Content

Research Paper

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MESSAGE FROM THE CHIEF-MENTOR

I am glad to see the June 2015 issue of the NSHM Journal of Management Research and Applications (NJMRA), which aims at providing the much needed platform for a meaningful exchange of knowledge and ideas between the industry and the academic fraternity. It is truly satisfying that NJMRA is shaping up as a standard journal by attracting articles of requisite quality from all parts of India. The subjects dealt with in such high quality papers cover all possible areas of management.

Such a steady progress would never have been possible without the sincere and sustained effort of the current editorial team and I compliment them wholeheartedly on this count.

Cecil Antony
Chief Mentor
NSHM Knowledge Campus

MESSAGE FROM THE FOUNDING DIRECTOR

I am delighted to find the publication of the June 2015 issue of the NSHM Journal of Management Research and Applications (NJMRA). This journal is one of our initiatives to highlight NSHM Business School's commitment to research and innovation as an integral part of management training. To put such a quality research publication on a firm footing is no doubt a stupendous task and our current editorial team deserves kudos for accomplishing this mission. NJMRA has been meticulous about selection of the papers from a wide range of topics and is well poised to establish the much needed connect among researchers, academicians and company executives for a useful exchange of views and ideas.

I reiterate my deepest appreciation for the dedicated efforts by the current editorial team and wish them all the success in their endeavours.

Rajib Chanda
Founding Director
NSHM Knowledge Campus

MESSAGE FROM THE DIRECTOR

Buoyed by the response we have received from the authors and readers, we have rededicated ourselves to making NJMRA a truly representative platform for sharing the vast intellectual and practical domain knowledge in the field of management. We are making constant efforts to broad base the appeal of the journal to a wider spectrum of contributors and followers. Today, there is hardly an aspect of endeavor which can claim to have no influence of management thought, practice or ethos. In spite of strong critics of the ubiquitous nature of the field, there is a growing evidence of its importance in all spheres of human activity.

The range of articles in the present issue reflects the belief we hold that management as a practice and domain of enquiry pervades the entire gamut of industry. However, lest disengaged knowledge pursuit leads to a suboptimal effect on society, we must be cautious about the issue of corporate citizenship, embodied in a forceful exhortation from Immanuel Kant: "Always recognize that human individuals are ends, and do not use them as means to your end."

As always, welcoming all to partake of this humble offering from our research team, and soliciting any feedback on this. We will be grateful for such gestures that would make NJMRA more and more focused on its prime objective of being a trusted partner in our journey of reading, thought and dialogue.

Dr. Naveen Das
Director
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FROM THE DESK OF THE CHIEF EDITOR

We take immense pleasure to present the June 2015 issue of the NSHM Journal of Management Research and Applications (NJMRA).

While bringing out the issues of NJMRA, the current editorial team has steadfastly stuck to the cherished goal of providing a platform for publication of research articles of merit, book reviews etc. adopting a broad based platform spanning key areas of management. The current issue is a collection of papers and articles from such diverse areas as consumer behavior, information technology, human resource development and corporate social responsibility.

The first article in the current issue of the journal analyses consumer perception towards online shopping in jewellery industry. The second article covers a study on the business applications of predictive analytics using artificial neural network and it is heartening to note that this article has been contributed by our final year MBA student under the guidance of our faculty members. The third article highlights skills & training needs analysis for officers and workers with the aid of an empirical study in a manufacturing unit. The fourth and concluding article is a dissertation on corporate social responsibility: step towards social accountability. In the book review section, the book selected is 'Business Adventures' authored by John Brooks.

We hope that, like the previous ones, this issue of NJMRA will also be well received by the industry and academia. The editorial team would be glad to receive all kinds of comments and constructive suggestions for further improving the quality of the journal.

