our physical needs but also directly impacts our mental condition and emotions. There are three types of food as per the prescribed scriptures. They are..

- Tamasic food
- Rajasic food
- Satvik food

The Tamasic food is the one which is stale or rotten. It leads to lethargy, laziness and impacts even the working of our brain and other parts of the body. One should never eat such stale food which will affect our health.

The Rajasic food is the one which instigates us. It influences our emotions as well. The food with more spices, food which emits strong odor, the one with more chillies all will fall into this category.

The Satvik food is the one which is more suitable for human consumption. The raw vegetables, fresh fruits, with fewer spices and more of vegetarian food will make it to satvic food category.

Apart from the type of food we take we also need to take right quantity of food. The intake of food during night time should be comparatively less compared to the day time.

Right amount of sleep / relaxation

Work while you work and play while you play is the famous saying. Games help us to relax. The real relaxation comes to from sound sleep. This is compulsorily required by us to keep up good health.

Right exercise

Yoga is the only solution. In the other forms of exercises like Gymnasium, aerobics etc one will become more emotional and more emphasis is given to improve physical health.

Right intake of water

The scriptures and science says that water is the best medicine. Our body consists of 80 per cent water in it. As we take good quantity (3 to 4 liters) of water the excretion system works in order and the toxins in the

body will be thrown out. This helps to maintain the easy flow of pure oxygen in the body. The medical science has proved that even the stones in the kidney will be dissolved if more water is taken.

Right thoughts

“Aano bhadraha krathavo yanthu viswathaha” is what the Vedas loudly pronounce means let the noble thoughts come to us from every corner of the Universe. Health mind and thought helps to build good health. This comes to us as a gift when we practice unconditional relation. We need to develop detached attachment.

When we follow the above five mantras meticulously we may not need doctors. We will be healthy and diseases keep away from us. When we are away from the ailments our mind will develop positive energy and there will be enthusiasm to out ourselves into any work.

Yogic body

The concept of yogic body is different from the concept of physical body what we study in schools. We normally describe the human body as the component of many chemicals flesh, boons, blood, nerves body parts like eyes, nose, ears, tongue, skin etc. The concept of yogic body is different and is identified as five sheaths as described below.

- Physical body (Annamaya kosha - maya means “made of” and anna means “food” or “physical matter”) – consists of the physical parts of the body which are visible.
- Pranic body (Pranamaya kosha) – includes the process of breathing, and blood circulation
- Mind body (Manomaya kosha - which means “body made of thought processes”) – The main component is mind which is not seen
- Intellectual body (Vijnanamaya kosha - means “the power of judgment or discernment) the part of our intellect which helps us to make decisions
- Bliss body (Aanandamaya kosha - subtle most body which is experienced as ananda) – The supreme of all which is the liberated state of mind and has no attachments.

The sheaths or the kosha mentioned above have the inter-related impact. If there is any disturbance in the Manomaya kosha the mind body it impacts the Pranamaya kosha by showing up the variations in breathing. The variations in breathing may impact the

respiratory system, circulatory system etc. Similarly when there is a disturbance in Manomaya kosha it affects the physical body as well. It may result in acidity, indigestion, increased hypertension etc. Similarly if there is some disturbance in Annamaya kosha the Physical body it impacts the Pranamaya kosha by showing up the variations in breathing and the Manomaya kosha resulting in depression, fatigue, pressure, tension etc. The doctors always say if the mind is disturbed any amount of medicine one take it is not going to help us. Therefore one need to keep the mind cool and calm.

The impact of yoga on human life

When everything fails try patience is the old saying and it is true also. Many a times the doctors advise the patients to go for yoga and it is the last effort. In fact it is proved that yoga can cure diseases when the modern scientific methods fail. Our life style depends on the intake of food, water and exercise. The scriptures say that the human life is very precious and one needs to use it thoroughly. The correct practice of eight limbs (Astanga yoga) of yoga can prove to be more useful. In the present day competitive environment yoga can be of more value and it could bring in happiness and bliss. The bliss state is the ultimate in the hierarchy. When one attains the bliss state it helps him to take on life as it comes and one can practice the detached attachment way of life.

