

## Spotlight on Awareness of Gold Monetization Scheme (GMS) : A Kaleidoscopic Investigation

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### Abstract

The volatile bullion market is a severe concern for policy makers as the Indians affinity to buy gold blocks huge economic resources into the idle unproductive asset gold. Massive gold demand leads to deterioration in current account deficit. Gold Monetization Scheme (GMS) acts as a pioneering mechanism to arrest widening current account deficit (CAD). This study attempts to gauge the level of awareness with regard to Gold Monetization Scheme (GMS) that exist among the Indian Working Women. One sample t test and non parametric Kruskal Wallis Test as been employed to determine the association between knowledge of finance and economics possessed by Indian Working Women on awareness about to Gold Monetization Scheme (GMS). Results revealed that Women possess moderate awareness about Gold Monetization Scheme (GMS) of Ministry of Finance, GOI. Necessary efforts have to be made by the government to boost the level of awareness among the Indian working women.

**Keywords:** *Gold Monetization Scheme (GMS), Current account deficit (CAD), Gold jewellery, Certificate of Purity, Balance of Payment, Working Women*

### Introduction

On 5th November 2015, Honourable Prime Minister, Shri Narendra Modi, launched “Swarna Barat” (Golden India), formally called “Gold Monetization Scheme (GMS)” for mobilizing gold held by households and institutions in the country in order to put this gold into productive use. The enduring intention which is hunted through this arrangement is to trim down the country's reliance on the import of gold to meet domestic demand. GMS acts as a pioneering mechanism to arrest widening current account deficit (CAD). India imports 661.4 tonnes of gold valued \$33 billion in 2013–14 and Gold stands as the second leading imported item after crude oil in country's import bill. Import of gold (on net basis, after reckoning export of gems and jewellery), constitutes nearly 25% of India's trade deficit in 2013–14. Hence, Government of India (GoI) controlled the gold by adhering to diverse measures, such as escalating gold import duty, stipulating additional conditions, such as 80:20 rule for imports,[iii] etc. Though these preventive measures facilitated in neutralize ballooning current account deficit to some degree, it finally resulted in unbridled smuggling of gold into the country through various channels. Rs. 690 crore of Illegal import of gold are seized by the Indian customs authorities during 2013–14 (Saravana, M Srikanth, Suhas M Avabruth (2015)). Gold Monetization Scheme (GMS) scheme enables the gold depositors to earn interest on their accounts. When a customer brings in gold to the counter of specified agency or bank, the purity of gold is determined and exact quantity of gold is credited in the metal account. Necessary KYC (know-your-customer) process has to be completed by te customer. Both principal and interest to be paid to the depositors of gold, will be ‘valued’ in gold. For example if

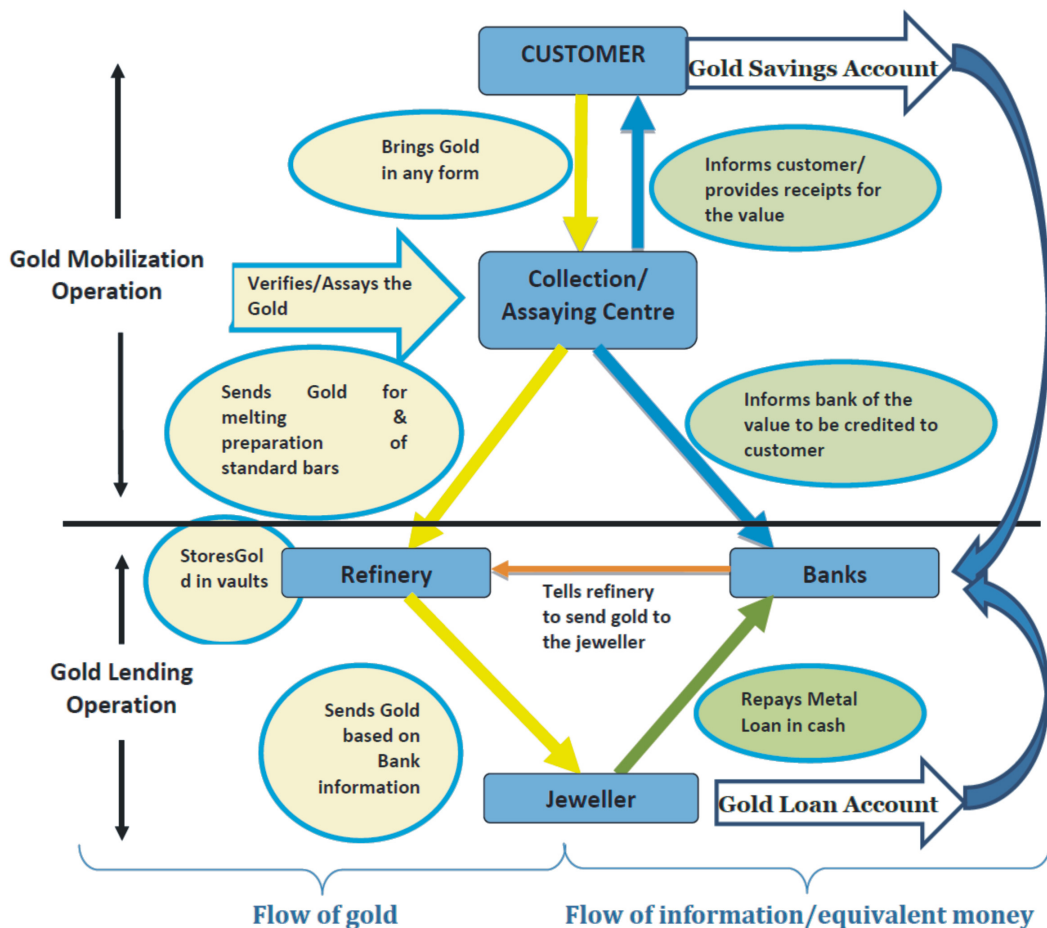
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a customer deposits 500 gm of gold and gets one per cent interest, then, on maturity he has a credit of 501 gram. Minimum tenure of Gold Monetization Scheme (GMS) is one year, In order to encourage small depositors; the minimum quantity is pegged at 30 gram. Redemption is done either in the form of gold or cash were the preference as to be mentioned by the customer at the time of deposit.

**Fig. No. 1 Diagrammatic Flow Chart**



Source: [www.finmin.org](http://www.finmin.org)

## Review of Literature

D'Souza (2015) emphasize that monetizing the gold within the country is, therefore, important for macroeconomic stability, and requires a credible scheme for valuing, storing, and tracking the metal.

P Saravanan et.al (2015) stresses that unless the Gold Monetization Scheme addresses the emotional attachment of investors with physical gold and shows significant improvement over the previous gold deposit scheme.

Lutter (2008) emphasized that the major rationale behind gold investment occurs from excess income over expenses and one wants to preserve its worth for the future in the scenario where inflation is augmenting.

Pranjape (2005) argues that unfortunate Indians who have no access to any other asset market can conveniently park their savings in the form of gold. This asset holds a unique position in that in good times it can be used as an ornament whereas in bad times it can be converted into cash.

O' Connell (2006) emphasizes that gold has an emotional feeling in Indian context, as it is known as 'Streedhan'. Gold is considered as Indian bride wealth which she takes with her when she marries and which remains hers. This helps to give gold a significant role in women empowerment.

Mehrotra (2004) focuses on the cultural significance of gold. The author highlights that despite the economic recession, fluctuating prices of gold and other secularizing forces of globalization, the cultural value associated with gold would continue to sustain the relationship between gender and gold thereby making it possible for the women to continue having control over this form of property. The author concludes that gold is being seen as a good investment option and find that the gold prices have spiraled up again conforming to the traditional Indian logic.

### **Statement of Problem**

India is the largest consumer and importer of gold. Demand for bullion does not adhere to the Law of Demand. The volatile bullion market is a severe concern for policy makers as the Indians affinity to buy gold blocks huge economic resources into the idle unproductive asset gold. Massive gold demand leads to deterioration in current account deficit.

### **Objective of the study**

To gauge the level of awareness with regard to Gold Monetization Scheme (GMS) that exist among the Indian Working Women

### **Hypothesis of the study**

H<sub>0</sub>: There exist no awareness with regard to Gold Monetization Scheme (GMS) that exist among the Indian Working Women

### **Source of Data**

This study is confined to Indian working women. The methodology of the study is based on primary data collected through well framed and structured questionnaire to elicit the level of financial literacy that exist among Indian working women. Convenience sampling has been used to collect responses from the Indian Working Women. The primary data was collected from the Working women in person by the researcher through survey method.

### **Research Design**

The researcher has designed nine statements to gauge the level of awareness with regard to Gold Monetization Scheme (GMS) that exist among the Indian Working Women. These statements were designed using Gold Monetisation scheme (GMS) formulated by finance ministry, GOI. Working women are instructed to express their opinion for the statements given in the questionnaire based on Likert's five point scale.

157 questionnaires were distributed for conducting the study among the Indian working women in Chennai City. The number of questionnaire collected after sustained follow up was 120. Out of the 120 responses only 101 were complete and suitable for statistical analysis. Therefore, the exact sample size for this study is 101.

Table 1. Descriptives for Awareness on Gold Monetization Scheme (GMS)

Statements on GMS	N	Mean	Std. deviation	Std. error mean
The GMS earns interest for your gold jewellery lying in your locker	100	4.0200	.71038	.07104
Coins and bars deposited under GMS can earn interest apart from the appreciation of value	100	3.9100	.71202	.07120
Your gold will be securely maintained by the bank	100	3.9200	.70611	.07061
Earnings obtained under GMS are exempt from capital gains tax, wealth tax and income tax	100	3.8100	.69187	.06919
You get back your gold in the equivalent of 995 fineness gold or Indian rupees as you desire	100	3.7300	.72272	.07227
The designated banks will accept gold deposits under the GMS	100	3.7500	.70173	.07017
Certificate on purity and gold content is issued to the depositor by Collection and Purity Testing centre	100	3.1400	.81674	.08167
GMS would have favorable implication for the country's current account and balance of payments	100	3.2400	.80554	.08055
GMS is an important instrument to contain the impact of high demand for gold on economy	100	3.3300	.71145	.07115

Source: Computed data

Table 1 exhibits that mean value of the nine variables with regard to GMS range from 3.1400 to 4.0200. Likewise the standard deviation also ranges from .69187 to .81674. The researcher computes t statistics to accurately determine the level of awareness of respondents towards Gold Monetization Scheme (GMS). The subsequent t test table reveals the perception of the respondents.

Table 2. t test results for Awareness on Gold Monetization Scheme (GMS)

Statements on GMS	Test value =2					
	t	df	Sig (2-tailed)	Mean difference	95% confidence interval of the difference	
	Lower	Upper	Lower	Upper	Lower	Upper
The GMS earns interest for your gold jewellery lying in your locker	28.435	99	0.000	2.02000	1.8790	2.1610
Coins and bars deposited under GMS can earn interest apart from the appreciation of value	26.825	99	0.000	1.91000	1.7687	2.0513
Your gold will be securely maintained by the bank	27.191	99	0.000	1.92000	1.7799	2.0601
Earnings obtained under GMS are exempt from capital gains tax, wealth tax and income tax	26.161	99	0.000	1.81000	1.6727	1.9473
You get back your gold in the equivalent of 995 fineness gold or Indian rupees as you desire	23.937	99	0.000	1.73000	1.5866	1.8734
The designated banks will accept gold deposits under the GMS	24.938	99	0.000	1.75000	1.6108	1.8892
Certificate on purity and gold content is issued to the depositor by Collection and Purity Testing centre	13.958	99	0.000	1.14000	0.9779	1.3021
GMS would have favorable implication for the country's current account and balance of payments	15.393	99	0.000	1.24000	1.0802	1.3998
GMS is an important instrument to contain the impact of high demand for gold on economy	18.694	99	0.000	1.33000	1.1888	1.4712

Source: Computed data

Table 2 reports that the t values 28.435, 26.825, 27.191, 26.161, 23.937, 24.938, 13.958, 15.393 and 18.694 are statistically significant at 5% level. This indicates that the computed mean values of all the nine variables are greater than 2. Therefore it can be concluded that the Indian Working Women perceive the Gold Monetization Scheme (GMS) initiated by Ministry of Finance, Government of India. Results reflect that the respondents possess moderate awareness about Gold Monetization Scheme (GMS) drafted by Ministry of Finance, GOI. Thus null hypothesis formulated by the researcher is rejected.

Table 3. Kruskal Wallis Test Results for Knowledge in Economics and finance among Indian Working Women and awareness about Gold Monetization Scheme (GMS)

Statements on GMS	Knowledge in Economics and finance (Mean Rank)			Chi-Square value	Asymp. Sig.
	High (N=13)	Medium (N=31)	Low (N=56)		
The GMS earns interest for your gold jewellery lying in your locker	37.35	52.53	52.43	3.817	0.041
Coins and bars deposited under GMS can earn interest apart from the appreciation of value	41.65	54.29	50.46	2.138	0.043
Your gold will be securely maintained by the bank	38.15	53.92	51.47	3.536	0.011
Earnings obtained under GMS are exempt from capital gains tax, wealth tax and income tax	36.38	53.47	52.13	4.438	0.054
You get back your gold in the equivalent of 995 fineness gold or Indian rupees as you desire	30.19	54.87	52.79	8.906	0.012
The designated banks will accept gold deposits under the GMS	28.81	55.37	52.84	10.487	0.005
Certificate on purity and gold content is issued to the depositor by Collection and Purity Testing centre	30.38	55.56	52.37	8.393	0.015
GMS would have favorable implication for the country's current account and balance of payments	27.04	55.94	52.94	11.396	0.003
GMS is an important instrument to contain the impact of high demand for gold on economy	25.23	55.29	53.71	13.838	0.001

Source: Computed data

Table 3 reports Kruskal Wallis Test results for Knowledge in Economics and finance among Indian Working Women and awareness about Gold Monetization Scheme (GMS). Mean ranks for 56 women who possess low financial knowledge ranges from 50.46 to 53.71.

31 Respondents who possess medium level of financial knowledge obtain favourable Mean ranks from 52.53 to 55.94.

13 Women who possess sound financial knowledge acquire mean ranks ranging from 25.23 to 41.65. The above table also depicts the Pearson's chi-square value =3.817, p value = 0.041 for awareness about the interest for gold jewellery deposited under GMS are statistically significant at 5% level. The awareness about the Coins and bars deposited under GMS can earn interest apart from the appreciation of value, knowledge on security of gold deposited (Pearson's chi-square value =2.138, p value = 0.043), Other benefits that accrue by depositing the gold under GMS such as exemption from taxation (Pearson's chi-square value =3.536, p value = .011), Redemption under GMS (Pearson's chi-square value =8.906, p value = .012), Certificate on purity and gold content issued by Collection and Purity Testing centre (Pearson's chi-square value =8.393, p value = .015) are statistically significant at 5% level.

Respondent's awareness on GMS as important instrument to contain the impact of high demand for gold on economy payments (Pearson's chi-square value =13.838, p value = 0.001), GMS favourable implication for the country's current account and balance of payments (Pearson's chi-square value =11.396, p value = 0.003) are statistically significant at 1% level. Kruskal Wallis Test results accurately determines that the respondents are moderately aware about Gold Monetization Scheme (GMS) of Ministry of Finance, GOI rejecting the null hypothesis.

## Conclusion

The extraordinary increase in gold consumption is a sound outcome of mounting attentiveness among people about gold as a trustworthy investment asset. "Gold Monetization Scheme (GMS)" is a novel initiative devised by Ministry of Finance Government of India to neutralize ballooning current account deficit and bring positive inference on Balance of payment position of the economy. This statistical investigation revealed that Women possess moderate awareness about Gold Monetization Scheme (GMS) of Ministry of Finance, GOI. The results of this study are noteworthy from a regulatory perspective. Necessary efforts have to be made by the government to boost the level of awareness among the Indian working women.

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# **Social Media Use at Workplace : An Analysis of the Agreement on Benefits, Risks and Risk Management Strategies**

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## **Abstract**

This study tested a generally held notion that allowing access to social media at workplace has more risks than benefits. Lists of possible risks, benefits and risk management strategies were developed from the literature. In an online survey, executives of different companies were asked to rank order these lists. The aggregates of these ranks were used to understand how clearly possibilities have been demarcated. This demarcation was found to be clearly identifiable in the cases of risks and risk management strategies, but not so with benefits. HR executives were separated to verify role related differences in these rankings. No significant differences were found between the ranks given by HR Executives and those given by other executives. The rankings given by executives who had either an experience of/had been a witness of social media abuse were also not significantly different. The results of the study appear to suggest an irony in the inevitability of the need for having access to social media though its benefits are unclear.

**Keywords:** *Social Media, Moral Reasoning, Risk Management, Benefits, Communication*

## **Introduction**

If a Martian looked at earth in the pre-social media era, and he had super-alien capacity lenses that could color code human communication by subjects involved and spaces across which communication was happening, he would have seen patches of colors in different spaces. Because family-related communication would be confined to the home-space making residential colonies appear as a big splash of color. And business-related communication would be somewhere else indicating office-space. Apart from being very clear, such geographical distance also masks any communication that is inappropriate for its space, such as raising family affairs at workspace and vice-versa. Martian would have been happy because if he wanted to send a post, he could clarify his destination using these color codes.

With the rise of social media, the super-alien capacity lens of the Martian loses potency. All of a sudden, what Martian can see is limited to a big black entity that is likely a result of all colors crossing and interspersing each other. Communication isn't marked out based on the subject or spaces, because social media is this new and elevated bridge that obstructs the Martian's view. The issue is not that this new bridge called social media is bad, but the Martian out there has trouble sending his post now.

The portrayal of these two extreme situations of the Martian may be unreal, but the reality of communication in the modern times fits between them somewhere. Social media blurs the difference between real spaces and virtual spaces. In a world where real spaces are ear-marked to appreciate certain types of communication, there is a greater element of control; and that meant that organizations

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could control the content of office-talk. But in a world that is shrinking by the disruptive technologies that come along frequently, creating virtual communities, there is a greater amount of uncertainty; and that means that organizations have lesser control on what their employees communicate, with who and which real space does it reach to.

Therefore the case for management to pay attention to social media is made at least on two counts: one, what can organizations do to gain some control on employee communication; and two, how can organizations be assured that employees don't abuse (i) the organization on social media and (ii) the organizational provisions of providing unrestricted access to internet at workplace by indulging in activities that limit their productivity, pass information beyond organizational boundaries, search for jobs and so on.