On behalf of the Editorial Team

Dr. Udayan Kumar Basu

An Insight of the Jewellery Industry "An Analysis of Consumer Perception towards Online Shopping"

Dr. Garima Malik

Abstract

Jewellery has come a long way from the time of manufacturing during the days of Indus valley civilization to exporting are even buying platinum and gold jewellery globally. Today it has now become an integral part of India's traditions and culture. Advent of information technology and penetration of World Wide Web jewellers are now able to make their products available for a wider market and cater to all its potential customers.

E-commerce has become one of the major modifications to the retail platform in this industry. In India, the Jewellery industry does a business of approximately 11000 crores or $215 million through e-commerce as provided by Internet and Mobile Association of India (IAMAI). India, even in its fast pace of ecommerce adoption, customers in jewellery segment prefer physical stores rather than buying online.

This paper intrinsically analyze the preferences and demographic patterns of the consumers buying jewellery online and explores the supporting factors and obstacles for its growth through various data analysis techniques such as ANOVA, descriptive analysis. In addition, present study has analyzed the consumer preferred jewellery categories for online purchase. Insights stated in this study can be adopted in the marketing strategies and for the formulation of the business models especially in ecommerce jewellery segment.

Key words

Online shopping, consumer perceptions, jewellery, e-commerce, consumer behavior.

Introduction

Current scenario

India's gems and jewellry industry is a bright star of the economy, and one of the important foundations of the country's export-led growth. The consumption of gold and Jewellery

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products in India has grown rapidly over the years at the rate of 10-15 per cent per annum and today, the domestic Indian market is estimated to be over US$ 30 billion.

India possesses world's most competitive gems and Jewellery market due to its low cost of production, highly skilled, low-cost and best artisan force for designing and crafting Jewellery, along with strong government support in the form of incentives and establishment of special economic zones (SEZs).

Growth prospects

Indian gems and Jewellery sector is expected to grow at a compound annual growth rate (CAGR) of around 16.26 per cent during the period 2011-12 to 2016-17 on account of increasing government efforts and incentives coupled with private sector initiatives, according to a report of the working group on 'Boosting India's Manufacturing Exports', by Ministry of Commerce & Industry.

India took its first leap into cyberspace nearly a decade ago. Indians in turn have readily taken to the internet with an online populace that's been growing exponentially over the past 10 years. Last year, 33.9 per cent of all Asian internet users were Indian.

With this year's e-commerce figures in India set to reach over half a billion dollars, this is a market that Jewellery retailers cannot afford to ignore. According to a report on Internetworldstats.com, around 3923 million Internet users for June 30, 2012, 11.4%per cent of all the Asians online even though they constituted less than 5 per cent of India's own population.

According to a report by the Internet and Mobile Association of India (IAMAI), in 2011-12, the Indian internet-using population is set to surge to over 1205 million.

E-commerce in India generated an estimated turnover of Rs.97, 483 crore or $100 billion says the IAMAI report.

In 2012, online Jewellery sales in India accounted for around 4 per cent of all web-based ransactions at Rs.11083.32 crore ($213 million), coming in at eight among the top ten performing categories that included airline and railway tickets, electronic gadgets, home appliances and apparel.

Reasons holding back the Indian retailers:

- Some marketing experts think these luxury brands somehow feel that making them too easily available over the internet could negatively impact their "rarity factor". Perhaps it's the fear of being clubbed together with "bargain-shopping" sites like eBay or Amazon.

- Maybe it's the very nature of the medium itself. The internet with its democratic set-up is the ultimate leveler, and this attribute puts it at odds with the very basis of their concept of luxury – something meant for the "exclusive few".

- Even the touch and feel factor requested by majority of customers cannot be met through online retail.

Literature Review

Many studies have been done on studying purchase intentions on branded products. In this

research, factors from consumer perspective have been studied. Scholars generally divide these factors into two major categories. First is the brand attitude and second is perception of those who purchase. (Czellar, 2003)

Wilkie (1986) and Kellar (1993) refer brand consciousness as overall consumer's evaluation and this forms one of the major considerations for buying any product. Multiple studies have been done indicating brand as a key determining factor towards brand attitude. (Carpenter and Nakamoto, 1989) Several past studies indicate that strength of a brand can be defined both objectively and subjectively. The objective indicators includes market share, advertising and promotional costs, channel stronghold, and distribution. The subjective part refers to customers' total assessment of the brand including brand preference and awareness.