Scope for further Research:

The field of yoga is very vast and the scope for research is very wide. The author has tried his best to conceptualize the concept of health and tried to link the same to yoga. In the medical field there are many advanced equipments to conduct the lab tests and collect the test results and conclusions could be drawn. These type of tested could be more authentic and statistically genuine.

Conclusion

The article has thrown the light on the health aspects and it has discussed the actual meaning of health as per WHO. There are many diseases that cannot be cured by mere medicine. Health is not simply the absence of diseases and the meaning goes beyond. One need to consider the state of mind also. When the exercises, aerobics, Gymnastics etc simply work on the body “yoga” works on both body and mind. The article also indicates the simple five point rules of life to keep health and happy. The yogic concept of body is also

very scientific and the science also agrees that the mind is the centre of all the variations. When one knows to manage the mind the other things will become easy. Mind can be our friend and it can also be our enemy. Let us be friendly and lead a blissful and blessed life.

The management of mind signifies the management in general. When a person knows how to control himself he could well understand how to control a team. This is in simple words the best management practice.

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INTERVIEW

Prof. Y. K. Bhushan

Management Educator, in conversation with AIMSR

Q1) A proper research is a combination of both qualitative and quantitative research. What is your viewpoint on this?

Ans. Qualitative research can rightly provide the basis for Quantitative research because such research can be exploratory and can provide leads for further research. Quantitative research can then be used for validation of the leads based on data analysis. In practice most of the empirical research is quantitative and qualitative research if conducted is not in accordance with the established norms, it tends to be descriptive without analysis.

Q2) Has Digital Disruption boosted research? If Yes, How?

Ans. Digital Disruption has only enabled research. Since digital means of data collection and analysis have become available right to the extent of Big Data crunching, it is a welcome disruption. In any case other tools which are available for small data analysis particularly, like SPSS and SaaS are generally considered enough for academic research. Big Data crunching is much more in use in industry specially in the area of Marketing.

Q3) What are the justifications for Operational definition to enhance the quality of research?

Ans. Clarity in research can emerge only when there is a common ground. Therefore there has to be a consensus on the terminology and the perspective recognizing that some words could have different new answers. The researcher cannot turn back later and say that he did not mean what rest of the academic community meant. The operational definition is also based on some degree of research in the sense that it has to be rooted in the work already done by way of research.

Q4) How SME development boosted India's economic growth?

Ans. SME's constitute a sector which has gathered many storms and yet they have proved resilient. Part of the reason for their survival is in the support provided by the Government for development as well as face saving. Since SME's are promoted by individuals, it has helped in creation of employment for many who would not find a place in the large industrial sector. However as the SME's grow and get upscaled they do run into problems of a kind that medium scale and large scale industries face. For example labour problems have been hurting many growing SME's. This combined with the financial problems may discourage some entrepreneurs to go out of business. The attitude towards SME's in the society has undergone tremendous change as getting into business was not the top option in the earlier days when government service was considered a better option for individuals. The spread of technical and management education has helped in encouraging individuals to take to their own business.

Q5) What suggestions would you like to give to young researchers who have just started writing research papers?

Ans. Proper research should emerge after and on the basis of considerable study of literature and application of research methods and techniques on a smaller scale for working on papers. Interest of the researcher may get crystallized through this process leading to enhancement of their interest in this area. Without developing an interest in the area, in-depth study through full scale research will be difficult to pursue.

Q6) You are considered as an epitome of success.

What are the skills required to be successful?

Ans. Looking back I feel that there is no end to the pursuit of excellence because it is a journey and not exactly a destination. In my own life, I have seen networking playing a very important role. That combined with some written work and active participation in the various forums especially with investment of time and energy in leadership positions helped me to reach where I am. I still feel that there is so much more to be done in this journey which gives me the feeling that one lifetime is not enough to do all that you wish to. One change which I observed in my own self is that I still continue to be ambitious seeking greater heights. But my ambition is now turned into institutional ambition from personal ambition. I now seek greater heights to be achieved by the Institutions which I am associated with. Ultimately its all about making a difference. I have transformed myself from the position of being different to making a difference.