Social media is not necessarily a sparing forum. Therefore, the range of communication risks that organizations are exposed to on social media is exactly inestimable and approximately unrepresentative. The manners in which these risks should be countered cannot afford to be blunt because the source of risk is accessible everywhere. So any mismanagement or risks might provoke a strike from a different and unanticipated area. And to add to those challenges, the sources of risk are also where the sources of opportunities lie. Hence, for organizations, there is an irresistible temptation to control the demon of social media, and at the same time an insatiable thirst to leverage the opportunities it can present.

### **Literature Review**

There are usually two extreme routes that organizations take when it comes to providing their employees access to social media at workplace: one, provide unrestricted access, and the other, block the access entirely. These two routes are potentially symbolic of organization's orientation in trusting its employees. While the former is interpreted as a sign of unconditional trust leading to an improvement in working climate, the latter may be interpreted as blunt and skeptical about the employees' commitment to job creating a sense of insecurity in them (Mutala, 2012).

Even in cases where organizations choose to restrict the access to social media at workplace, employees still retain some capacity to access social media at their private places and still post messages and involve in conversations. And if there is an intention of malice, the capacity of organizations to censor the activity of their employees on social media falls clearly insufficient. Therefore, blocking access to social media at workplace really serves only as a threat and a call for obedience to broader organizational policies.

In case of organization whose employees are professionally mature, giving access to social media may not be much of a risk. But even otherwise, giving access to social media and then informing the employees of professional standards they are expected to follow, gives more potency to the threat that follows any misuse. This is since the organization acted in the best interest of employees and expects similar returns, which is fair in any kind of employment contract. This perspective may be pragmatic since employees can be trained on being professional, and standards of communication can be deliberated and developed.

Employees act as the face for organization in their boundary-spanning or client-facing roles. In such roles, the conduct and communication must be relevant, accurate and assertive. Employees have organizational email IDs for communication. In most cases, these IDs are also used for personal communication of employees with their friends elsewhere. Organizations may consider encouraging the employees to use disclaimers that specify the nature of communication in the email. Instead of working as a threat signal, such gesture allows the employees a freedom to continue using the email ID in whichever way they want, but only with more clarity and caution to separate the professional cause from personal use. Such move may be reasonably seen as non-intrusive measure that invites certain conformity to the spirit of providing professional email IDs.

In the same vein, it also becomes imperative for organizations to protect their information and ideas; which the employees having privileged access may leak. In such cases, the organization may call for

external intervention such as imposing the copyright laws or intellectual property right laws as applicable on all employees.

Employee engagement is another veritable idea which proclaims that employees often work for lesser time than they are contracted for; but in that lesser time, they should be able to contribute as much as they had promised or perhaps more. Organizations have adopted several ideas in keeping their employees actively engaged. These strategies include offering sports facilities, cafeterias, and other recreational facilities to which the employees can retire when they are not working, so that they can come back to work feeling rejuvenated. By the same argument, some organizations treat giving access to social media as part of keeping the employee as actively engaged. However, research shows that once employees are onto social media, it takes them more than twenty-five minutes to connect back to real work (Thorne, 2015). This is therefore a time-loss of serious consideration for organizations. Organizations may at this stage choose to; hypothetically at least, indicate terms of acceptable use of social media at workplace. And these terms may be included in the employment contract itself.

And lastly, organizations could place themselves on the 'cajole' orientation to persuade employees to have access to social media and at the same time be offered incentives for a pro-organization use. In this perspective, access to social media is not seen as a risk, but seen as an opportunity that invites the employees to promote the organization. CapGemini for example rewards its employees who do the best promotion of the company on social media.

### **Research Design**

Emerald recently published a book series called 'Advanced Series in Management'. One full volume in the series was dedicated to the conversation on 'Social Media in Human Resources Management'. This volume was chosen as a point of reference since it brought together qualitative and quantitative studies from different countries. The methods used in several papers of this volume included surveys, focus groups, Delphi technique, and systematic literature reviews. The volume is robust and strived to fairly balance theory with applications. The volume was thoroughly read with an intention to bring out the application aspects of social media use at the workplace. For example, from a chapter called 'Social Network Screening', it was identified that HR Managers tend to reject applicants because the applicants had posted (i) inappropriate pictures, (ii) bad-mouthed employers, or (iii) made discriminatory comments on their social networks. Once all such application aspects were identified, from an organizational perspective, a list of risks, risk management strategies, and benefits were taken for inclusion in the survey. The annual surveys by KPMG (<https://www.kpmg.com>) and Proskauer Rose Inc. (<http://www.proskauer.com>), on 'social media uses of organizations' have also been studied in detail to validate if the items selected for survey.

The final survey included questions asking the executives if they had any prior experience of social media abuse and their role in the organization. The questions regarding risks, risk management strategies, and benefits were formulated in two different ways to enable testing for response validity. The first form was that of a multi-response multiple-choice question. And the second form was that of a rank order question where the respondents were required to rank all the risks, risk management strategies, and benefits. Responses are considered valid if the choices made for the multi-response multiple-choice question figure among the top ranks. Otherwise, the responses are considered random and are excluded from analysis.

### **Objectives**

This study seeks to understand the following:

- RQ1: Is there a clear differentiation, exhibited by the aggregate ranks, between risks, risk management strategies, and benefits?
- RQ2: Does the ranking of risks, risk management strategies, and benefits change by (a) role within the organization (HR executives and others), and (b) prior experience of social media abuse (those with such experience and others).

### Sample and Data Collection

The survey was designed on KwikSurveys.com and was placed on social media portals such as Facebook, LinkedIn, and Twitter. It was also emailed to several acquaintances. More responses were acquired through references. Such snowball sampling had to be used since social media at workplace is a sensitive idea that most organizations would not have encouraged their executives to respond to. For a confidence interval of 95% with a margin of error of 10%, the required sample size to come to reasonable conclusions is 97(<http://stattrek.com>). The survey received a total of 121 responses of which 24 were excluded from analysis because either (i) these responses did not pass the response validity test, or (ii) the response was incomplete.

Parameter	Count (Percentage)
Role (HR)	32 (33%)
Role (Other Executives)	65 (67%)
Prior experience of social media abuse (Yes)	40 (41%)
Prior experience of social media abuse (No)	57 (59%)

### Analysis Scheme

Weighted average ranks were computed for each factor given to participants in risks, risk management strategies, and benefits of accessing social media at workplace. These values were plotted on a bar chart by the rank. A trend line is also placed on the same graph. The slope of this trend line is a good indicator as to how clearly—on an average—participants are able to differentiate the options they had ranked. For example, if the trend line is of a higher slope (angle of the line made with x-axis), then it indicates that the mean difference in weighted average ranks between factors is increasing—there by indicating greater clarity/differentiation. Alternately, if the slope is lower, then it indicates a lack of differentiation. A 450-trend line could have started at, for example, a risk ranked 1st and gone on to a risk ranked 6th in increments of 1-unit along both axes. Such a line indicates a theoretically perfect differentiation between factors. Since these are ranks developed from aggregate responses, such perfection is not expected. However, the closer the trend lines are to this, one can infer that there is more clarity/differentiation. On the contrary, flatter trend lines indicate fuzzier factors.

### Results

Figure 1 attempts to answer RQ1; and shows the aggregate rank structure and the trend lines (linear projections). It can be seen that the slopes of trend lines for risks and risk management strategies is clearly bigger than the slope of the trend line for benefits. This means that generally there was more clarity (and consistency) in rank ordering factors for risk and risk management strategies as compared to the benefits accruing out of accessing social media at workplace.

Figure 2, Figure 3, and Figure 4 offer a comparative aggregation of ranks of these factors by role (RQ2a), i.e., to verify if the evaluation of these factors is different for HR executives and other executives—and it can be observed that not only are the slopes as in the original aggregation are retained by these trend lines, but they overlap almost to appear as one line and that indicates that there isn't any statistically significant difference in how the aggregates stack up for HR executives and other executives.

Figure 1: Aggregate rank structures and their linear projections

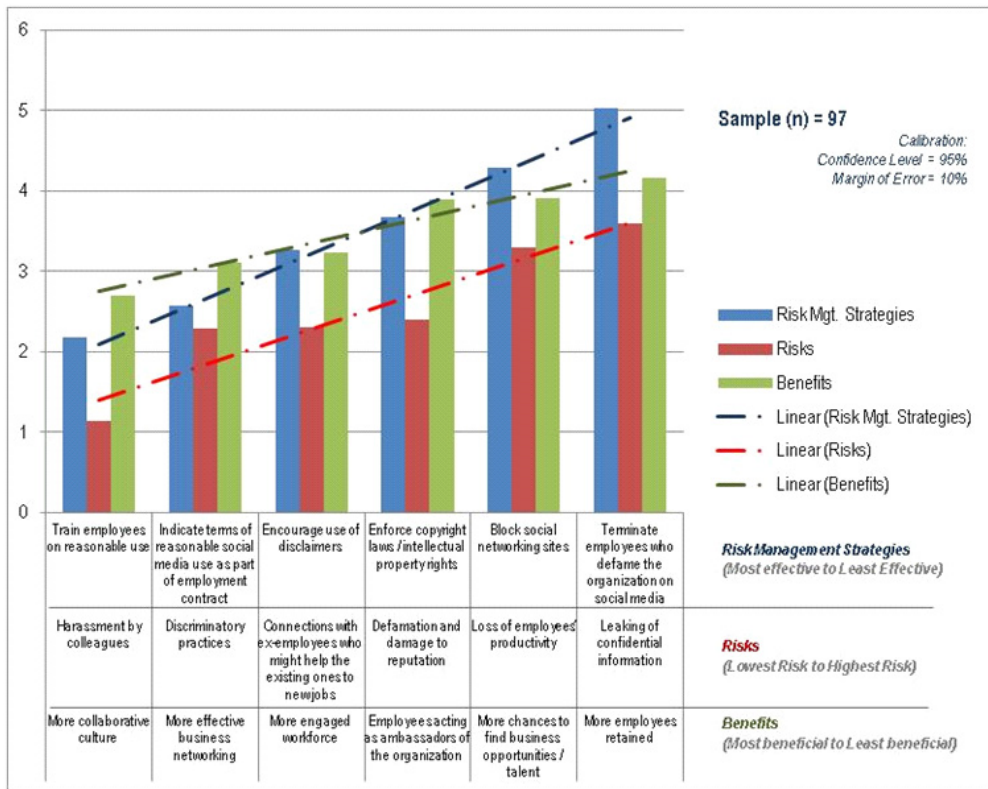


Figure 2: Aggregate rank structure of risks for HRs and Others

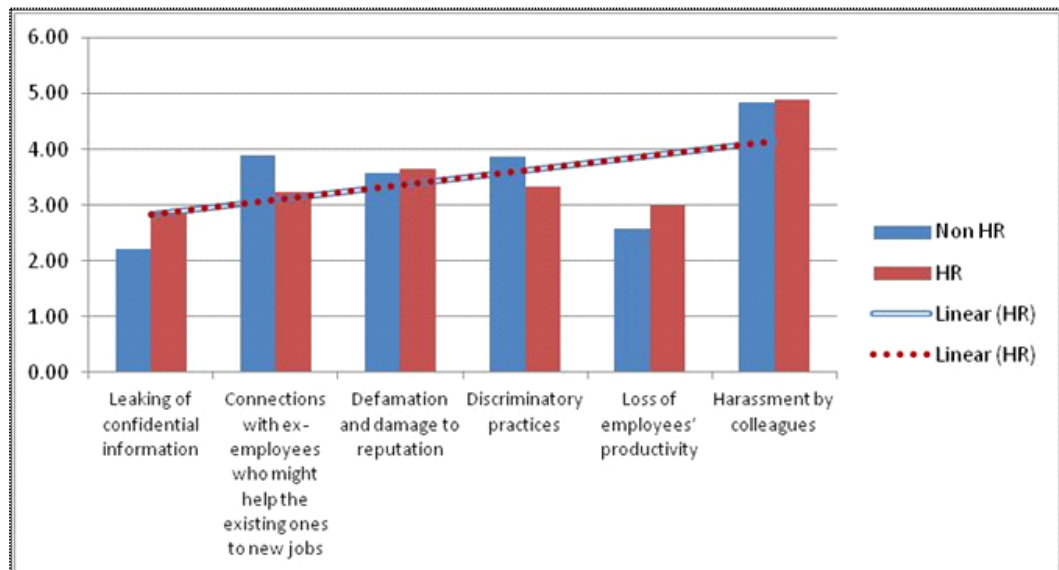


Figure 3: Aggregate rank structure of risk management strategies for HRs and Others

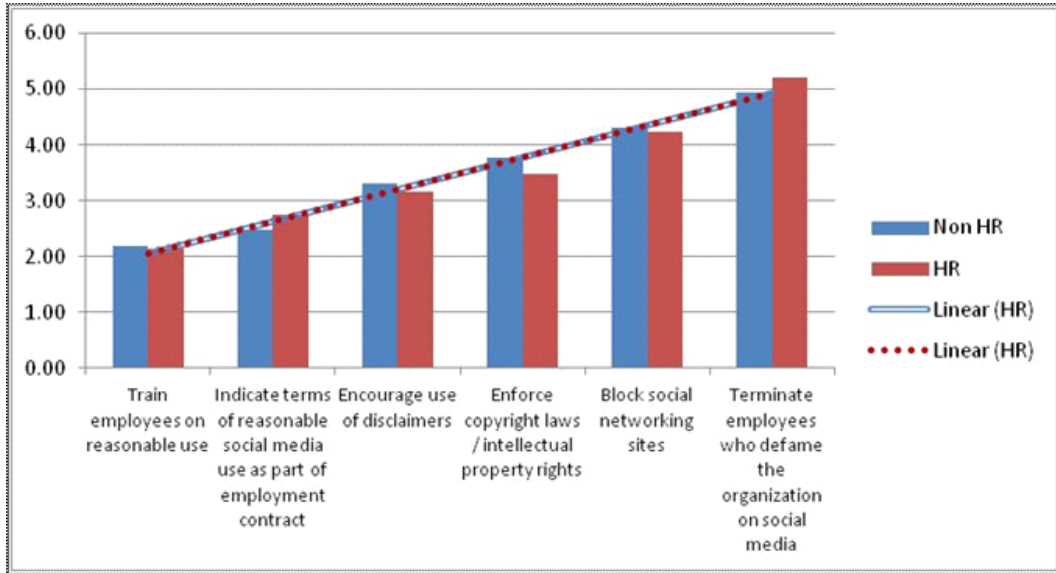


Figure 4: Aggregate rank structure of benefits for HRs and Others

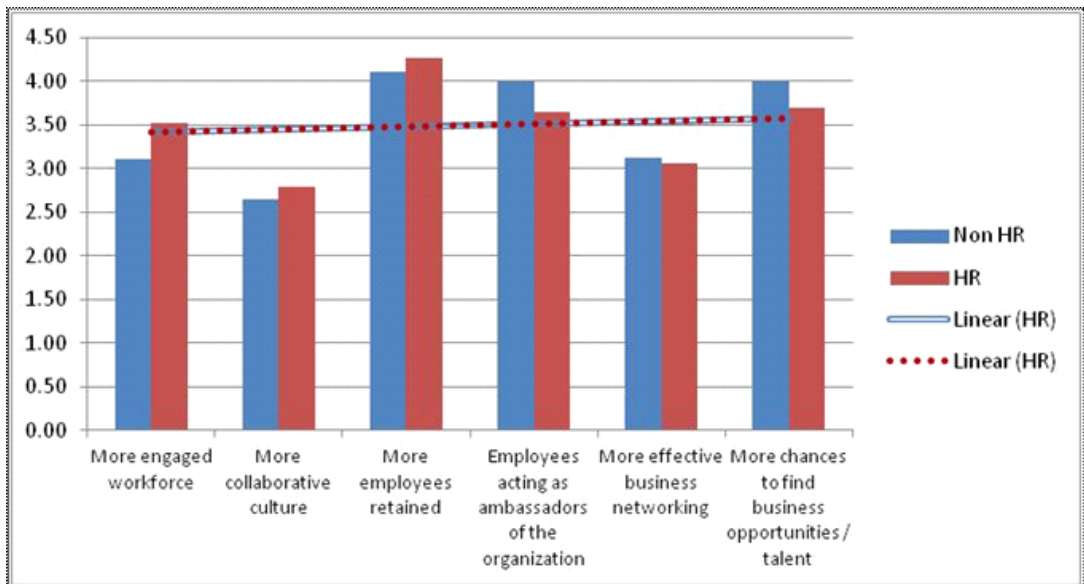


Figure 5, Figure 6 and Figure 7 offer a comparative aggregation of ranks of these factors by prior experience of social media abuse (RQ2b), i.e., to verify if the evaluation of these factors is different for executives with and without the experience of social media abuse in organizations. Figure 5 and Figure 7 show that there is a marginal difference in the slopes of the trend lines. The evaluations of executives with experience of social media abuse tended to be less differentiating than the evaluations of others.