Q7) What inspires you in Education sector?

Ans. In the Education sector the opportunity of making a difference to your colleagues and students has kept me going. Because of this I have enjoyed my work in education and human development has kept me on for nearly 60 years now.

Q8) You are considered as one of the good leaders leading a successful team. What are the main qualities of a successful leader?

Ans. A leadership position which involves building, sustaining and enhancing influence, one has to take care of the development of colleagues and students. One cannot be competing with the colleagues. But should be prepared to sometimes make way for a colleague to achieve greater excellence. Its often a pleasure to be left behind by colleagues much the same way as a father likes to be outdone by his children.

Q9) How you made your journey overcoming various hurdles?

Ans. My first hurdle was a personal one in the sense that I had a failure experience when I began speaking in the school debate. I went blank. My father encouraged me and so did the teachers and I again came back to speak and I achieved some success. From then on I spoke and

gained confidence to the point where I could speak in as many as three debates on one evening, one after the other. So I had a large number of prizes to the point that at one of the prize distribution at my college, the then Vice -Chancellor of Delhi University, an expert in Maths, was the Chief Guest. When he found me receiving a prize in practically all events of the college he announced that the distinction of distributing prizes should go to me. On the other hand, as a teacher as I spoke, participated in various forums, beginning with the colleges where I taught, got into administrative positions and then I got into the passion of building an Institution. Earlier as a teacher I was into building people and came to believe that an institution is the best gift one can nurture.

Q10) What suggestion would you like to give to our leaders and youngsters who have ideas but do not know the way forward?

Ans. The way forward to my mind lies in associating with others, gaining acceptance and pushing forward the common agenda with others.

Book – Restart: The Last Chance for the Indian Economy

Author – Mihir S. Sharma

Publisher – Random House India

In *Restart*, Mihir S. Sharma shows what can and must change in India's policies, its administration and even its attitudes. The answers he provides are not obvious. Nor are they all comforting or conventional. This book is the answer to the very basic question "What is wrong with India". The author has divided the book into four parts and each part discusses specific aspects, the symptoms, the root cause, the reasons for erstwhile growth models failure and the hardship that the nation has to subject itself in order to grow. Along with this, the book critically evaluates the dimensions on which India is transforming namely demography, infrastructure and social. Structurally, the book is well organized and the author often cites instance from the previous sections. The author, backed with examples, goes on to prove the old adage that "India is unique". Overall, this book gives you very good perspective about India, its problems and the way forward.

Mihir S. Sharma was born in Delhi and grew up in Chandigarh, Mumbai, Jamshedpur and Kolkata. He was trained as an economist and a political scientist before dropping out of academia. He now writes and edits opinion for the *Business Standard* newspaper in New Delhi.

Sharma documents, in his well-researched, entertaining and well-written book, the story of the Indian economy over the last 67 years and the need for Indian thinkers and policymakers to restart the growth and development process.

India needs a change of mindset, and Sharma has valiantly embraced that path as the salvation of our future. In identifying the problems facing the economy, the author faults the ineptitude of both the state and the private sector "India," says the author, "has a passion

for under-capacity as enduring and inexplicable as its love for cricket." The problem is we need to create capacity very rapidly, because jobs need to grow by 3% every year, almost twice the rate at which they have grown since liberalization.

Why haven't we done as well as we should have? There is, of course, a whole cast of villains, including "The Mahatma's Malign Legacy", the heading of one of the chapters. The reference is to the mistaken emphasis on protecting rural India and rural livelihoods, in spite of young Indians wanting to escape what Karl Marx called "the idiocy of rural life". Forcing the poor to stay on in unproductive marginal farms or in make-work programmes like the Mahatma Gandhi National Rural Employment Guarantee scheme (MGNREGA) is a guarantee they will stay poor. The same argument holds true for the protection of small-scale enterprises, which too ensures they remain unproductive and unable to afford modern technology.