Figure 5: Aggregate rank structure of risks for those with abuse experience and others

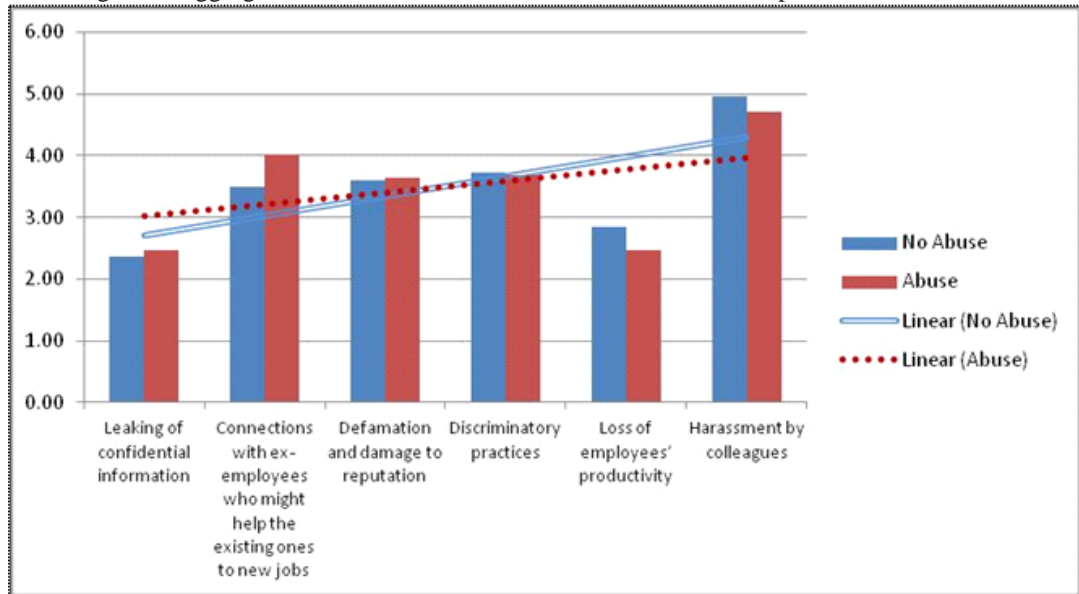


Figure 6: Aggregate rank structure of risk management strategies for those with abuse experience and others

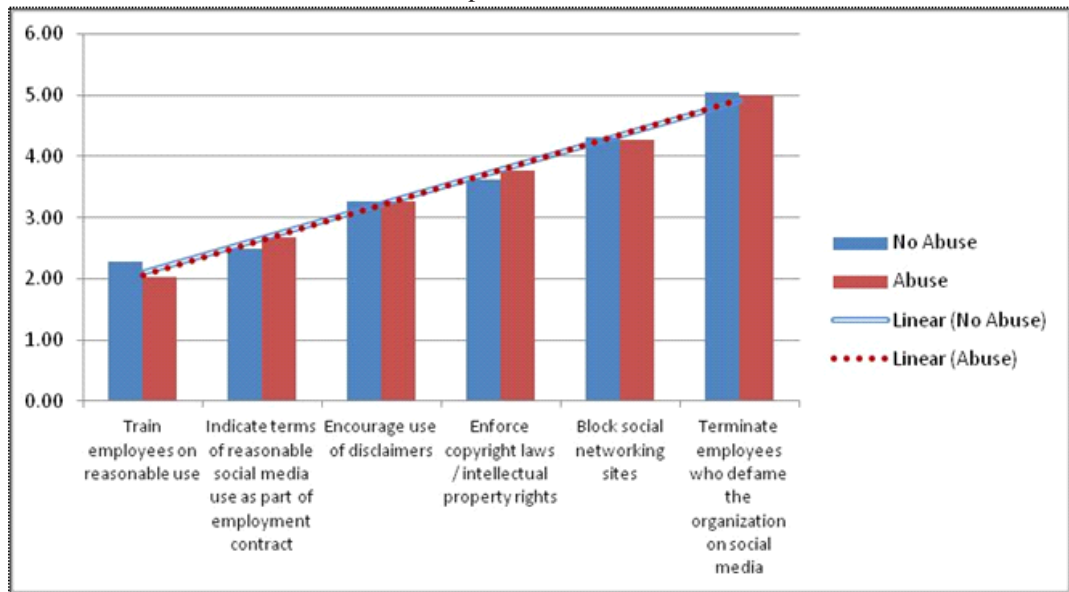
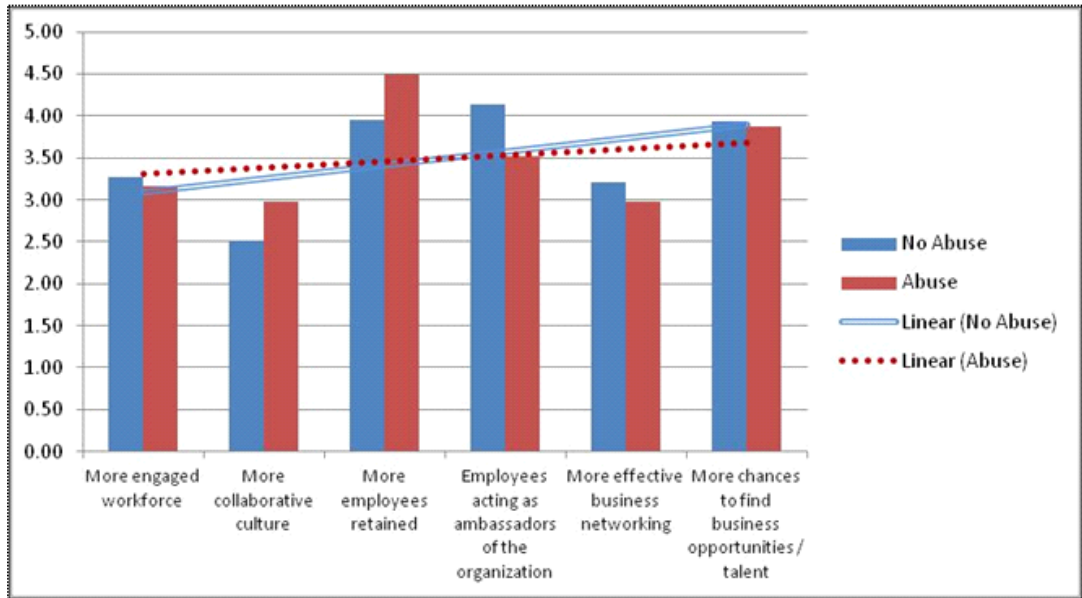


Figure 7: Aggregate rank structure of benefits for those with abuse experience and others



### Conclusion

The findings of the study are in consonance with the idea that employees prefer cajoling style of management to controlling style of management. Therefore, as aggregate, employees prefer that organizations manage risks of social media abuse by training them on terms of reasonable use; and not terminate them.

Organizations would have hoped to find more clarity in the benefits that social media access provides; but it appears that the case is not so. One initiative that organizations could take to bring in more clarity in this aspect is by pointing to the employees what mode of their social media use can best benefit the organization, such as in the case of CapGemini. Most organizations these days have pages on social media, but seldom are they promoted actively by their own employees. Incentivizing pro-organization use of social media also benefits the organization greatly. Parts of reputation management programs of organizations are therefore already going digital. Since social media cuts borders, active social media engagement of employees of an organization also helps in communicating their culture and sharing their achievements and celebrations with the outside stakeholder community. This serves as another source of attracting human resources.

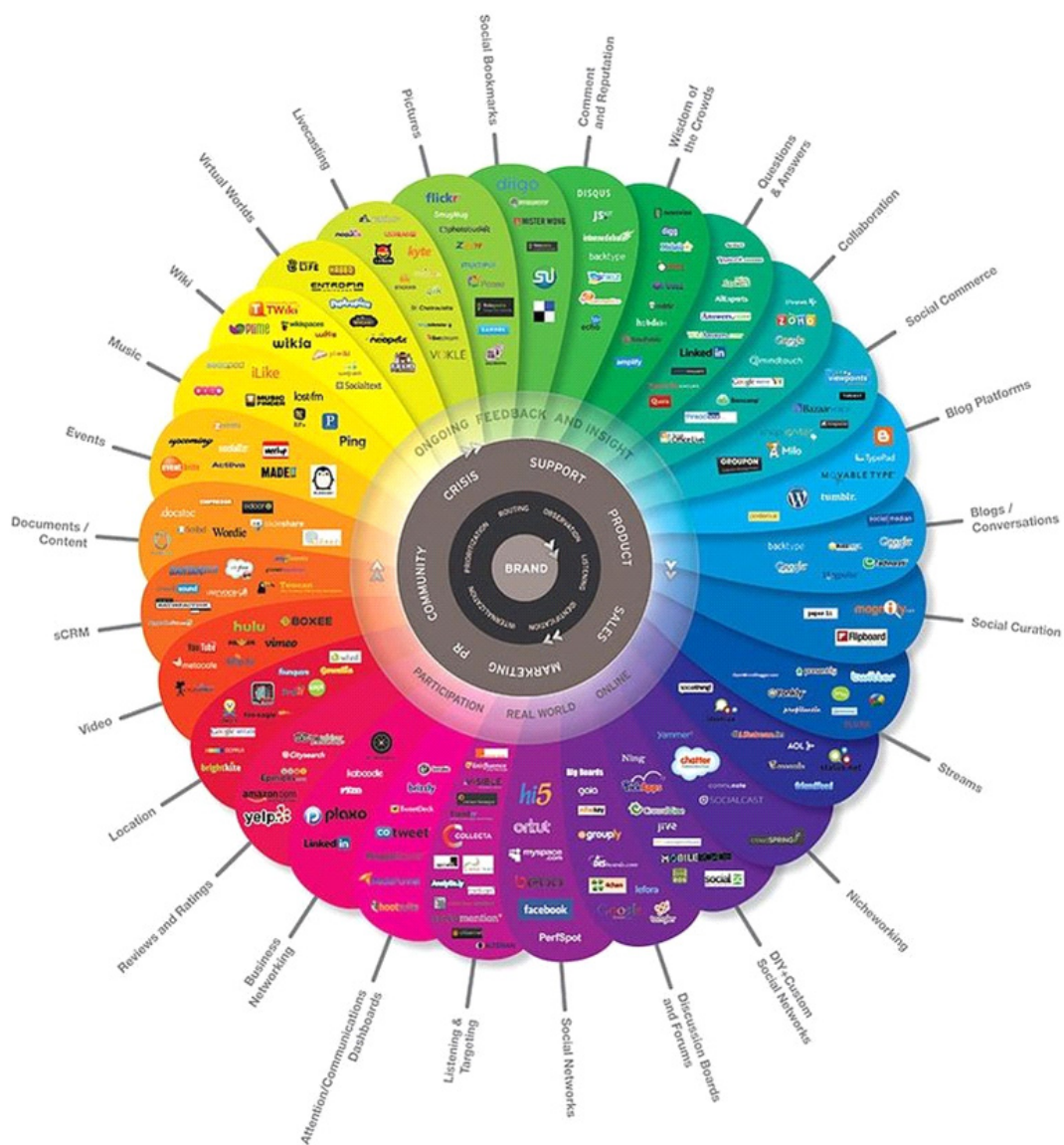
Our future research efforts are in seeking to understand (i) if the depth of hierarchy influences the nature of social media engagement of an organization, (ii) if there are gender related concerns on the use of social media, (iii) if certain age groups tend to exhibit compulsive and/or repulsive and/or loyal behavior in posting messages, (iv) the employees' interpretations of organizational policies on the use of social media, (v) the characteristics of groups of employees who could hesitate to take part in organizational promotion on social media, (vi) the quantifiable benefits for organization in using social media for recruitments, and (vii) how employees respond to companies tracking their social media use.

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## Appendix I: Range of Social Media



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## CSR Initiatives Lead to Successful Innovation in Banks: A Study on Selected Banks in India and Bangladesh

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### Abstract

Innovation is the process of bringing the best ideas into reality, which triggers a creative idea, an idea doesn't become an innovation until it is widely adopted and incorporated into people's daily lives. It is the creation of new value. Innovation is the process that transforms new ideas and combines ideas and knowledge into new value. The implemented innovations are successful in organizations where it is considered that Corporate Social Responsibility influences innovation positively. It is needless to mention that CSR has become a widely used term in business. Recent studies in this area show that the implementation of appropriate CSR practices can produce a positive impact on the performance of banking organization. Furthermore, it is believed that there is a link between innovation and CSR related practices. Even though information in the area of CSR is widely available there is little evidence of previous work that explicitly addresses the link between CSR and innovation, within the context of banking sectors in particular. The purpose of this study is to identify innovative CSR initiatives in India and Bangladesh banking sector and to study the comparative CSR aspect in India and Bangladesh. The work described in this paper has an exploratory nature.

**Keywords:** *Bank, Corporate Social Responsibility, Innovation and Sustainable.*

### Introduction

The study attempts to focus upon identify innovative CSR initiatives in India and Bangladesh banking sector. Innovation is the process that transforms new ideas, combines ideas and knowledge into new value. An idea doesn't become an innovation until it is widely adopted and incorporated into people's daily lives. It is need less to mention that Corporate Social Responsibility (CSR) is a rapidly growing field in both the academic and practitioner domains. Today, CSR is epitomized as the voluntary ethical behavior of a company towards society, including shareholders and stakeholders, and holding human and employee rights, environmental protection, community involvement, and supplier relations as core values (Steven, 2007). World Business Council for Sustainable Development has been defined CSR is the continuing commitment by business to behave ethically and contribute to economic development while improving the quality of life of the workforce and their families as well as the local community and society at large . To be successful and innovative today, organizations must consider the social and environmental impact of their operational processes, stimulate employees to be created, and collaborate with their customers, suppliers and other business partners in designing and developing new products and services. The implemented innovations are successful in organizations where it is considered that Corporate Social Responsibility influences innovation positively. Recent studies in this area show that the implementation of appropriate CSR practices can produce a positive impact on the performance of banking organization. Furthermore, it is believed that there is a link between innovation and CSR

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related practices. Even though information in the area of CSR is widely available there is little evidence of previous work that explicitly addresses the link between CSR and innovation, within the context of banking sectors in particular. Both India and Bangladesh are developing neighboring countries. They have a long lasting relation to each other formed upon by varies factors over the time. For economic development both countries have some important sectors that played significant role. Banking sector is one of them, For the past three decades, India and Bangladesh banking sector has several outstanding achievements to its credit and both countries banks have played important role for varies types of social activities. By this time, Indian banking sector have included mandatory Corporate Social Responsibility (CSR) in their company Act with respectively effect from April, 2014. On the other hand banking sector in Bangladesh, they have no CSR Act. But they have enjoyed tax rebate facilities for their CSR activities that are not allow in Indian banking sector. Both in the India and Bangladesh banking sectors have taken varies innovative CSR activities that lead to successful CSR initiatives. Keeping this in mind this paper attempts to define the structure of CSR activities, the nature of the link of CSR initiatives and innovation in India and Bangladesh banking sector. The work ha described in this paper an exploratory nature.

## **Literature review**

### **Innovation**

Innovation is the tool of an organization. It is applicable to any type of organizations, and also at various levels within the organization, from management teams and departments down to large project teams and even individuals. Innovation can occur in products, processes, services and can involve radical or incremental changes that help an organization to grow in many ways. An innovation is the implementation of a new or significantly improved product (good or service), or process, a new marketing method, or a new organizational method in business practices, workplace organization or external relations. "Innovation activities are all scientific, technological, organizational, financial and commercial steps which actually, or are intended to, lead to the implementation of innovations. Innovation activities also include research & development that is not directly related to the development of a specific innovation" (Tiwari, 2006). Innovation is the process of making changes, large and small, radical and incremental, to products, processes, and services that result in the introduction of something new for the organization that adds value to customers and contributes to the knowledge store of the organization.

### **CSR and Innovation**

With respect to CSR and innovation, it is plausible that the respective positive and negative relationship between CSR and innovation could, at least partially, be resolved by bringing variations in the dynamics of innovation into the analysis. The dynamics of innovation may vary, from incremental/sustaining to radical or disruptive, with potentially very different effects on CSR. While CSR could go well with incremental and sustaining innovation, supporting the win-win argument, combining it with radical and disruptive innovation would be more problematic, supporting the opposing position. Today, most of the pioneering companies have integrated social entrepreneurship into their core activities by actively funneling their research and development capabilities towards socially innovative products and services (Schwab, 2008). Borger and Kruglianskas (2006) have found an evidence of a strong relationship between the adoption of a CSR strategy by the firm and an effective environmental and innovative performance.

According to Asongu (2007), the key to success in using any type of innovation to a company's advantage from the CSR perspective is to communicate with local municipal authorities, the press and,

the most importantly, the general public that stands to benefit from such initiatives. Companies that have sustainable policies tend to be technological leaders, as they seek imaginative new methods for increasing efficiency, e.g., by reducing pollution. In many cases, these companies are able to come out with new, innovative products that outpace most of their competitors.

According to Phills et al. (2008), many social innovations involve the creation of new business models that can meet the needs of underserved populations more efficiently, effectively, and if not profitably, at least sustainably. Many innovations tackle social problems or meet social needs, but there is only for social innovations the distribution of financial and social value spilled over the society as a whole. A social innovation can be a product, production process, or technology (much like innovation in general); it can also be a principle, an idea, a piece of legislation, a social movement, an intervention, or some combination of them.

### **Current State of CSR in India**

Indian companies are now expected to discharge their stakeholder responsibilities and societal obligations, along with their shareholder-wealth maximisation goal. Nearly all leading corporate in India are involved in corporate social responsibility (CSR) programs in areas like education, health, livelihood creation, skill development, and empowerment of weaker sections of the society. Notable efforts have come from the Tata Group, Infosys, Bharti Enterprises, ITC Welcome group, banking sector, Indian Oil Corporation among others.

The TATA group is one of the pioneers of CSR in India. It believes, no business success is worthwhile unless it serves the needs or interests of the country and its people. Corporate Social Responsibility has always been taken care of by the Tata group. The founder Mr. Jamshedji Tata used to grant scholarships for further studies abroad in 1892. Over 120 students are selected every year from across India as JN Tata scholars. He also supported Gandhiji's campaign for racial equality in South Africa. Tata group has given country its first science center and atomic research center. A unique feature of the group is that 65 percent of the equity capital of the parent firm "Tata Sons Limited" is held by Tata Trusts, which are philanthropic in nature. Over 75 per cent of Trust's funds come from dividends on the shares it owns in Tata Sons, the group's holding company. The remaining comes from their own statutory investments. The trusts don't handle corporate social responsibility; they are more of a funding agency.

Sir Ratan Tata Trust was established in 1919 in accordance with the will of Sir Ratan Tata, the younger son of group founder Jamsetji Tata, the trust is a grant-bestowing public foundation. The trust seeks to be a catalyst in development through giving grants to institutions in various areas.

In 1920, Mahatma Gandhi the father of the nation believed in trusteeship model, where the wealth created by someone has to be ploughed back for the benefit of society.

Ardeshir Godrej to the Tilak Fund for the upliftment of Harijans donated of RS 26 lakh, which was started in 1926. This initiative was applauded by Mahatma Gandhi as a major contribution to the cause. Later they established Pirojsha Godrej foundation in 1972, one third share of the holding company 'Godrej & Boyce Manufacturing Company Ltd' was donated to this foundation and the income from the dividend is being utilized for providing free medical care to the poor and critically ill, for education of poor student and relief in case of natural disaster.

The Sir Dorabji Tata Trust was established in 1932 by Sir Dorab Tata, the elder son of group founder Jamsetji Tata, and is one of the oldest philanthropic organisations in India. Lady Meherbai Tata Education Trust: Set up in 1932, the Trust grants scholarships to young Indian women graduates of recognized Indian universities to pursue higher studies abroad in the fields of social work and public health.

In 1965 the then Prime Minister of India, Lal Bahadur Shastri, presided over a national meeting that issued the following declaration on the social responsibility of business: Business has responsibility

to itself, to its customer, workers, shareholders and the community, every enterprise, no matter how large or small, must, if it is to enjoy confidence and respect, seek actively to discharge its responsibilities in all directions and not to one or two groups, such as shareholders or workers, at the expense of community and consumer. Business must be just and humane, as well as efficient and dynamic.

Voltas for Women (VOW) was founded in 1965. The organisation, whose membership is restricted to female employees of Voltas and the wives of male employees, helps the needy with assistance in health and education, and offers career and vocational guidance.

In 1979, the Tata Steel Rural Development Society (TSRDS) is involved in various social development programmes aimed at helping the rural communities living around Tata Steel's operational units.

Tata Chemicals set up the Tata Chemicals Society for Rural Development (TCSRSD) in 1980 to promote its social uplift projects for communities in and around Mithapur (in the state of Gujarat in western India), Babrala (in the state of Madhya Pradesh in northern India) and Haldia (in the state of West Bengal in eastern India).

In 2009, Issued Guideline on Social Responsibility for Central Public Sector Enterprise. In 2014, Lok Shaba has passed 'The Company Act 2013' and made CSR mandatory for certain category of companies depending on their volume of business or profit. In response to the Committee's overwhelming concerns on the extent of Corporate Social Responsibility (CSR) being undertaken by corporate and the need for a comprehensive CSR policy, the Ministry of Corporate Affairs have agreed that the Bill may now include provisions to mandate that every company having [(net worth of rupees 500 crore or more, or turnover of rupees 1000 crore or more)] or [a net profit of rupees 5 crore or more during a year] shall be required to formulate a CSR Policy to ensure that every year at least 2% of its average net profits during the three immediately preceding financial years shall be spent on CSR activities as may be approved and specified by the company (Caroline, 2012).

### **CSR in Bangladesh**

In Bangladesh, every organization is conducting CSR activities because of globalization and earns competitive advantage. Every organization, business houses in Bangladesh are responsible for their different activities with regards to both socioeconomic and environmental values. The main purpose of an organization is earning profit but for earning profit they always consider their socio-economic and environmental impact. Stakeholders, people and others interest parties are always want to know about organizations social duties. For sustainable development of Bangladesh CSR concept play an important role. Now, every private and Government organization has disclosed their social responsible activities in different format like part of an annual report, report on social responsible. Many multinational companies have been invested different sectors in our country. For this, by ensuring sustainable development we can attract much more multinational companies for huge foreign investment as possible. Belal (2008) has said many export oriented companies operate in Bangladesh, by international and domestic pressure we can increase their social, ethical and environmental performance and from this pressure Government of Bangladesh argued to the companies for improved their environmental presentation and better labour circumstances under the social activities. In Bangladesh business organizations are ethically bound to their society. For fulfill this bond social responsibility is one of them. Every business and others organizations in Bangladesh have taken different social responsible activities in different ways such as donation, environmental protection, community development and sponsorship etc. By the donation activities business organizations have taken different social responsibility activities such as improve health facilities in rural and remote areas, educational improvement, supply safe drinking water, disaster relief, flat shelter etc. At present, every business organization and Government is very serious to protect environment because Bangladesh is natural disaster affected area. For environmental protection every industrial and business organization have



taken different responsible activities such as effluent treatment plant, Bio gas plant, solar panel, tree plantation, river dragging, less use of paper document and give up plastic etc. Government of Bangladesh has taken different initiatives for protection of our environment. For community development, business organizations have taken different activities. For development of our country's art and culture, sports different companies have taken different initiatives. They have taken sponsorship for different sectors development.

For implementation CSR initiatives in Bangladesh most of the business organizations are collaborating with local NGOs because NGOs have direct communication and knowledge about local condition and they can take special issues to the root areas. Corporate houses can apply their strategies, expertise, money, resources and manpower for improving social condition. They have provided better medical and sanitation facilities, build schools and houses, and help the villagers by teaching them vocational and business skills. On the other hand, Pharmaceuticals' CSR programs primarily focus on health and healthy living. They work in tribal villages and remote areas where they provide medical check-ups and treatment, health camps and health awareness programs. They also provide money, medicines and equipment to non-profit organizations whose work that work towards improving health and education in under-served communities. Banking and Non-Banking financial Institutions' are leading position for CSR activities. They have initiated different types of CSR activities like Education, Health, Environment, Sport, Art & Culture and Disaster Relief. Every year they have contributed huge amount in those sectors. They have taken many programmes for developing rural and urban areas in Bangladesh. Many CSR initiatives are executed by companies in partnership with Nongovernmental organizations (NGOs) who, as mentioned earlier, have both the knowledge and experience of local conditions.

### **Significance of the Study**

Today, Corporate Social Responsibility is a burning issue not only in Bangladesh but also all over the world. Banking sector in Bangladesh, Central bank and Government of Bangladesh have taken different initiatives for gear up CSR activities but, still now, CSR activities have operated as a voluntary basis not mandatory basis. In India, CSR activities have operated mandatory on the basis of Company act 2013, section 135. There is no act on CSR in Bangladesh. For this, this study is important to know the various CSR aspects in India and Bangladesh.

### **Methodology**

There are 89 Commercial banks in India and 52 Commercial banks in Bangladesh; both comprise Nationalize Commercial Banks (NCBs), Private Commercial Banks (PCBs) and Foreign Commercial Banks (FCBs). We have selected Private commercial banks in Bangladesh and Nationalize commercial banks in India for this study by using purposive sampling because PCBs in Bangladesh NCBs in India have played important role for CSR initiatives and every year both countries banks contributed huge amount for CSR activities than others banks. The Data is collected from secondary sources particularly from concerned banks Annual Report, Web sites, newsletters and Articles. For our study we have selected 10 Innovative CSR activities. These are Rural Self Employment Training Institutes, The Mahabank Agricultural Research & Rural Development Foundation, Baroda Grameen Paramarsh Kendra, Canara Bank Energy Conservation/Environment protection, IDBI CSR Committee, Wind power system, Mobile banking, Solar power ATM booth and solar power branches and Rain water harvesting.

### **Objectives**

- 1) To identify and analyze of the Innovative CSR initiatives of banking sector in India and Bangladesh.
- 2) To compare the CSR aspects in India and Bangladesh banking sector.

### **Innovative CSR activities of banking sector in India and Bangladesh**

Banks act as financial intermediaries in our society: they price and value financial assets, they monitor borrowers, they manage financial risks and they organize the payment system (Greenbaum and Thakor, 2007). Banks have a huge impact on society by performing these functions. They usually require firms and households to adopt certain behavior in order to increase the chances that these lenders will pay interest and amortizations. This has resulted in an overwhelming amount of literature that assesses how banks affect the economy. The main finding is that the banking system appears to play an important role in economic development (Levine, 2004). As such, they also may affect sustainable development. The World Commission on Environment and Development (WCED, 1987), in their report “Our Common Future”, defined sustainable development as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs”. Socially responsible banking is becoming a well-established notion in the financial services industry. Financial institutions are coming round to the idea that there is more to invest than just to check the figures. In the US, every one out of eight dollars invested is subject to some social or ethical screen (Social Investment Forum, 2006). In India and Bangladesh banks have the opportunity to save or invest their money not only on the basis of financial rewards, but also in the face of the nonmonetary value of savings and investments. Both countries some specialized banks offer savings accounts to the public while promising that the savings will be used to finance environmentally sound projects or for operations of entrepreneurs who find it hard to get access to finance from institutions that are more conventional. Rural and remote areas Women and minorities have been targeted specifically for these projects. In more than 40 countries, including several developing countries like Brazil and South-Africa, people can put their savings in socially responsible investment funds that in some way or another check for corporate social responsibility (CSR) of the firms in which they invest (International Finance Corporation, 2003). Banks increasingly are involved with financing economic activity that aims at sustainable development and offer microcredit to the poor and deprived people. Against this backdrop it can be understood that CSR is now an integral part of functioning of banking sector in India and Bangladesh. The performance of both countries banks should be judged beyond the some social innovative activities parameters. Many authorities only focus on the financial performance but by this study, we have to examine into the CSR performance of the both countries on the bases innovative CSR activities. In India and Bangladesh banking sector every bank is engaged CSR activities. They have operated their CSR activities directly or indirectly. Most of the banks have taken similar CSR activities but some banks have operated exceptional CSR activities, we have considered these types of activities as a innovative CSR activities. Keeping in view, we have selected 10 innovative CSR activities carried out by India and Bangladesh commercial banks.

***Rural Self Employment Training Institutes (Allahabad Bank):*** As per the Ministry of Rural Development, Government of India, Allahabad Bank Rural Development Trust has established 21 Allahabad Bank Rural Self Employment Training Institutes in the following districts (sixteen lead districts and five non-lead districts). The main features of these institutes shall be providing training to the rural BPL youth and women so that they can engage themselves in productive self employment and raise their income level. The Institutes provides training and is canalizing youth power in wealth creation through entrepreneurship development and imparting knowledge & skill required for taking up self employment venture.

***The Mahabank Agricultural Research and Rural Development Foundation (Bank of Maharashtra):*** The Mahabank Agricultural Research and Rural Development Foundation (MARDEF) is active in socio-economic development of villages by encouraging farmers to take diversified activities like dairy, EMU farming, goat rearing, grape cultivation, horticulture and scientific use of various inputs like fertilizers etc. The foundation assists farmers, especially small and marginal farmers, in receiving timely



bank credit. The bank has established Five Mahabank Self Employment Training Institutes (MSETI), one each at Pune, Aurangabad, Nagpur, Nasik and Amravati. These provide training to rural youth and women for self employment. A total of 4605 candidates have been trained by the institutes so far.

**Baroda Grameen Paramarsh Kendra (BGPK):** This is another initiative undertaken by Bank to help the rural community by providing credit counseling, financial literacy and other services like information on the prices of agricultural products, scientific farming, etc. Bank had 52 BGPKs as on 31st March, 2013. During FY13, around 42,601 youth beneficiaries were trained out of which 27,891 have established self-employment ventures. Out of the total 1, 64,899 beneficiaries trained by these centers so far, 1, 02,996 have established their self employment ventures.

**Canara Bank Energy Conservation/Environment protection:** Solar water heaters for rescued children, Solar water heaters & lighting, Solar power plant for the school, Distribution of solar lights to villagers, Solar water heaters to hospitals, Solar lights in 5 villages bordering to forest area, Carbon neutral Village, and Planting/ distribution of 1 lakh saplings. Total sanction Rs208.41 Lakh and distributed Rs.175.87 Lakh in 2014.

**IDBI CSR Committee:** IDBI Bank, approved constitution of a five-member Corporate Social Responsibility (CSR) Committee of the Board, comprising of CMD, both DMDs and two Independent Directors. The Committee, as mandated under Section 135 (3) of the Companies Act, 2013, shall (a) Formulate and recommend to the Board, a Corporate Social Responsibility Policy which shall indicate the activities to be undertaken by the bank as specified in Schedule VII; (b) Recommend the amount of expenditure to be incurred on the activities referred to in Section (a); and (c) Monitor the Corporate Social Responsibility policy of the bank from time to time.

**Wind power system (Dhaka bank):** in 2010, Dhaka bank has established a wind power system in beach area. 3 villages' people are benefited by this power system bordering to beach area.

**Mobile banking:** Mobile banking is one of the best ways of financial inclusion procedure without bank branch which provide banking service to unbanked society efficiently at the minimal rate of cost. Where bank branch operation is impossible, mobile banking service is suitable for more people under the umbrella of banking service. By using latest technology banking organization can provide banking service to rural and remote areas peoples in Bangladesh. Overall mobile banking status in Bangladesh has given in below Table 1.

Table1. Mobile Banking Financial Services (MFS) summary statement

SN	Description	2010	2011	2012
01	No. of approved banks	07	08	10
02	No. of banks started to convey the service	03	06	09
03	No. of agent	35160	88278	170188
04	No. of registered client	15.12 lac	42.50 lac	72.48 lac
05	No. of active account	7.09 lac	19.52 lac	29.28 lac
06	No. of daily average transaction	91292	290745	565170
07	Average amount daily transaction in taka	Tk.33.18crore	Tk.63.18 crore	Tk. 123.09 crore.

Source: BB Mobile Banking Report, 2014.

**Solar power ATM booth and solar power branches:** 214 branches of 52 banks are now powered by solar energy. There are seven branches of bank Asia, Sixteen branches of Al-Arafah and fourteen branches of Mercantile bank have powered by solar energy ATM both. Out of 52 banks, only 9 banks 'SME units' offices are powered by solar energy. BRAC Bank has facilitated 131 SME units office powered by solar energy.

**Health activities:** DBBL has taken the initiative to bring back smile on the face of the boys and girl with cleft-lip through plastic surgery at free of cost since 2003 under the banner 'Simple Brighter'. More than 3000 number of poor cleft-lipped boys and girls have been successfully operated across the

country. HSBC bank and Unilever Bangladesh operated mobile hospital in the river areas. People, those who are not facilities under health treatment by this hospital, they have given varies health facilities. Under these programs every year 5 thousand river area people benefited.

**Rain water harvesting:** A safe drinking water project was commenced by five banks to provide safe water to 0.25 million people and sanitation to 0.4 million people in the north-east and northwestern regions of Bangladesh. Five banks have operated Rain water harvesting projects. By this project, they collect rain water in rainy season and use this water in dry season. This program has ensured safe drinking water in Sandorbon area people in Bangladesh.

**Comparative CSR aspect in India and Bangladesh:** The history of banking sector of India is so long than the Bangladesh. The idea of CSR is not new in India but it is new idea of Bangladesh. Bangladesh banking sector has followed India's banking activities. Banking sector CSR activities are new idea but last ten years they have operated their CSR very formative way than any other countries in Asia. In Bangladesh, there is no CSR act but they have operated their CSR activities impressively. Now, in India CSR is mandatory. Below Table 2 has discussed different aspect of CSR activities of banking sector in India and Bangladesh.

Table2: Comparative CSR aspect in India and Bangladesh

Aspect	India	Bangladesh
Act	Schedule vii, Section 135 of the Companies Act, 2013 after, the Companies (Corporate Social Responsibility Policy) Rules, 2014	No
Areas of CSR	Act. 2013, Schedule Vii- 10 areas	22 areas
Tax rebate	No	Maximum 10 % on total CSR Expenditure.
Foundation	Yes	Yes
% of PAT	First year only one bank expenses 2%.	Average 3.27
Mandatory	Yes	No
Structure	Yes	Yes
Reporting	No	Yes ( Mandatory)
Board	Yes	No
Committee	Yes	No
Annual Report	Yes	Yes

Source: Authors' observation.

Above Table 2 shows that there is a similarity and dissimilarity between both countries CSR activities. Indian Government has established Act for CSR but in Bangladesh there is no CSR Act or Regulation. On the other hand, banking sector in Bangladesh for CSR activities they enjoyed Tax rebate facilities but in India there is no option for Tax rebate on CSR expenditure. In India CSR expenditure in mandatory but in Bangladesh CSR expenditure is not mandatory but every year all bank in Bangladesh expenses huge amount for CSR initiatives. Every year, banking organization both countries in India and Bangladesh have disclosed in their Annual report a chapter of CSR. Both countries banking sector have operated their CSR activities by directly, foundation and NGOs.

### Findings

- The study found that a close relationship between two different countries structure of CSR activities.
- The study found that the existence of an established innovation process within the organization can increase the potential of CSR generating more value to both countries banks.
- The study found that both countries banks have operated their CSR activities varies channel i. e.

directly, foundation and NGO linkage programs.

- The study found that various innovative CSR activities maintain sustainable development of both countries.

### Conclusion

The study described within this paper aims towards developing a better understanding of how CSR initiatives can lead to successful innovation in banking sector in India and Bangladesh. In the process of achieving this objective we often found ourselves coming up with more questions than answers. So, it is still early days to come up with more definite answers from this research study. We believe that the work carried out as part of this research project and this subject area in general has great potential for having a key impact on the economy in both countries. The development of the innovation capabilities of banking sector through responsible and sustainable initiatives can contribute to the competitiveness of banks and the development of regional economies. The overall aim of the paper is to mainstream CSR in India and Bangladesh banking sector through demonstrating the link with successful innovation. Both countries banking sector has taken different types of innovative CSR activities by these activities positive impact on both countries economic development.

### Recommendations

Banking sector in Bangladesh has an imaginary changed of CSR activities. By their CSR activities different rural and remote areas people directly and indirectly benefited. Banks have taken different CSR initiatives such as scholarship, donations, relief, green banking and training. Every year, banks have donated much more amount for CSR activities in different sectors. Bangladesh bank and Government have published some guidelines and gazettes for CSR activities. But there is no CSR act in Bangladesh. The study suggests that for effective and efficient CSR activities in Bangladesh CSR act is essential.

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# The Information Technology and its Impact on Indian Banking and Payment Settlement Systems: A Case Study

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## Abstract

The impact of digital technology in banking and financial services over the past decade mirrors the drastic impact on the economy as a whole. To meet out the growing challenges of economy and to speed up the business financial transactions the banking sector has transformed itself according to the socio- economical norms and embraced the use of technology to serve its clients faster in order to maximise the banking base with controlled payment settlement systems. Industry leaders are trying their best to determine the implication of these changes. Ever growing technological revolution has systematically consolidated the banking industry and changed its accounting and management system which impacted efficient and speedy payment settlement inside and outside the political boundary. Revolutionised modern banking is now focusing to minimise the use of cash in society and continued its endeavours to improve the IT infrastructure with a view to facilitate the Indian banking sectors alignment with the latest technological innovations. Thus this article presents a study which aims to analyze the RBI initiatives and role of information technology in banking industry especially in context to speedy payment settlement system according to the policies procedures laid by the apex body Reserve Bank of India (RBI).

**Keywords:** *IT, ATM, Payment Settlement, Securities, Clearing, Online Payment, Plastic Money*

## Introduction

It is fundamental truth that financial sector is sprit of economic body and within it, the strategic strength and core structure of banking sector play crucial role and hold significant position. The strength and weakness of banking infra base can push and pull the nation economy. In present global competitive and politically hostile environment Indian economy is riding high and is now been considered as a future growth engine of global economy. Being back bone of future growth engine, Indian banking sector leaving no stone unturned to consolidate their elevated status and thus for the purpose strategically evolved in catering financial needs of trade and industry. In order to meet out the global challenges the Indian banking structure started adopting sophistication and planned improvement. To develop transparent economical structure and to mobilize confidence in trade and commerce, regulatory reforms and overall improvement in core banking system became priority for the government. In order to consolidate reforms and improvise economic conditions the government of India exercised its importance and played parental role through RBI and time to time passed legislations, rules, regulations and amendments etc., to enable economy and domestic industry to compete the changing economic hostility. Now banks are self reliance and are free to evolve their own system of financing working capital of business concerns.

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Further, globalization and growing overall competition forced Indian government to strategically adopt economic liberalization and deregulation and implement radical and effective reforms in financial sector with core relevancy. Ever-growing technological base and known competition with structural changes in international financial markets and its unpredictable impact brought tremendous changes in nation policies and futuristic strategies. To match the growing economic challenges Indian financial and banking sector reoriented and reorganised their existing strategies and deregulated and digitalized its financial sector adopted innovative financial instruments with diversification in fund base and non fund base activities with matching innovative technology especially in payment settlement system.