The author writes that in 2004, when the United Progressive Alliance (UPA) government came to power, it too wanted to speedily improve infrastructure. But the magnitude of the task was immense and the government realized it didn't have the resources for it. So it decided to rely on the private sector and the PPP (public-private partnership) model was forged. The government pulled out all the stops in trying to make it work, giving the corporate sector cheap land and cheap financing. But when the euphoria dimmed after the 2008 financial crisis and the corporate sector realized that it had badly miscalculated the returns from investment, it was the government they turned to for relaxing the stipulations. Bid conditions were altered to benefit private parties.

The government was either unable or unwilling to discipline its private sector partners. Sharma quotes eminent journalist T.N. Ninan as saying that India is a strong state when it comes to bullying the poor, but a weak state when it comes to controlling the rich. The failure of the PPP model, Sharma says, was responsible

for investment drying up during the UPA's second term. The problem, Sharma believes, is of crony capitalism. As exemplars, he identifies businessman Vijay Mallya, who has a chapter, "The King of Good Crimes", dedicated to him, and the Indian Premier League which, he says, "manages to insult women, history, cricketing skill and the intelligence of its viewers".

But it's not just cronyism. Governments, for example, are loath to take on the landed elite in villages because they are the ones who can deliver the votes. Unlike the autocracies of East Asia, the Indian establishment has been unable to assert itself when it comes to powerful sectional interests. The tendency has been not to rock the boat, but to take the easy way out. The stimulus package for industry after the financial crisis was one such example. Indian industry has got used to freebies.

What then needs to be done? India, says Sharma, needs another way to grow. We must stop throwing good money after bad. If promoters have made wrong decisions, they must suffer the consequences and their projects handed over to others. And the decision whether to continue with the projects or to hand them over must be made by the market. We need to allow the process of price discovery to work and for that we need free markets in land, in labour and in capital.

What about the UPA's supposedly unsustainable subsidies? Sharma says a welfare state is inevitable in a democracy but it would be best to give money to poor people directly, rather than through convoluted subsidies that distort market prices.

India promises a lot to its citizens and the world, but delivers little and disappoints a lot. Our economic policies get lost in the maze and trap of bureaucracy, outdated laws, multiple power centres right from the centre to the village level, impossible to navigate rules and regulations and a society divided by caste and class. It is nearly impossible to do an honest business in India and be world class. Mihir Sharma takes a hard look at the Indian reality, its myth of progress and its lost opportunities to provide jobs for its citizens and compete with the world. The language is very simple, almost folksy and very easy to understand for a common reader who has no knowledge of economics and politics. Mihir traces the history and how we have reached the present wherein on one hand Government makes big announcements, but on the ground hundreds of obstacles defeat the policy. He has made some scathing observation about Indian way of accepting

mediocre goods, cutting corners, and compromise quality. Indian pharma and IT industry are supposed to be world class, but Mihir shows them as they really are, second class imitators.

When India was compared with the Asian tigers and mentioned as an elephant, our former Prime Minister, Dr. Manmohan Singh remarked that when an elephant walks it leaves its footprint behind. This is where the description provided in the book on policy paralysis has made it so interesting read. Problems like employment generation, agriculture challenges, PPP structuring have been dealt with keeping in view the past and the present global scenario. Most interesting chapter or the topic was the observation by the author on the relationship (causal or co-incidental) between ownership of IPL teams by the companies and shareholder value destruction of those companies. The other interesting lesson from the book is on how the companies bid for the government contracts without keeping in mind the increase in commodity prices.

The author provides case studies on total non accountability and mismanagement of Indian companies, poor delivery of public infrastructure projects by private players and how personalities and companies have profited and milked the political patronage for their personal profits. The infrastructure bits on Mumbai, Floor scale Index, how the politics killed the business district and how the story of how the city is being slowly choked to death makes interesting read. The readings on improving cities not as centers of living but as centers as productivity and work where people from villages can come for work is quite contrarian but makes sense. The latter part of the books mentions some of these solutions to these issues and the reason why this could be the last chance to restart the Indian economy but is sometimes vague on the nature of implementation.