Technological up gradation has enabled the banking industry to open effective and efficient delivery channels. It strengthens the banking industry to tackle the unpredictable challenges the economy poses with. Technology changed the scenario of management, regulation and supervision. It is exploring new ventures for supervisors with new challenges. Issues which are driven out by the impact of technology such as privacy, payment settlement system and nature of electronic communications have become core policy agenda. With passing time it is becoming tough to distinguish between electronic banking and electronic commerce and further it is becoming more difficult to define them clearly. More than most other industries, financial institutions depend upon gathering, processing, analyzing and providing information in view to meet the needs of customers especially in payment settlement. Given the importance of information in banking, it is not surprising that banks were among the earliest adopters of automated information processing technology which significantly improved their payment settlement from paper and branch settlement to digitized and network banking settlement.

To convert traditional banking into modern banking the apex body of the nation RBI continued its systematic and prudent efforts in making the payment system more secure and efficient. The efforts were also strategies to make payment system more economical in order to attract users and to expand its use beyond urban base to achieve the goal of financial inclusion. RBI futuristic policy emphasizes to reduce cash in society and replace it with plastic money (card payment). Thus considering payment settlement important for business transaction Reserve Banks continued to encourage innovations in payment systems to enhance accessibility and affordability to hitherto unbanked segment of population through suitable adoption of technology developments. The impact of efforts are very much been found as paper based clearing declined to a great extent and comparatively volumes under electronic modes during the year increased by many fold.

To consolidate the paper based clearing structure in the country the Reserve Bank of India (RBI) in the year 2008 introduced Cheque Truncation System which also shown substantial growth during the year. Impact of RBI efforts produced the positive results and overall growth in payment and settlement system has been registered. The volumes and value during the time period has grown at the rate of 15.0 percent and 29.7 percent respectively which is comparatively much higher than previous year 9.0 percent and 23.2 percent respectively.

Reserve Bank of India in order to establish Indian banking system at par to the global set norms leaving no stone unturned and taking multi layer initiative in all segment. Bankers Bank the RBI realised the importance of digital connectivity of everyone to everything, anywhere and at any time initiated proactive moves accordingly. Its futuristic policies and competency to analyze the use of digital technology in all aspect of bank functioning which ultimately create opportunity and challenges is producing positive results. The initiatives which Reserve Bank adjudicated to strengthen the nation economy are examined and interpreted by the researchers which are in five parts. In first part Introduction, Research Objectives, Methodology and Review of Literature are given, in second part Reserve Bank of India's initiatives and Trends in Payment Systems is examined. In this all aspect of transparency, efficiency, safety and security initiatives of Reserve Banks were taken into consideration. In third Part Information Technology Initiative of RBI for Banking System in India, up-gradation of



Information Technology within Reserve Banks and Reserve Bank of India Agenda for 2014-15, 2015-16 and its Status are examined; in forth part BBI Initiatives and its Impact on Payment System Annual Turnover table is analysed and interpreted and in fifth part finding, conclusion, recommendations and references are given.

### **Objective of the Study**

The core objectives of the study is to evaluate the performance of payment settlement system in Indian banking, to examine and analyze the initiatives taken by the Reserve Bank to consolidate and develop transparent, speedy, safe and secure payment settlement system according to the global standards, to examine the impact of digital technology use in banking system, and to compare outcome of initiative with Reserve Bank Vision Document 2012 -15, agenda 2014-5 and 2015-16. In addition for better future of Banking sector will give suggestion to explore efficiency in general banking environment by optimally utilising the innovative technology which can be considered as a judicious recommendation.

### **Methodology**

The study is carried out to examine and evaluate the performance of initiatives taken by Reserve Bank in regard to Payment Settlement System and for the purpose secondary data and reports are used which are collected from published economical and commercial reports, magazines, research articles and annual report of Reserve Bank of India. After examining the available resources and data judicious suggestions and recommendations are been given. The outcome of study depends on the selected vision period of Reserve Bank by the researchers which may differ from other analysis.

### **Review of Literature**

Technology has influenced all aspects of business world very dramatically and banking industry is one of them. It is been found that impact of digital technology on banking sector is very deep and cover all segments including storage, processing and collection of information etc. To find out the degree of impact the financial economists, researchers and bankers carried out extensive research work and reveal uncovered and untouched factorial truth by analyzing past and present and tired to predict the future comparatively. Many researches in past have been carried out which differ to present researches due to time period and level of technological development. All carried out researches of past produced some relative facts and pave the way for researchers and financial economists to find progressive solution to progressive problems of technological growth and development and explore dimensions of improvement in banking sector. Many studies of yester years advocated the negative impact of total adoption of technology in banking system especially in developing and underdeveloped nations and some studies are in favour of adoption of technology. Thus, this study is carried out by the researchers to analyse the impact of technology in banking sector especially in payment settlement system in India and its outcome will set new parameters for future studies.

Hannan and McDowell (1984) in their study revealed that adoption of technology can be one deterrent to measure the performance, other deterrent are market concentration and competition, Farrell and Saloner (1985) in their study found that relationship between banks and information and communication technology is positive and have elevated the performance level of banks, Solow (1987) in his study revealed that computer age is maturing and everywhere you can see computer these days, since 1970's Solow claimed that there was a huge decelerating in growth as the technologies were becoming ubiquitous he also claimed that positive impact of information and communication technology add value to business, Griliches (1992) edited the NBER volume and found that there are many other factors causing difficulties in measuring banking service performance. He found that most of the researchers disagree on the approach "output verses input" which is generally used by the banks to measure deposit, loan and securities. According to him, it is difficult to value inputs and outputs as banking

services are often priced implicitly through below market interest rate on deposit balance or it is priced through higher fees or interest on other services that are part of relationship between bank and customer, Robert Rugimbana and Philip Iversen's (1994) in their study examine the association between customer ATM usage patterns and their perceptions of ATM attributes by analyzing variables which distinguish them as a users and non users, Saloner and Shpard (1995) in their study which covered the time period of 1971 – 1979 found that interest of network effects is significant in utilizing an Automated Teller Machines (ATMs), Bauer and Ferrier (1996) in their study found that technological progress has reduced the costs of processing paper check and cash payments, although these cost reductions have generally been much smaller than those for processing electronic payments, England et al (1998) in his study which was carried out to check the performance of electronic banking in United States found no major difference, Cindy McClure and Beatriz Joseph (1999) in their study explored the use of technology in the delivery of banking services considering that the use of technology will reduce the cost and uncertainties. They found that most of the customers have perceptual problems with some technical aspects of electronic banking, Kansas USA, Sullivan (2000) in their carried out study found that no multi channel bank in the 10th Federal District have registered any improvement or decline by having transactional web sites, The McKinsey Global Institute (2001) developed its own index for banking labour productivity. For the purpose it has used retail banking sector which in general has a large overlap in comparison to commercial banking, but it removes the corporate lending and included savings institutions. The outcome of their work shows that annual productivity growth rates increased dramatically, from 1.14 % over 1977-1982 to 6.08% over 1982 – 1987, and then it declined somewhat thereafter to 5.54% over 1987-1995 to 4.13% over 1995-1999. But by using BLS statistics for the same period it was 1.12 % over 1977-1982, 4.44% over 1982-1987, 2.93% over 1987-1995, and 1.81% over 1995-1999. The analysis of both series show negative productivity growth over 1977-1982, but strong increase in the early 1980s followed by decline in growth in the subsequent intervals, Corvoisier and Group (2001) in their study used European data and found that penetration of internet has reduced the sunk cost of market entry, increasing banking market contestability and yielding more favourable prices for customers, Alan Greenspan, Chicago Bank Structure Conference (May 10, 2002) found significant increase in the preliminary figures on productivity growth for late 2001 and early 2002, which could reflect the benefits of previous investments in IT that are not significantly confounded by adjustment cost because of the slowdown in investment, Furst et al (2002) in his study examined the federally chartered US banks and found that those banks that have used conventional business model have higher Return on Equity (ROE). The study also found that most of the profitable banks have adopted ICT after 1998 but yet they are not the first movers, Berger (2003) in his study found that all banks who have used Information Communication Technology related products like electronic payment, online banking, online shopping, security investments, information exchange have delivered superior quality customer services to their customers with comparatively less efforts, Kozak (2005) in his study tried to investigate the impact of technology on the profit and cost effectiveness of the banking industry within the stipulated period of 1992-2003 and found significant relationship between the executed information technology, productivity and savings, Sathye (2005) in his study examined the credit unions in Australian banks. During the period of study "1997 to 2001", he found that electronic banking has not proved to be a yard stick to measure the performance and it cannot be considered as a performance enhancing tool, Hernando and Nieto (2007) in their study revealed that internet banking is seen as a complementary channel, Turbam, et al. (2008) in their study examined the discrepancy between measures of investment information technology and measures of output at national level and found that information technology proven to be most essential and dynamic factors relating to all efforts but it cannot improve banks earnings alone, Zafar S.M.Tariq (2014) in his study found that there has been discernible improvement in operational efficiency of traditional banks in comparison to modern



banks in India, techno based modern banks have recorded higher efficiency as compared to their traditional Indian counterparts and trend has to be closely monitored to come to a firm conclusion and suggested that to compete growing challenge of modern banks, traditional banks have to adopt quality, efficiency, productivity and profitability as their core policy and in process have to improve their productivity and cost reduction efforts perpetually, S.M.Tariq Zafar (2014) in his study found that “modernization, explored efficiency and growth has been tremendous, especially in the banking area of retail, housing, vehicle loans and credit cards”,

After analyzing the research work of different time period the researchers found that all research work have contributed to some extent. There facts and finding largely depend upon the prevailing circumstances and technology. The outcome of all study will naturally be different with some similarities and dissimilarities. All the dissimilarities are seed of future studies and this study is one of them.

### **RBI Initiatives and Trends in Payment Systems**

Reserve Bank has taken numerous initiatives in regard to develop safe and secure Payment Settlement System. To comply with international standard it has issued many directives set committees and working groups to study the prevailing status and suggest the changes and modifications according to global norms. The Initiatives to accomplish the Reserve Bank Vision Document are examined and analysed as below.

#### ***Paper Clearing***

The paper clearing is an important component of payment settlement system. In the year 2011 the applications package “Express Cheque Clearing System (ECCS) was introduced by the RBI for non-MICR clearing. Later in March 2012 the Grid based Cheque Truncation System was introduced by the government in Chennai but it has been further extended to cover image based clearing operations in adjoining states and to some specific cities across India. Banks from 88 location including 24 MICR centres and 64 non- MICR centres took active part in Chennai Grid. Further to extend this Grid base system at national level CTS clearing operations was introduced in Mumbai in April 27, 2013.

#### ***Electronic Payments***

The study found that by the end of March 28, 2013, the Real Time Gross Settlement System (RTGS) transactions took place to the value of around 8 trillion rupees. This is a highest value settled through RTGS on a business day. It is found that in the month of March 2013 National Electronic Funds Transfer (NEFT) handled 47 million transactions totalling around 3,602 billion rupees. It is been found that with the addition of 13,980, NEFT branches the number of participating bank branches have grown to 100,429. In addition to the participating banks there are around 650 sub member banks participating in NEFT. It has been found that by the end of 2013 with additional 18,257 branches of National Electronic Clearing Service (NECS) the coverage increased to 75,659 locations. In addition to this in various Reserve Banks centres The Regional Electronic Clearing Service (RECS) system has been introduced during the year. The study found that by the end of March 2013, 23 million customers base were covered by the mobile banking service in India by 55 banks which is much higher than previous year 13 million customers covered by 49 banks. During the year of 2012-13, around 60 billion rupees were transacted through 53 million transactions. Due to removal of transaction limits on mobile banks and rising of limits for transactions the collective growth of 108 percent and 229 percent respectively has been found over the previous year.

#### ***Authorisation under Payment System***

Any financial entity that wants to operate a payment system in India has to acquire Authorisation from the reserve bank which is mandatory Under Payment and Settlement Systems Act, 2007 (PSS Act). It has been found that by the end of May 2013, 44 entities nationwide are operating various payment systems among which financial market infrastructure organization, The Clearing Corporation of India Ltd, (CCIL), the National Payments Corporation of India (NPCI), automated teller machine network

(ATM), card payment networks (VISA, Master Card etc), cross border in bound money transfer services and pre paid payment instrument (PPI) issuers.

#### ***White Label Automated Teller Machines***

To speed up and to expand the horizon of payment settlement system Reserve Bank of India issued guidelines in June 2012, on the entry of non bank entities to bridge gap of ATM operations. This open offer has been christened White Label ATMs (WLAS) by the RBI. By the end of the year only 19 entities shown their interest and approached the Reserve Bank of India seeking authorisation to set up their entities to operate and out of 19 WLAs applicant 12 entities have been approved and certificate of authorisation been granted.

#### ***Transparency and Efficiency Measures in Paper Clearing***

To attract more customers and to penetrate deep in society there is need of developing confidence among the users which is possible only through adoption of transparent and efficient practice in cheque clearing. For the purpose RBI took initiatives and banks advised to re-strategies their Cheque Collection Policies (CCP) and include compensation payable in case of delay in the collection of local cheque. In absence of specified rate in CCP for delay compensation have to be paid according to saving bank interest rate. As per the directive of RBI that all CBS enabled Banks only issue free of cost “Payable at Par” / “Multi City” CTS 2010 Standard Cheques to all deserving customers with appropriate board approved risk management procedures. Further banks were advised to facilitate all saving bank account customer by issuing free Standard CTS- 2010 standard cheques for first time. In addition banks were directed to continue clearing of non – CTS cheques up to December 31, 2103. After the dead line such instrument will be cleared through separate clearing sessions in the CTS locations up to some period till all the non CTS cheque may not replaced by the CTS 2010 standard cheques. Further to bring more speed in payment system it was suggested to decline the usage of cheques in future and to promote online clearance, and for the same discussion paper on “Disincentivising Issuance and Usage of Cheques” was prepared and placed on the website for public to comment and give advice.

#### ***Efforts to Enhance Efficiency in (NEFT)***

In process to develop efficiency in the National Electronic Funds Transfer (NEFT) system two effective efficiency enhancement features were introduced. As per directive an additional batch at 8.00 AM was introduced due to which total number of batches on weekdays became 12 in numbers and 6 on Saturday. On other hand uninterrupted release of credit messages was introduced which facilitated the banks to handle growing transaction volumes with ease along with providing more time opportunity to banks to process inward NEFT transactions with speed and comfort. In addition to this, to facilitate the migration of small value transactions from cash or cheque to NEFT, customers charges for making transaction up to rupees 10,000 were reduced to 2.50 rupees only.

#### ***Systematic Adoption of Uniform Routing Code and Account Number Structure***

In order to develop efficiency in banking system in India the apex bank of the nation RBI took initiative and constituted a technical Committee to study the severity of adopting CBS. With the adoption of CBS by all the major banks there was demand from banks to develop branch identifier in the IFSC for routing RTGS and NEFT transactions. Apart from this there was increasing demand to adopt uniform account number across banks in order to avoid mistake of wrong credits under the payment systems.

#### ***Safety and Security in Card Payment***

To increase the use of safe and secured card payment transaction in both form Card Payment (CP) and Card Not Payment (CNP) the apex bank of India ‘RBI’ introduced many protective measures. It mandated the use of authentication in case of CNP transactions along with mandated SMS alerts. On the recommendation of Working Group Committee Aadhaar card was introduced as an additional factor of authentication (AFA) for card present transaction. Further, the impact of growing alternate channels of payments mounted additional responsibility of safety and security in transactions on banks shoulders.

It became paramount important for banks to enable safe and secure transaction to avoid fraudulent usage. In order to provide safe and secure payment RBI issued additional directive to banks to develop certain security measure in time bound manner to strengthen the security aspects of the eco-system. In response to the directives of RBI the measures adopted by banks are use of AFA for online payments, mandatory digital signatures for customer based large value payments in RTGS, Securing PoS terminals to prevent data compromise along with applying techniques to prevent fraud and limiting the number of online transfer and putting restriction on adding beneficiaries in internet banking accounts. In addition international cards will be issued only on demand by customers with limiting the usage threshold on magstripe cards for international transactions and issuance of EMV cards to the customers who use cards internationally etc.

#### ***Rationalisation of Merchant Discount Rate (MDR) in Debit Cards***

In order to promote card payment and to minimise paper currency in circulation the apex bank RBI issued a directive to all categories and types of merchants to deploy card acceptance infrastructure and facilitate and encourage customers to use debit card for making transaction of payments. To consolidate the efforts the Merchant Discount Rate (MDR) structure for debit card transactions became rationalised and the maximum rate that banks can charged cannot exceed the specified rate 0.75 percent up to the transaction value of 2000 and it cannot exceed 1 percent for transaction valuing above 2000.

#### ***Effective Rationalisation of Prepaid Instruments Issue***

RBI initiative to minimise cash based transaction by promoting prepaid instruments been widely accepted by the banks and financial institutions. By the end of May 2013, 41 nationalised Banks and 22 non banks have been authorised by the RBI to issue prepaid instruments (PPI). In due process the apex bank RBI standardised the guidelines for issuance of semi-closed PPIs in terms of categories and Know Your Customer (KYC) requirements. The guidelines emphasize that PPIs up to 10,000 can be issued only in electronic form with minimum customer details, amount outstanding at any point of time and its total value of reloads may not exceed 10,000 in month. If value of PPIs exceeding 10,001 to 50,000 then officially valid document as defined under the rule 2 (d) of the Prevention of Money Laundering Act, non reloadable in nature will be followed and it can only be issued in electronic form. PPIs up to 50,000/- can be reloadable if they are with full KYC norms. Further to promote the importance of PPI and its utility the banks are authorised to transfer the funds from a PPI to another PPI issued by the same entity and in addition to any bank account, enable for all categories of PPIs.

#### ***GIRO- Based Payment***

In yesteryear normal practice of making payment was performed by sending cheque to the payee and payee deposited the cheque in his / her bank for credit to his / her account. Later improvements in this system were made and payer himself could deposit the cheque in his / her bank credit to payee's account. These were termed as "payer" initiated payment and were known as GIRO. In Indian banks wide range of payment channels and payment instruments are available, but to facilitate bill payment no exclusive system exists and still cheque and cash payments occupy major place. Thus considering this issue important RBI constituted a Committee to study implementation of GIRO based Payment System and directed to establish common and secure infrastructure for all kind of bills payments with following broad term of reference which are (a) finalise the contours of the GIRO product (electronic and cheque) for the country (b) design the operational and procedural guidelines of the GIRO payment system (c) draw up a roadmap for implementation of GIRO in India and (d) lay down the transitional path for switch over from cheque to electronic GIRO over a period of time.

#### ***Automated Teller Machines (ATM)***

To develop speedier customer service in transaction and payment settlement RBI emphasized in its directive to promote use of ATMs on pan nation base. Banks were advised to submit quarterly review of ATM transactions to their Board of Directors, indicating inter alia, the reason of denial of ATM

facilities to the customer's sites, and remedial measures taken by the respective banks along with development in this regards to the Reserve Bank.

#### ***National Payment Corporation of India (NPCI)***

RBI in view to expand the base of mobile payment permitted NPCI to increase the array of services through promoting mobile banking and also been directed to widen the channels which are presently available to customers to make IMPS transactions by using provided facilities by banks like ATMs, Internet, Mobile etc. NPCI was encouraged to bring more mobile network operators on board to provide mobile banking services by establishing common dedicated platform. During the year NPCI was allowed to admit WLA operators under its service umbrella if they approach as a direct member of National Financial Switch. Further to strengthening the services related to customers The National Automated House (NACH) system was set and made operational. This NACH was set in expectation to provide additional alternatives to the users of bulk payment for effecting their payments. Further to develop more alternative approaches NPCI launched India's first domestic Rupay Card scheme and later RBI permitted NPCI to launch Rupay affiliated prepaid cards. To make Rupay Card more commonly used alternative RBI permitted its use on PoS and for e-commerce transactions.

#### ***Oversight of Payment System***

On the directive of RBI the constituted Committee on Payment and Settlement System (CPSS) has prescribed an oversight framework commensurate with international standards. According to this a global standards setting body on payment and settlement system has been organised with a task to monitor the activities of the 44 authorised bank and non bank entities involve in operating payment system in the country. The National Payment Corporation of India (NPCI) and Clearing Corporation of India Limited (CCIL) after inspecting gave their consent that entities have sound governance structure and the risk management system are according to norms. Though CCIL is a critical financial infrastructure and is being monitored closely to avoid any systemic impact. Further for better practice and performance the concentration risk in payment system is being evaluated and if any unwanted circumstances been found then justifying action in accordance with the international norms will be taken. In addition to oversight the offsite monitoring of all authorised entities is carried out on the basis of data received from the respective banks through online and offline mode using the Online Return Filing System (ORFS) and analysis of the data are carried out periodically to discern patterns and trends for further policy Action.

#### ***Clearing Corporation of India Limited (CCIL)***

India is one of the fastest growing economies with a bright internal and external economic future and deal with financial transaction throughout the year in relation to export and import. To maintain its status globally at par the RBI is committed to develop, adopt and implement fair and transparent standards along with excellent practice in payment settlement systems including the new CPSS-IOSCO standards "Principles for Financial Market Infrastructure (FMIs). The oversight framework for CCIL would now be drawn up based upon the PFMI. To establish Indian standards and to ascertain the compliance to each of the 24 global standards the CCIL was assessed using assessment methodology of the PFMI. In due process during the year the CCIL implemented numerous measures to consolidate its risk management framework which include overall revamping of margining system in securities segment, implementations of new norms in forex forwards regulations pertaining to exit option for members, resignation by members, computation of default funds and limited liability for members etc. in order to develop efficiency and effectiveness with high degree of transparency the CCIL during the period conducted two rounds of trade compression in IRS / FRA which resulted in before time termination of trades.

#### ***Committee on Payment and Settlement Systems (CPSS)***

In order to develop confidence and to protect customers worldwide the CPSS and the International Organization of Securities Commissions (IOSCO) modified the existing standards and published new

set of standards for financial market infrastructures “Principles for Financial Market Infrastructures” (PEMIs) which specifically unified and strategically harmonised three previous international standards of FMIs<sup>1</sup>. Further in addition to this change the CPSS-IOSCO published disclosure framework in order to promote consistent and comprehensive public disclosure set by FMIs and an assessment methodology that eventually would provide sufficient guidance to assess and monitor observance with the PFMIs.

#### ***Implementation and Monitoring of PFMI***

To maintain transparency, safety and security and implementation of global standards the CPSS-IOSCO started monitoring implementation of the PFMIs in jurisdictions, consideration that they are core members of the FSB and / or the CPSS-IOSCO Steering Group that carried out the review of PFMIs. In order to exercise better control and transparency in the system the CPSS published periodical report on “innovation in retail payment” which provides an overview of innovative retail payment activities in the CPSS and in several other nations and identifies numerous exogenous and endogenous factors that may impact retail payment innovations and also highlighted the reasons which could become hurdle for it. The report also identified and highlighted issues of Central Bank in which they revealed the active participation of non banks in retail payments for which a separate CPSS working Group under the supervision of Shri G Padmanabhan was constituted.

#### ***Technical Support to Member Countries in SAARC***

India being a founder member of SAARC owes responsibility to support all member nations in order to develop efficiency and transparency in settling the payment within, and also enabling them to become global at par. In due course RBI is shouldering the responsibility and providing technical support to the member countries whenever it is requested and required. RBI in obligation arranged joint training programmes and provided specific training in the areas of electronic payments and image based cheque clearing systems to the officials of Maldives Monetary Authority and to the Royal Monetary Authority (RMA) of Bhutan.

### **Information Technology Initiative of RBI for Banking System in India**

#### ***Automated Data Flow***

To develop more efficiency, speed, safety and security Reserve Bank of India directed banks to submit returns to the RBI through Automated Data Flow (ADF). By the implementation of ADF banks are able to automate the flow of data from their CBS or other IT systems directly to RBI without any manual intervention. The ADF sensitizes the banks to ensure data quality and consistency in regulatory reporting and through ADF Reserve Bank is closely monitoring the progress of banks. By the adoption of technology the pace of banking performance has been changed and banks transformed themselves to meet the growing challenges from global financial entities and new private entrants at par. Adoption of technology is not only boon but also poses a threat of organised and sophisticated financial crimes to banks. To overcome the threat, it is imperative that regulator has complete information in the form of dashboards, score cards and reports on almost real time base to make timely policy decisions and act proactively. Thus in this context the ADF is a first step and further RBI focus would be on analytics.

#### ***Cloud Computing***

Uses of technology are necessity and thus have a heavy acquiring and operational cost too. Adoption of information technology (IT) base in banks needed to be examined by keeping the issue of shared IT resources in order to optimise cost while maintaining the expected levels of efficiency, effectiveness and security. The feasibility of shared resources by the banking sector required to be explored at all point of time and place considering security issues, data integrity and confidentiality. For the purpose one avenue is cloud computing. Cloud computing is a large scale parallel and distributed computing system. It is a system which consists of collection of interconnected and virtualised computing resources that are managed to be one or more unified computing resources. It opens up the world of



computing to a broader range of uses and simplifies the use by providing access through any internet connection. It is a pay per use model which is available, convenient and is on demand network accessed to a shared pool of configurable computing resources like networks, servers, applications, services etc. It can be extensively provisioned and can be released with least management efforts or by a service provider interaction. Structure of cloud computing is having three broad segments that is “application, storage and connectivity” and this model is composition of three specific service models, five essential characteristics and four deployment models. The cloud computing providers by managing certain technical variation among these three fundamental models provide services to the banks and banks avail the advantage of maximising cost efficiency, accessibility, agility, scalability, high availability but also have some serious concerns to banks related to privacy as service provider at any point of time may access the data of banks, in order to obtain compliance with the regulations the banks may have to adopt private cloud deployment modes that may cost them high.

#### ***Replacement of RTGS by NG-RTGS***

After analysing the astonishing rise in RTGS volume in the month of March 2013, which crossed 0.43 million transactions, the reserve Bank took decision to replace the existing RTGS with NG-RTGS with improved functions and features. The features which are implemented in the NG-RTGS system are advance liquidity facility, extensive mark up language (XML) based messaging system conforming to ISO 20022 and real time information monitoring and control systems. For the purpose RBI procured necessary hardware to facilitate operations and also arranged necessary training to all RTGS members and launched it facility to customer from August 2013.

#### **Up gradation of Information Technology within Reserve Banks**

##### ***Formation of IT Sub Committee to the Central Board***

Information Technology Sub Committee (ITSC) to the Central Board was constituted considering the importance of good corporate governance which was recommended in IT Vision Document 2011-17. The accountability of ITSC is to advise Reserve Bank time to time on overall IT strategy, infrastructure, applications, and review of the security of the IT Systems, recommend measures to implement suitable IT solution and developing effective monitoring and control of various IT initiative undertaken by the RBI. This committee is constituted by central board representative and are nominated academicians and industry people and headed by Central Board member. The ITSC meeting outcome focused on issues related to the IS policy, DR drills time to time conducted by the Reserve Bank, systematically strengthening infra network, crystallising the responsibilities of the Chief Information Security Officer (CISO) for the Bank and also highlight the weakness and strength of new IT initiatives undertaken by the Bank.

##### ***Reserve Bank and Its Information Security Policy***

To secure safety and security RBI has established some strong measures. The existing IS Policy, sub policy and operational guidelines of Reserve Bank is subject to be reviewed periodically. For the purpose of review the required inputs were obtained from ISACA certified officers managing administration and other associated functions of the Bank. The revised policy and sub policies are been approved by the ITSC and all the operational guidelines which are necessary to administer the policy been finalised and are been implemented.

##### ***Foreign Exchange Transaction Electronic Reporting System (FETERS)***

Foreign exchange is a sensitive issue for all nation government as it reflect the status of the nation in global socio- eco- political environment. To prepare Balance of Payment (BoP) and to maintain its statistics inputs of sale and purchase of foreign exchange are also taken in accounts which are derived from the banks reports detail of sale and purchase of foreign exchange by AD branches under the Foreign Exchange Transaction Electronic Reporting System (FETERS). On the recommendation of RBI Working Group the RBI revised the format of (BoP) presentation in 2011-12 in order to comply with

IMFs Balance of Payments and International Position Manual Sixth Edition (BPM6). The modified reporting system was implemented and became operational from April 1, 2012 and resultant transition was found positive and India became member of pioneer countries who implemented BPM6 standards.

#### ***RBI Initiative to Upgrade the Enterprise Knowledge Portal***

To develop efficiency and excellence in the prevailing system the Reserve Bank directed to upgrade KEP under the guidance of external expert. As per the directive the portal was revamped and developed on a robust platform with latest enhanced high tech features and enriched utilities. The new portal was enriched with powerful search engine, rich content management, and effective personalisation and collaboration tools, easy navigating and overall improved performance. Reserve Bank initiative to upgrade the KEP resultant positive and overall impact on the performance of the banks increased.

#### ***RBI Initiative to Upgrade the Video Conferencing (VC) System***

RBI considering the importance of providing effective training to the employees issued directive to upgrade Video Conferencing. It was determined that up gradation will facilitate executive VC rooms at ideal locations, class room VC facility in training college become more efficient and effective with up graded High definition technology, video streaming facility and video on demand facilities became more effective and promoted the interaction performance.

#### ***Perimeter Security Solution***

To develop adequate security mechanism in view to protect information system in Reserve Bank from external cyber attacks through inflow harmful content, executables and leakage of confidential information's through network, the decision to strengthen the Perimeter Security Solution (PSS) was taken by the Reserve Bank. After consolidating the security of PSS the information system can avoid attacks from network packet sniffers, IP spoofing, denial of service, password attack, application layer attack, BOT attack etc. Perimeter Security Solution (PSS) protect all IT infra and high value assets of Reserve Bank including confidential and non confidential data. PSS is a protective mechanism and protect organisation from all external attacks and threat from outside cyber world. This project was carried out in two phases. In the first phase Reserve Bank procured all required component like switches and routers and in second phase firewalls, intrusion Prevention System (IPS) etc were operationalised. Reserve Bank initiative to consolidate PSS not only protected the confidential data but also relieved the employees who were handling this work in Bank.

#### ***Setting of Information Security Operations Centre (ISOC)***

To develop more protective layer in order to handle enterprise wide IT security, the Reserve Bank decided to set up information Security Operation Centre (ISOC) to protectively detect security related incidents impacting the Reserve Bank, other banks and financial sector. The expected objective of ISOC is to classify all Reserve Bank system based on criticality, to carry out incident management and root cause analysis, to monitor security systems of the Reserve Bank and to plug deficiencies, to coordinate the activity of monitoring the internet with external agencies such as CERTIN and to ensure compliance with reserve Bank's IS policy.

#### ***Reserve Bank XBRL Phase II Initiative to Modernise the Data Acquisition from Banks***

Reserve Bank on the recommendation of High Level Committee for IT Vision Document under the chairmen ship of Dr. K.C. Chakrabarty has set eXtensible Business Reporting Language (XBRL) taxonomies for the various returns in the area of banking supervision and foreign exchange transaction reporting. In due process an unduplicated list of data elements which are covered in this return is being prepared along with business rules. These taxonomies supported the banks to develop necessary data as required at their end and validate the same by implementing the business rules.

#### ***Reserve Bank's Information Management Initiatives***

Reserve Bank Data Warehouse is playing centralised information management platform to process data and information dissemination. In accordance of Reserve Bank Vision all the information collected

through various returns and processed in disparate systems at different departments will be progressively channelized through the eXtensible Business reporting language (XBRL) platform. Following the restructuring impact the Reserve Bank undertook project with aim to automate information flow, to generate reports and dissemination of all tables pertaining to Weekly Statistical Supplement (WSS) and current statistics of Monthly Bulletin directly from data warehouse.

#### ***Department of Information Technology and its Role***

To develop Indian banking system at par to international banking system the Reserve Bank of India established Department of Information Technology. This department was entrusted with a role to focus on the Reserve Bank's Information Technology (IT) vision and to enable RBI to use IT as a strategic tool to bring overall operational efficiency in RBI along with developing safe, secure and overall technically protected IT environment, in addition improving standards of services, strengthening governance and to facilitate analytical and information based decision making. To promote the vision of RBI further the Information Technology Sub Committee (ITSC) of the Central Board was entrusted to provide overall guidance. In the year 2014-15, ITSC met on three occasions and discussed core issues related to Reserve Bank's IT ongoing projects and information security, Reserve Bank data warehouse, audit pertaining to information security, operations of data centres (DCs), efficiency of disaster recovery drills and working of the office of the chief information officer (CISO).

#### ***Reserve Bank of India Agenda for 2014-15, 2015-16 and its Status***

As a Part of Agenda for 2014-15 and 2015-16, The Reserve Bank in order to reduce paper currency in circulation and to promote non paper currency planned to promote Mobile Banking and issued necessary directives and guidelines to banks to enhance the usage of mobile banking in the country. It directed banks to undertake necessary groundwork and encourage customers and maintain security in transactions and redressal of customer grievances, besides engaging with stakeholders to explore the feasibility of having standardised application for mobile banking across banks. RBI also introduced Bharat Bill Payment System (BBPS) to promote effective payment system in India as per agenda 2014-15. It issued guidelines and directives for BBPS in November 2014. NPCI being entrusted to set BBPS as a pan India integrated bill payment system under the PSS Act 2007, under this act inters operable and accessible bill payment services to customers through network agents will be offered. The process of authorization of NPCI to act as a Bharat Bill Payment Central Unit (BBPCU) and authorization of Bharat Bill Payment Operating Unit (BBPOU) will be completed during 2015-16.

RBI in order to consolidate the payment system has took the initiative and issued a directive to consolidate payment system in India and following the directives consolidation of payment has started from December 2014 with migration of volume from the ECS suite to NACH and thus almost all participants are on board in the NACH system. In order to bring more development in enhancing greater acceptance of electronic payments The RBI has introduced policy changes time to time. It gave push to infra expansion and to service providers in order to ensure availability of additional payment options and issued authorisation to nine more entities in 2014-15 making total number of authorised payment system operators to 63. The number of PPIs authorised operators increased to 34 with authorisation of additional five entities during the year 2014-15 and remaining four entities were been authorised by RBI for the money transfer service schemes (MTSS) which also provide cross border inward remittances, white label ATMs (WLAs) and instant money transfer. By the end of March 2015, total numbers of 7,881 WLAs were installed across the country and out of which 4,932 were in Tier III to IV centres.

RBI in order to provide speedy and efficient financing alternative for the micro, small and medium enterprise (MSME) segment proposed to set electronic Trade Receivable Discounting System (TReDS) to bring together the MSME, financiers, corporate buyers to reduce the constraints faced by the MSME segment liquidity management. This system will execute and support factoring of both receivables as



well as payables. Seven entities have applied for TReDS, their Authorisation will be done within 2015-16 under the Payment and Settlement System (PSS) Act, 2007. Other initiative like Security and Efficiency in large value payment system, migration of NEFT platform to UNIX Platform under data centre architecture, CCIL migrated its USD-INR settlement of interbank forex transaction to a payment versus payment (PvP) mode, activation of hybrid features and extended business hours in RTGS system, acceptance of future value dated transactions for settlement up to three business days has been activated. RBI to ensure convenience in the use of payment system and to support migration to electronic payment introduced Customer Convenience and Innovations. It amended the policy guidelines related to PPIs, mobile banking, usage of ATMs and Additional Factor Authentication (AFA2). RBI increased the limit of full KYC semi closed PPIs from 50,000 to 100,000, for foreign nationals and NRIs banks were allowed to issue rupee denominated open system non reloadable PPIs during their stay in India with a permissible ceiling on such PPIs being 200,000 with cash withdraw restricted to 500,000 per month. RBI amended its PSS Act 2007 to match the legal frame work for payment system with international standards. RBI to support over the counter (OTC) derivative markets have directed to adopt Trade Repositories (TR) and Legal Entity Identifier (LEI).

RBI in the year 2014 organised international seminar at Kovalam, Kerala to justify the role of central banks in payments settlement and organised Payment System Innovation Day in December 2014 and presented various innovative initiative which has taken place in payment system. It has also hosted the 14 SEACEN Advance Course on Payment and Settlement Systems for Emerging Economies in 2015 and focused on "Resilience of Payment System to Cyber Crimes. Reserve Bank of India took initiatives to develop and modernised Enterprise Knowledge Portal (EKP), Video Conferencing (VC) system, mail Messaging System (MMS) which has enhanced the RBI efforts to next level. In the year 2012 the CBS of Reserve Bank of India E- Kuber was introduced, in the year 2014-15 many changes were made to e-Kuber by RBI and in process The Depositor's Education and Awareness (DEA) Fund scheme was implemented in e-Kuber which enabled a flow of 45 billion rupees in the fund within two days. RBI under the Agenda for 2015-16 established IT subsidiary of the Reserve Bank and integrated large scale of IT processing in banking and in due course Implementation of the Electronic Document Management System (EDMS) within Reserve Bank was completed which empowered its staff with knowledge and a comprehensive business process re-engineering (BPR) which is been undertaken as a core.