Book: Academic Excellence...The Start of Learning Revolution

Author: Abhishek Shetty

Publisher: Shroff Publishers & Distributors Pvt. Ltd.

The author of the book, has made his debut in writing on the basis of his personal transformation and life experiences as a student. He has attempted to put his valuable insights and attempted to provide a guiding light for any student to find the best in themselves, enabling them to be on the right path to achieve Academic Excellence.

Academic Excellence...The Start of Learning Revolution is about understanding and accepting the different attributes of a student. It emphasizes on the fact that it is okay to be diverse but one should be passionate in doing whatever they like to and their approach towards academics should also be similar. The techniques and tips discussed in this book will give you a preview of what the top students do to attain academic excellence and in what way any student can do the same.

The vivacity of the book is sustained through the conversations of Amish Sharma (a teenager born in a city who is having all the resources needed for a student to be successful but is scared of exams) with Niel Shah (a student with portfolio of achievements) and others. The book comprises of 25 chapters divided across 4 sections. In the initial pages of the book, Abhishek speaks about the need of the students to be accepted as they are in terms of food they eat, clothes they wear and even their hairstyle. He also states that their family members and also their friends should comfort and support them. Further, every student is unique and has something unique to offer. All of them are born perfect, and what is important is the quest for excellence and not marks.

First section of the book is about "Seven steps to becoming a subject topper". In these seven steps the author has narrated about ones belief in oneself through positive affirmations and utilizing the knowledge of the past achievers, even learning from their mistakes. All is possible by focussing on small goals and the bigger goal is automatically taken care of. Visualise your accomplishments and think, feel & act like a topper. Celebrate every accomplishment and reward yourself with small joys of life.

It is very clearly mentioned in this section that it is important that you should fall in love with the subjects and then subjects will fall in love with you. Its all about understanding the subject rather than chasing the marks, which eventually follow. A consistent revision and reviewing is important for being successful.

The second section of the book explains about mastering exams by mastering the three areas of exam preparation, pre-exam mindset and actual writing of exam. While preparing for the exam the student should prepare a plan and start studying from Day 1 and just finish the daily goals, as planned. Practicing past years papers will help you to reduce errors. Similarly timing your paper will enable you not only to complete your paper but also answer unanswered questions. Besides the exam preparation, the most important for a student is his mindset and the winning attitude towards his exams which can be built through anchoring, "I WILL GET HUNDRED ATTITUDE and the power hour (morning sixty minutes of energetic exercise, breakfast of champions, inspiring books/ movies and auto suggestion) will totally transform your day. While writing the exam, a student should use review time effectively, focus on each question separately and keep a watch on paper presentation and time allotted.

As stated in the book,' a sound mind resides in a sound body', the author has illustrated the importance of physical as well as psychological development in the third section of the book. It covers the importance of power of subconscious mind, power of suggestion, mind stimulants and staying positive. He also narrated the fundamentals of speed reading, memorising techniques and developing a topper physiology.

To conclude this book, Section 4 states “ 11 reasons why the best students become better' which shares the 11 qualities that students must nurture and experience in themselves. They include leadership, communication skills, sports, team building and becoming a better human being.

Conclusion:

This book exposes the student power to achieve excellence in all spheres of life by overcoming academic fears and uncertainty through consistent effort. The four sections of this book are very well connected through the academic illustrations of Amish, thus leading to his success. This book is quite motivating and can be a guiding light to many who are detrimental about academic success.

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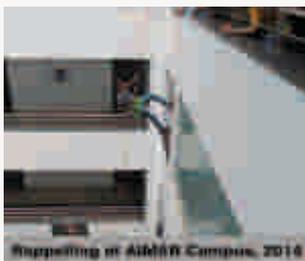
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