To bring more efficiency RBI took initiative of Revamping of IT Infrastructure at DCs and at very first step the migration of RTGS system to new IBM mainframe system was done and later it became operational. To handle enterprise wise IT security RBI implemented Information Security Operating Centre (ISOC). RBI to promote cash less speedy transaction took initiative to extend E-Receipt and E-Payments across all States using e-Kuber- CBS and it also conducted conference of the State Finance Secretaries focussing on promoting the use of the system in all states by the end of 2016. RBI also introduced Integrating Currency Management Functions with CBS, as accounting of currency movement and reporting is potential area to integrate with e-Kuber, it has issued necessary directive to set modules and facilitate the integration.

Table 1. RBI Initiatives and its Impact on Payment System Annual Turnover

Items	Value in Billion (Rs)				
	2010-11	2011 - 12	2012 - 13	2013-14	2014-15
Systemically Important Payment System (SIPS) through RTGS	484872.3	539307.5	676841.0	734,252.4	754,032.4
1 CBLO	122597.4	111554.3	120480.4	175,261.9	167646.0
2 Government Securities Clearing	69702.4	72520.8	119948.0	161,848.2	179,372.0
3 Forex Clearing	191601.5	221996.1	261170.1	284,459.5	325,437.6
Total Financial Market Clearing (1+2 +3)	383901.3	406071.2	501598.5	621,569.6	672,455.6
4 CTS	14391.2	15103.7	21779.5	44,691.4	66,769.9
5 MICR Clearing	68621.0	65093.2	57504.0	30,942.8	1,850.4
6 Non – MICR Clearing	18329.1	18815.1	20898.3	17,681.8	16,819.0
Others (4+5+6)	101341.3	99012.1	100181.8	93,316.0	85,439.3
7 ECS DR	736.5	833.6	1083.1	1,268.0	1,739.8
8 ECS CR	1816.9	1837.8	1771.3	2,492.2	2,019.1
9 EFT / NEFT	9391.5	17903.5	29022.4	43,785.5	59,803.8
10 Immediate Payment Service (IMPS)	NA	NA	4.3	95.8	581.9
11 National Automated Clearing Hours (NACH)	NA	NA	NA	214.8	1,220.9
Total Retail Electronic Clearing (7+8+9+10+11)	11944.9	20574.9	31881.1	47,856.3	65,365.5
12 Credit Cards	755.2	966.1	1229.5	1,539.9	1,899.2
13 Debit Cards	386.9	534.3	743.4	954.5	1,213.4
14 Prepaid Payment Instruments (PPIs)	NA	NA	79.2	81.0	211.9
Total Cards (12+13+14)	1142.1	1500.4	2,052.1	2,575.4	3,324.5
Total Others (4 to 11)	114428.2	121087.4	134,115.0	143,747.7	154,129.3
Grand Total (1to 14)	983201.8	1066466.1	1,312,554.5	1,499,569.7	1,580,617.3

Source: Extracted from RBI annual Reports, 2011-2012, 2012-13, 2013-14, 2014-15

### Analysis and Interpretation

From the above table we found that Systemically Important Payment System (SIP) has grown year to year respectively. In the year 2010-11 it was 484872.3 Billion Rupee which rose to 676841.0 Billion Rupees in the year 2012-13 and in the year 2014-15 it raised to 754, 032.4 Billion rupees. Total Financial Market Clearing which is a sum of CBLO, Government Securities Clearing and Forex Clearing has also grown stupendously, it was 383901.3 billion rupees in 2010-11 and by the end of 2014-15 it rose to 672,455.6 billion rupees. Others which is a sum of CTS, MICR Clearing and Non – MICR Clearing has shown a decline as in the year 2010-11 it was 101341.3 billion rupees but declined in the following year 2011-12 but shown some improvement in the year 2012-13 and rose to 100181.8 billion rupees but still behind 2010-11 status, further it declined drastically in the year 2013-14 and continued its declining trend and touched it lowest to 85,439.3 billion rupees in the year 2014-15. Total Retail Electronic Clearing which is a sum of ECS DR, ECS CR, EFT / NEFT, Immediate Payment Service (IMPS) and National Automated Clearing Hours (NACH), during the study period high growth trend has been recorded in all segments of transactions. In the year 2010-11 it was 11944.9 billion rupees which rose to 65,365.5 billion rupees by the end of 2014-15. Study found that during the period of study Credit Card, Debit Card and Prepaid Payment Instruments (PPIs) has shown increasing trend, in the year 2011-12 the total transaction in Debit Card and Credit card was 1142.1 billion rupees which do not include Prepaid

Payment Instruments (PPIs) transactions but it increases many fold year by year and by the end of 2014-15 it rose to 3324.5 billion rupees including Prepaid Payment Instruments (PPIs) transactions.

### **Findings**

The study found that all settlement of government securities clearing and forex transaction was carried out by Clearing Corporation of India Ltd. All the figures for cards are of those transactions which were carried out at POS terminals only. It is found that during the year 2012-13 total transactions of 79 billion which represent only 0.01 percent of total non cash were done by using the prepaid instrument and transactions of 4.3 billion in the respective year which represent 0.0003 percent of total non cash transaction were done by Instant Money Payment Services (IMPS). The study found that by the end of March, 2015 NEFT facility was made available to the users through 121,845 branches of 161 banks in addition to the business correspondent (BC) outlets and it managed 928 million transaction valuing around 60 trillion rupees in 2014-15 and in the month of March 2015, NEFT recorded 106 million transaction which is largest ever monthly volume of transactions. The study found that in the year 2014-15, 615 million transactions valued around 1.9 trillion were carried out through credit cards and 808 million transactions valuing 1.2 trillion were carried out through debit card, PPIs also grew substantially and recorded 314 million transactions valuing 212 billion rupees. Study found that new payment option of mobile banking services handled 171 million transactions total worth of 1 trillion during the year. The study found that in the year 2014-15 overall growth of 27.1 percent in volume and decline growth of 5.4 percent in value have been recorded in payment and settlement system in comparison to previous year and in volume term, paper based transactions accounted 25.4 percent of the total transaction which is comparatively lower than previous year of 33.9 percent.

The study found that Reserve Bank of India has succeeded in its mission payment settlement system. By adopting the digital technology in all aspect of banking it has proven its maturity and transformed Indian banking system at par to the global standards. Its prudent initiatives succeeded in encouraging electronic payment and minimised the use of cash in society. All the technology based initiatives for safe, inclusive and efficient payment systems is been successfully adopted by the Banks and effectively been implemented. Its efforts to make the payment system more affordable for users and to widen their reach beyond the existing levels to achieve the goal of financial inclusion are moving on a desired direction with gradual pace. Its initiative in relation to rationalisation of policies in regards to ATM transactions, white label ATMs, prepaid payment instruments, and relaxation of additional factor of authentication for small value contact-less card present payments are giving positive results. Its initiative in respect to process of infrastructure enhancement in bill payments and MSME bill discounting segments by putting in place policy framework for setting up Bharti Bill Payment (BBPS) and Trade Receivables Discounting System (TReDS) has provided strength to the payment settlement system. It is been found that Reserve Bank of India in order to cater the emerging challenges has undertaken a slew of in-house IT initiatives. Last but not the least the study found that RBI initiatives Vision Document 2012-15, Agenda 2014-15 and 2015-16 are been successfully implemented and their outcome has enhanced efficiency, effectiveness, safety, security and speed in payment settlement system in India.

### **Conclusion and Recommendations**

The initiative which Reserve Bank took in regard to payment system has enabled financial system to transform itself into global at par in terms of efficiency, safety and speedy delivery. All the initiative has attained deeper acceptance and penetration of non cash payment modes. The Reserve Bank is actively engaged in developing transparent, safe, secure, efficient, interoperable, authorised, accessible, and inclusive and compliant with international standards payment and settlement system in the country.

Following the futuristic mode of payment and settlement in comparison to global standards the Reserve Bank have to keep on making efforts to encourage electronic payment systems in order to minimise cash transactions in the financial system. To explore the untouched potential in suburban area the Reserve Bank of India has to make payment system more affordable for users and have to expand its services beyond the existing levels. In objective to achieve the goal of financial inclusion Government of India have to promote Information and Communication Technology. RBI has to accept adoption of digital technology and efficient communication system as a core part of policy in regard to payment settlement system. In last RBI has to take care of Nations global status and thus have to establish Indian Banking System at par to global banking which is possible only if it keep on adopting the ever growing technology with transparency, safety, security, easy pan India access and affordability.

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# Country-of-Origin Effect and Consumers' Buying Behaviour: An evidence from Indian Market

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## Abstract

Country-of-origin (COO) is seen as an intangible cue which can influence consumers' product purchase and evaluation process. As international trade and global competition increase and universal standardization of product minimize product-based competitive advantages, marketers are not likely to abandon powerful promotional methods such as COO. It is considered as a powerful image variable, which has been used to influence competitive positioning and success in the global marketplace. Consumer ethnocentrism and xenocentrism are other important factors in the domain of COO effect studies. In light of this information, this study intends to find out COO effect on buying behavior of young consumers of India. Younger consumers were employed as a sample because they are considered to be a more conscious group. The purpose of this research is to show how a country's products affect the buying behavior of young consumers. The present study also investigates the interrelationships between COO, product purchase and demographic characteristics of consumers. The findings of the study can be useful for multinational corporations to frame suitable marketing strategies for Indian market to create a positive image of their home countries and products in order to influence consumer buying decision.

**Keywords:** *Country-of-origin (COO), Ethnocentrism, Xenocentrism, India.*

## Introduction

A competitive business environment and its rapid expansion beyond national boundaries has undoubtedly become a necessity for companies to succeed in the long run and expand their customer base (Aboulnasr, 2007). Globalization and increased international business activities have caused the emergence of the global market, new foreign competitors to the forefront, a wider range of foreign products for customers and broadened their choices (Hsieh, 2002). In addition, access to information, higher levels of education and technological progress have also made it possible for consumers to become more aware of the products and services available throughout the world. Consequently, companies consider product differentiation the key priority in pursuing to attain a constant competitive advantage in this challenging global environment (Baker and Ballington, 2002). Among the many factors, which are believed to impact upon international competitiveness, product's country-of-origin (COO) has emerged as a variable which has the potential to enable a company's competitive advantage by distinguishing the product from competitors' offerings, and thus strengthen the company's market position. Consumers' awareness and perception of COO have increased since COO labeling was legally mandated; consumers are paying attention to the origin of certain products as part of their evaluation and purchasing decision process (Klein, Ettenson & Morris, 1998; Bandyopadhyay & Banerjee, 2002). Consumers often use product's COO as an extrinsic information cue when making product evaluations and purchase decision (Papadopoulos & Heslop, 2002; Balabanis & Diamantopoulos, 2004; Kwok, Uncles & Huang, 2006). It serves as a signal for product quality, reliability, safety, durability and

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performance and also helps consumers to understand the rationality of their purchasing behavior (Cai, Cude & Swagler, 2004; Laroche, et al., 2005). It may act as a brand itself for less known products, thus allowing companies to position their products. For well-known brand, it helps to reinforce brand attributes. The country image can leverage attributes of the brand, acting as an external cue about product quality. In recent years the effect of a product's COO on consumer attitudes, consumer purchase intentions, evaluation and behavior has been one of the most widely studied phenomena in international marketing and consumer behavior. Numerous studies have been conducted in the context of different countries with the objective of identifying factors which affect consumers' evaluation and purchase intention of buying products based on its COO (Shimp & Sharma, 1987; Bailey & Pineres, 1997; Kaynak et al., 2000; Sin, Ho and So, 2000; Lin & Chen, 2006; Ghazali et al., 2008; Wang & Yang, 2008; Mostafa, 2010; Dagger & Raciti, 2011; Diamantopoulos, Schlegelmilch, & Palihawadana, 2011; Bamber, Phadke & Jyothishi, 2012; Tabassi, Esmaeilzadeh, & Sambasivan, 2012; Haque et al., 2015).

### **Objective of the Study**

This paper investigates the interrelationships between COO, product purchase and demographic characteristics of young Indian consumers. In particular, a study of this nature is justifiable in the Indian context as it is the second fastest growing economy in the world, after China. Together with a population of 1.22 billion people, India is designated as the second largest emerging consumer market in the world and rapid economic transformations have led to an increase in consumption. Specifically, there are two aspects of this study. Firstly, it will determine to what extent the product's COO impacts upon the consumer buying behaviour. Secondly, this study will examine the effect of product's COO across the consumers of different demographic characteristics. This study will contribute further to the understanding of how the young Indian consumers perceive foreign products. In addition the outcome of this study will be of immense value to foreign multinationals in marketing their products in the emerging Indian market.

### **Review of Literature**

Following the classic work by Schooler (1965), numerous studies have been conducted in different parts of the globe on COO. This concept has gained greater significance because of the growth in international trade and being considered as an important and powerful determinant of consumer buying behaviour (Han, 2010; Diamantopoulos et al, 2011). COO effect is concerned with how customers perceive products from certain countries and the overall perception consumers form of products from a particular country, based on their prior perceptions of the country's production and marketing strengths and weaknesses (Roth & Romeo, 1992). It serves as an extrinsic cue from which consumers make inferences about product, quality, performance or specific product attributes. Consumers infer attributes of the product based on country stereotype and experiences with products from that country (Dagger & Raciti, 2011). COO cues generate a halo effect acting as a file of information about various brands from a country that consumers develop over time, store in their memory in the form of overall evaluations of products from the country and retrieve readily when evaluating the brands (Han, 1990).

Numerous studies have examined the effect of COO of various dimensions of consumers' product evaluation and subsequent behavior. Piron (2000), Zafar et al (2004) and Veale and Quester (2009) found that COO is more important for the evaluation of high involvement products and vice versa. Thus, COO effects influence consumers' perception of luxury products stronger than their perception of everyday products. Balabanis & Diamantopoulos (2004) examined British consumers' decisions about foreign and local products and found that nationalism has a pronounced effect on preferences. On contrary, studies of Kaynak et al. (2000) in Bangladesh, Sin, Ho and So (2000) in China and Ghazali et al. (2008) in Malaysia indicate that consumers do not place COO as a priority attribute. They prefer western foreign brands over local brands due to its symbolical social meaning that portrays higher

quality, sophistication, modernity, novelty and prestige. Russell and Russell (2006) and Ahmed and d'Astous (2008) advocated that greater level of familiarity with a country and its products may increase consumers' acceptance of imported products and decrease their preference of local products. Moreover, when consumers have little knowledge about a foreign product's attributes, they are likely to use COO to evaluate products and make inferences regarding the quality of their attributes. Han (2010), Hu and Wang (2010) and Koschate-Fischer, Diamantopoulos and Oldenkotte (2012) found that consumers prefer products from reputable countries and are thus willing to pay higher premium for them.

### ***COO Effects and Demographic Characteristics***

Consumers' demographic characteristics usually influence the way they perceive, evaluate, form attitude and purchase foreign brands. Studies proved that demographic variables of consumers play important role in determining the COO effect. It is observed that age is widely used variable in COO effect on consumer buying behavior. Researches show that older people are biased towards the foreign products as compared to less aged people (Bailey and Pineros, 1997). Huddleston et al (2001) found the positive relationship between age and ethnocentrism (domestic orientation). In past studies, a significant relationship between age and perceived impact of products' COO was examined, as older people were likely to have a more positive attitude toward the country where the product is manufactured. On the contrary, few researchers have found that younger consumers prefer to purchase products of western countries considering high quality and value for money. This may be because many younger people have a better education background and have global exposure and orientation. Male and female shows different attitudes towards different countries products and females like foreign products, whereas males are biased towards them (Sharma, et al., 1995). McLain and Sternquist (1991) and Huddleston et al. (2001) concluded that there is no significant relationship between gender and ethnocentric tendency. Consumers' level of education with global exposure could also play moderator roles in the evaluation of the COO effect. Researchers argued that level of education is correlated to favoring the foreign products as compared to the people with lesser education (McLain and Sternquist, 1991; Sharma et al., 1995). It is because educated people seem to be more familiar or aware of the attributes of product and country's competitive advantage in manufacturing certain kinds of products. Insch and McBride (2004) found a positive relationship between level of education and COO cues. They found that Mexican consumers with higher levels of education were more likely to synthesize the product's COO cue in their product quality evaluations. They also found that level of education and COO evaluation was not applicable to all range of product evaluations. Chrysoschoidis et al. (2007) and Hsu and Nien (2008) found consumers with lower levels of education are comparatively more ethnocentric. Imported products are favoured by the higher income group people and vice versa (Wall et al., 1991). However, McLain and Sternquist (1991) and Han (1990) found no relationship between income and COO. Considering these issues, a hypothesis was framed to examine the relationship between demographic characteristics of consumers and the effect of COO on their product evaluation and purchase behavior.

*H1: COO effect of product purchase does not differ significantly across the demographic characteristics (age, gender and education level) of consumers.*

### ***Xenocentrism and COO effect***

Xenocentrism is the sociological concept which views that a group other than one's own is the center of everything and that all others, including one's own group, are scaled and rated with reference to it (Kent & Burnight, 1951). In marketing, this means that foreign products are superior to all others, including the domestic products. It is observed that consumers of developing economies may regard products from developed markets as an indication of their higher status, class, wealth and lifestyle and,

in this sense, the possession of such products allows them to demonstrate that they are more cosmopolitan (Ghose & Lowengart, 2001). Consumers from developing countries may perceive themselves as being less provincial and more international. They are interested in purchasing and using products of other countries because they are more concerned about material needs and interested in showing their status and wealth by purchasing and using foreign products. Research has found that degree of global exposure, the level of familiarity with different countries and their products can influence consumers' willingness to purchase products and the extent to which they use COO cues. Russell and Russell (2006) and Ahmed and d'Astous (2008) suggested that the greater the level of familiarity with a country and its products, the more objective consumer's product perceptions are. Animosity may increase the consumer's rejection of imported products and increase their preference of local products (ethnocentrism), under the condition of unfamiliarity. Keeping these into consideration, the second hypothesis is assumed as:

*H2: There is no significant relationship between product COO and Xenocentrism.*

### **Research Methodology**

The young Indians as a market segment are immensely significant in India in terms of both magnitude and spending capacity. It is, therefore, important to study buying behavior of young Indians not only because they frequently make the purchase these items, but also because they become trend setters and opinion leaders of various kinds of products. Thus, in this study, information was collected from students of various universities of Dehradun, the capital of Uttarakhand state of India in September and October, 2015. University students were selected for the study because they belong to the middle and high class, and their education, purchasing power, social status and social interactions make them more involved in the purchase of different variety of products. By reviewing the works of prominent researchers, including Shimp & Sharma (1987), Sharma, Shimp & Shin (1995), Kaynak, Kucukemiroglu & Hyder (2000), Balabanis & Diamantopoulos (2004), Ahmed & d'Astous (2008), Haque et al. (2015) variables for COO effect on purchase decision were identified and incorporated into the structured questionnaire.

The survey was conducted using self-administrated questionnaires. Convenience and justified sampling was done in front of the Universities' entrance gates to choose the respondents. Each prospective respondent was initially approached and informed the purpose of the survey. A total of 400 students participated in the study, with a final valid 387 questionnaire being used in this study, excluding 13 responses that were unreliable or insincerely answered. The survey questionnaire consisted of three sections: consumer purchase behavior, attitude towards the effect of products' COO and demographic profile. Respondents were asked to indicate their level of agreement with each of the 20 attributes of a five-point Likert-scale ranging from 1 (strongly disagree) to 5 (strongly agree). In order to ensure the validity of survey instrument, the initial questionnaire was given to a panel of experts and faculty members to judge its content's validity, the clarity of its items meaning and to assure its linkages with the study objectives. In order to validate the reliability, the questionnaire was pilot tested using 40 respondents, representing 10% of the total sample size, who were considered the representatives of the study population. The value of Cronbach's alpha was found 0.768, which suggested an acceptable level of reliability of the questionnaire. The data thus received was systematically arranged, tabulated and analyzed using IBM SPSS Version 20.

### **Results**

#### **Demographic Profile**

The demographic characteristics of respondents shown in table 1 reveal that 13.2% of respondents were from the age group of up to 20 years, 47.3% were from 21-25 years, 30.2% were from 26-30 years

and 9.3% were above 30-35 years. The analysis indicates that males dominate the sample with 56.3% of them included in the survey. The implication of the high male response rate is twofold: men may be more inclined to fill in a questionnaire, but more importantly, they are the driving force for purchasing products of different variety. As regards to educational background, 18.3% students were graduate, only 7% were post-graduate and 74.7% were having a professional degree.

Table 1: Demographical Profile (N = 387)

	Categories	Frequency	Percentage
Age	Upto 20 years	51	13.2
	21-25 years	183	47.3
	26-30years	117	30.2
	30-35 Years	36	9.3
Gender	Male	218	56.3
	Female	169	43.7
Education	Graduate	71	18.3
	Post Graduate	27	7.0
	Professional	289	74.7

Source : Primary data

### COO effect on Different Product Category

COO touches both consumer evaluations of the product as well as the firm's decision to manufacture its goods in certain countries and how to brand. With this in mind, an attempt was directed to know the influence of a COO effect on consumer in a different category of products. Multiple responses received from the customers were processed and is presented in the table 2. The information presented in the table 2 reveals that COO has great influence in the telecom products and services as it was indicated by 28.5% respondents in the sample. It was followed by Apparel purchase (20.2%), food and beverage (16.3%) and electrical and household appliances (15.8%).

Table 2: COO effect on Different Product Category

Product Categories	Responses		Percent of Cases
	N	Percent	
Apparels	154	20.2%	45.6%
Food and Beverage	124	16.3%	36.7%
Furniture and Home Decor	83	10.9%	24.6%
Electrical & Household Appliances	120	15.8%	35.5%
Telecommunication products & Services	217	28.5%	64.2%
Banking Services	63	8.3%	18.6%
Total	761	100.0%	225.1%

Source : Primary Data

### Confirmatory Factor Analysis

Past studies indicate that consumers make purchasing decision based on their own personal attributes such as age, gender and education, as well as product attributes such as price, performance, quality and COO. COO has emerged an important topic of discussion in the young generation consumers as majority feels differences in the product quality and country of its origin. Keeping these into consideration, an attempt was made to assess the effect of products' COO and its influence in a purchase decision among young consumers. Respondents were asked to complete a series of attitude

statements using a five point scale where one was strongly agree and five strongly disagree. All these statements were categorized into five major categories, namely quality and technological excellence, product superiority and trust, product class and knowledge, ethnocentrism and xenocentrism. The results are presented in Table 3 and provide further insight into the role that COO plays in influencing the purchase patterns of young consumers in India.

Table 3: Consumers' attitude towards COO

Statement	Mean	SD
<b>Quality and Technological Excellence</b>	<b>3.06</b>	<b>0.73</b>
I find out a product's COO determines the quality of a product.	3.33	1.43
To make sure that I buy the high quality product, I look at what country the product was made in.	2.87	1.19
I trust brand instead of its place of origin.	2.91	1.03
I believe COO determines the technological sophistication of the product.	3.23	1.32
<b>Product Superiority and Trust</b>	<b>3.08</b>	<b>0.52</b>
I look for COO information to choose the best product available in a product class.	3.32	1.26
When I am buying a new product, the COO is the first piece of information that I consider.	3.02	1.24
If I have a little experience with a product, I search for COO information to help me make a more informed decision.	2.74	1.17
I look for the "Made in..." labels in product before making a purchase.	3.25	1.50
I refuse to purchase a product without knowing its COO.	4.16	1.02
When a lot of equivalent products are available, I would prioritize to purchase the product on the basis of COO.	1.96	1.05
To purchase a product that is acceptable to my family and friends, I look for the product's COO.	3.10	1.21
<b>Product Class and Knowledge</b>	<b>3.50</b>	<b>0.70</b>
It is less important to look for COO when buying a product that is less expensive.	3.38	1.19
When buying a product that has a high risk of malfunction, I always look for COO.	3.48	1.05
The influence for COO seems to be more important for luxury goods than for necessity products.	3.54	1.14
When buying expensive items, I always seek to find out the product's COO.	3.59	0.94
<b>Ethnocentrism</b>	<b>3.22</b>	<b>0.77</b>
Products made in India are usually a good value for the money.	2.61	1.16
If the quality of Indian-made and imported products is the same, I will buy Indian products even if it cost a bit more.	3.83	1.11
<b>Xenocentrism</b>	<b>3.23</b>	<b>0.57</b>
I would always prefer to buy products made in the West.	3.05	0.99
Products made in the West occupy a very strong competitive position in comparison to the products made in Asia.	3.36	1.08
Products made in Indian are generally of a lower quality than similar products from Western countries.	3.29	0.99

The results, presented in table 3, indicate that product class and knowledge is the most important dimension of COO effect ( $m=3.50$ ). However, the effect of COO is more significant for expensive products as compared to cheap or products of necessity. Further, COO also acts as a source of knowledge for quality and performance of products. The responses of consumers towards ethnocentrism and xenocentrism are almost same. Statement, If the quality of Indian-made and imported products is the



same, I will buy Indian products, even if it cost a bit more, shows satisfactory opinion of customers towards product of Indian origin ( $m=3.83$ ). Whereas, the opinion of the consumer regarding value for the money of Indian products seems fair ( $m=2.61$ ). In the Xenocentrism, strong positioning of western products in the minds of Indian consumer ( $m=3.36$ ), better quality of western products as compared to Indian products ( $m=3.29$ ) and consumer preference towards products of western countries ( $m=3.05$ ) shows the performance above than average. Concerning product superiority and trust, consumers believe that COO information helps in selecting the best product in the product category ( $m=3.32$ ) and making the purchase of the new product ( $m=3.02$ ). COO information is also used by consumers to purchase the product which is acceptable to family and friends and purchase a product having no or less prior experience ( $m=2.74$ ). With respect to quality and technological excellence, consumers gave a high ranking to statement 'COO determine the quality of a product' ( $m=3.33$ ) and 'the technological sophistication of the product' ( $m=3.23$ ).

### COO Effects and Demographic Characteristics

One-way ANOVA analysis was carried out with the assumption that the factors of COO do not differ significantly across the age of consumers. From the table 4, it is clear that calculated value of  $F(3, 383)$  is less than the tabulated value of  $F(2.60, \alpha = 0.05)$  for Ethnocentrism (1.743) and Xenocentrism (0.992). Correspondingly, the observed p-value for all factors is above the chosen alpha of 0.05 (0.158 and 0.396). However, in case of quality & technological excellence, product superiority & trust and product class & knowledge, calculated value of  $F(3, 383)$  is greater than the tabulated value of  $F(2.60, \alpha = 0.05)$  and the observed p-value for them is well below the chosen alpha of 0.05. Hence the null hypothesis is accepted, indicating that there is no significant difference in Ethnocentrism and Xenocentrism across the age of consumers. Whereas, the null hypothesis is rejected in case of quality & technological excellence, product superiority & trust and product class & knowledge, indicating that there is a significant difference in these factors across the age of consumers.

Table 4: COO effect across the Age of Respondents

COO Factors	Mean				ANOVA	
	Up to 20 years	21-25 years	26-30 years	30-35 years	F Value	p Value
Quality & Technological Excellence	2.8627	2.9003	3.4017	3.0694	14.155	0.000
Product Superiority & Trust	2.9048	2.9961	3.2125	3.3056	8.991	0.000
Product Class & Knowledge	3.3284	3.4085	3.6239	3.7639	5.142	0.002
Ethnocentrism	3.0294	3.2049	3.3077	3.3056	1.743	0.158
Xenocentrism	3.2026	3.1894	3.2963	3.2870	0.992	0.396

Df = 3, 383; F Value = 2.60 and p Value = 0.05

One-way ANOVA analysis was carried out with the assumption that the factors of COO do not differ significantly across the gender of consumers. From the table 5, it is clear that calculated value of  $F(1, 385)$  is less than the tabulated value of  $F(3.84, \alpha = .05)$  for all factors except quality & technological excellence. Correspondingly, the observed p-value for all factors except quality & technological excellence is above the chosen alpha of 0.05. Hence the null hypothesis is accepted, indicating that there is no significant difference in product superiority & trust, product class & knowledge, ethnocentrism and xenocentrism across the gender of consumers. Whereas, the null hypothesis is rejected in case of quality & technological excellence, indicating that there is a significant across the gender.

Table 5: COO effect across the Gender of Respondents

COO Factors	Mean		ANOVA	
	Male	Female	F Value	p Value
Quality & Technological Excellence	2.9851	3.1627	5.767	0.017
Product Superiority & Trust	3.0439	3.1226	2.228	0.136
Product Class & Knowledge	3.4392	3.5695	3.315	0.069
Ethnocentrism	3.1927	3.2604	0.742	0.390
Xenocentrism	3.2492	3.2110	0.426	0.514

Df = 1, 385; F Value = 3.84 and p Value = 0.05

One-way ANOVA analysis was carried out with the assumption that the factors of COO do not differ significantly across the education of consumers. From the table 6, it is clear that calculated value of F (2, 384) is less than the tabulated value of F (3.00,  $\alpha = .05$ ) for all factors except quality & technological excellence and product class & knowledge. Correspondingly, the observed p-value for all factors except quality & technological excellence and product class & knowledge is above the chosen alpha of 0.05. Hence the null hypothesis is accepted, indicating that there is no significant difference in product superiority & trust, ethnocentrism and xenocentrism across the education of consumers. Whereas, the null hypothesis is rejected in case of quality & technological excellence and product class & knowledge, indicating that there is a significant across the educational level of consumers.

Table 6: COO effect across the Education of Respondents

COO Factors	Mean			ANOVA	
	Graduate	Post-Graduate	Professional	F Value	p Value
Quality & Technological Excellence	2.9648	3.3981	3.0554	3.588	0.029
Product Superiority & Trust	3.0946	3.3016	3.0534	2.940	0.054
Product Class & Knowledge	3.5423	3.9722	3.4403	7.557	0.001
Ethnocentrism	3.1901	3.4630	3.2076	1.449	0.236
Xenocentrism	3.1033	3.2716	3.2607	2.253	0.106

Df = 2, Product Class & Knowledge 384; F Value = 3.00 and p Value = 0.05

### Xenocentrism and COO effect

Foreign visits of consumers were considered as a degree of global exposure of consumers. They were asked to indicate their preference to purchase the product on the basis of quality or COO while visiting a foreign country. The term 'emotional conflict' is used to predict the consumer purchase behavior while shopping abroad. Emotional conflict indicates the difference between rational and emotional appeals for purchasing the product. The quality of the product is the rational justification to purchase the product while product COO is considered as emotional attachment of consumers to purchase the product of the home country or foreign countries. Chi square test is applied to check the impact of global exposure of consumer and COO effect on product purchase. It is found that the calculated value (2.347) is less than the table value (3.95). Therefore, the null hypothesis is accepted, indicating that there is no significant relationship between the COO and global exposure of consumers.

Table 7: COO Effect and Abroad Visit

COO effect and Emotional Conflicts		Visited abroad any time (Global Exposure)		
		Yes	No	Total
While shopping in abroad what influence you most in selecting a product? Total Pearson Chi-Square	Quality of the product	30	283	313
	COO of the product	3	71	74
		33	354	387
		2.347a	1	0.126

Further one way ANOVA was carried out to test the hypothesis that, the mean of Xenocentrism attributes does not differ significantly across the customers' exposure to the global market. The data presented in the table 8 indicates that calculated value of F is greater than the tabulated value of F (3.94) at ( $p < 0.05$ ) level of significance. Thus, the null hypothesis is rejected indicating that there is a significant difference in the mean of xenocentrism attributes does not differ significantly across the customers' exposure to the global market.

Table 8: One way ANOVA: Xenocentrism and Exposure to Global Market

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.189	1	1.189	4.080	.044
Within Groups	161.408	554	.291		
Total	162.597	555			

Table 9: One way ANOVA: Xenocentrism and Emotional Conflicts

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2.386	1	2.386	8.251	.004
Within Groups	160.211	554	.289		
Total	162.597	555			

Further one way ANOVA was carried out to test the hypothesis that, the mean of Xenocentrism attributes does not differ significantly across the customers having different degree of emotional conflict in product purchase. The data presented in the table 9 indicates that calculated value of F is greater than the tabulated value of F (3.94) at ( $p < 0.05$ ) level of significance. Thus, the null hypothesis is rejected indicating that there is a significant difference in the mean of xenocentrism attributes does not differ significantly across the customers having different degree of emotional conflict in product purchase.

### Discussion and Managerial Implications

The results of the study show that COO is considered as information that affects consumers' purchasing decision in terms of their perception toward the product's attributes as well as their overall evaluation of the product. The present study demonstrates that COO has great influence in the telecom products and services followed by apparels, food & beverage, and electrical & household appliances. Young Indian consumers perceive that product COO determines the quality and technological sophistication of the product. However, in some product categories, consumers put more emphasis on brand rather than product COO. Consumers are also of the opinion that COO information helps them to choose the best product available in a product class and consider the new product to make a more informed decision. It was found that the effect of product COO on purchase among consumers is high in the case

of luxury or expensive products or products involving high level of malfunction or risk. On the other hand, in case of less expensive items, consumers do not give more emphasis on product COO. Interestingly, consumers display ethnocentric concern for product evaluation and purchase and are ready to pay little more prices for Indian made products. Globalization, increased international business activities, access to information, higher level of education, global exposure and travelling across different countries have made consumers more aware of the global products. The study also reveals that young Indian consumers believe that foreign products are superior to the domestic products and they are more inclined to purchase foreign products as compare to the domestic products. Thus, it can be stated that xenocentrism is gaining momentum as it has gained higher mean and less standard deviation as compare to ethnocentrism.

Since demographic characteristics of consumers play important role in determining the COO effect on product evaluation and purchase, the present study also examined the relationship between demographic characteristics and COO effect. One-way ANOVA analysis was carried out with the assumption that the factors of COO do not differ significantly across the age, gender and education of consumers. The study revealed that there is no significant difference in ethnocentrism and xenocentrism across the demographic characteristics of consumers. In case of quality & technological excellence, product superiority & trust and product class & knowledge, there is a significant difference in across the age of consumers. Concerning gender, there is a significant difference in quality & technological excellence across the gender only. Regarding education, there is a significant difference in quality & technological excellence and product class & knowledge across the education of consumers. These results are consistent with the studies of Sharma, et al. (1995), Bailey and Pineres (1997); Huddleston et al. (2001), Insch and McBride (2004), Chryssochoidis et al. (2007) and Hsu and Nien (2008). The study also shows that product evaluations by young Indian consumers are influenced positively by their perceptions of the product's COO. This is important for global companies which are likely to face intense competition from other foreign companies and domestic Indian producers upon entering the liberalized Indian market.

From a managerial perspective, this indicates that it is vital for marketers to tailor different strategies for different class of consumers and craft meaningful marketing strategies that will enable them to appropriately position as well as sell foreign products, particularly in the Indian market. Multinational marketers should include plans to create a positive image of their home countries in terms of technological, educational, and standard of living attributes in their advertising strategies for the Indian market. COO needs to be promoted along with the product. The concepts of consumer ethnocentrism and xenocentrism may improve the understanding of consumer behaviour and this shows why certain segments of consumers prefer domestic goods, whereas others do not discriminate between domestic and foreign products. It is found that those Indian consumers who exhibit a high degree of ethnocentrism tend to have a more positive perception of India as a country and products that are domestically made. One of the significant findings of the study is that a favorable attitude toward India and domestic products (ethnocentric orientation) among young Indian consumers do not necessarily lead to a negative perception of foreign countries and products. This assumption can be supported by the fact that Indian consumers are allured with well-known foreign brands and some of them rate products of developed countries higher than those from India and similar other developing countries. This trend is encouraging for foreign companies which are planning to enter and expand their market in the highly promising Indian market.

## Conclusion

The results have demonstrated that the importance of the COO effect depends on the nature of the product, consumer knowledge, degree of involvement in the purchase, global exposure of consumers,

their demographic characteristics and image of the product's country in the mind of the consumer. Therefore, to assess the extent of the COO effect on the product evaluation and purchase, it is important to consider all these factors. It is observed that consumers in developing countries generally perceive themselves as more international and in order to show their status and wealth, they purchase and use foreign products. The degree of global orientation, the level of familiarity with different countries and their products also influence their willingness to purchase products of different countries. In this context, the findings lead to three main conclusions. First, the 'made-in' effect was found to be significant in a multi-attribute scenario. Second, Indian consumers have a low to moderate level of ethnocentric beliefs. They have a certain degree of global exposure that provides the flexibility to accept the products, ideas, norms and values of other cultures. However, foreign products are also evaluated by them on certain product features, such as quality. Third, the growing presence of foreign products in domestic market brings about greater awareness and acceptance of these products. As the market and products become more complex, consumers increasingly seek means of simplifying information processing through using some specific product cues, including product's COO, in their decision makings. Therefore, it is recommended to multinational marketers to frame suitable communication strategies for Indian market to create a positive image of their home countries in terms of technological, educational and standard of living attribute, and the COO needs to be promoted along with the product.

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