Perception fit is based on multiple linkages, between perceived quality and emotional value which includes use condition, user setting, functional benefits and social status.

There is a high influence of others on development of attitudes, interests, norms, and purchase behaviour. (Yu-An Huang, Ian Phau, Chad Lin, 2010). These individuals conform to group norms or modify their judgments based upon others' evaluations. Normative influence has been defined as "the need to identify with or enhance one's image in the opinion of significant others through the acquisition and use of products and brands, the willingness to conform to the expectations of others regarding purchase decisions" (Bearden et al., 1989). Jewellery has long been associated as the fact displaying social status to others and thus conforms to the expectations of others. (Goffman, 1951) Jewellery is a product that is worn for public display. The jewellers also communicate to the consumers that the product reflects consumers' social life, aspirations, and their affiliation (Levy, 1959; Solomon, 1986). The social role of jewellery is even more important in developing countries, where interpersonal relationships are of prime importance (Ger et al., 1993). India is a collectivistic society tends to be group-oriented (Hofstede, 2001) and maintain interpersonal relationships by being in tune with the wishes and feelings of others (Albert, 1996).

Mehta, Pravin (2005) in the article describes the other benefit aspect of online sales of Jewellery and related products. It refers to meeting the demands of the niche market segment comprising of people who have travelled abroad and require the products available and produced in abroad. Apart from the finished goods, raw material imports in India are a major need as it is the largest Jewellery consumer, polisher and manufacturer of Jewellery in the world. **Kothari, Sanjay (2008)** in this report speaks that every 11 of 12 diamonds sold around the globe are processed in India, irrespective of where these are mined. With the right policy and regulatory framework, India could establish itself as a brand in the international Gems & Jewellery market, increase employment and create new breed of entrepreneurship. Since the demand of diamond-studded Jewellery among Indian consumers has risen sharply, the industry should focus on the domestic market. Diamantaires, in Surat's US$ 11.29 billion diamond industry, are eyeing Jewellery manufacturing in a major way, after DTC has decided to prune supply of rough diamonds to India. If India becomes a manufacturing hub for Jewellery as well as a consumption market it will just prove India's strength in both sectors. Since India plays such a major role in the Jewellery sector worldwide, online sales have led to a major boon for the industry. India sells most of its products in India and abroad through online sales. **Digumarti, Sharat (2010)** epitomizes a study conducted by EBay India

which highlights rural India as a new and rising buyer of Jewellery through an online platform. EBay India had entered Indian market in 1995 and since then it's seen a tremendous growth rate. It believes that technology is the most traded vertical category in India which contributes over 48% of its transactions. According to their reports "Jewellery is the largest selling product online and every four minutes a Jewellery piece is sold in India." " Rural towns are major comer targets for eBay India."

Rambhajo, A. (2011) studies the acceptance of the internet by Indian retailers for sale of Jewellery. Venus jewels being one of the biggest diamond suppliers in India and suppliers to the world shows tremendous scope in online Jewellery sales. They are a DTC site holder. They have an annual sales of over $ 340 million out of which 42-45% is from online sales. They believe that it is a newly tapped marketing method for sales of Jewellery worldwide, in short exports. They believe that one day there online sales will account to 100% of their turnover as the company has targeted its market and strategies according to it. **Dutta, Saptarishi (2011)** presents the interest shown by investors into e-commerce of Jewellery. Tiger global is a major investment company which invests in major online sales firm carat lane being one of them. Carat lane is a subsidiary of Jaipur gems. It has major contacts through which it creates a huge inventory of diamonds in its website and is available to over 50 cities in India. It has a turnover of 50crores and it expects to expand to 100 cities now. It's a sole online based company which sells diamonds. They provide low prices with a delivery within 48 hours of order. It is a major success in the newly found retail market segment. **Madhvi Sally, Sutanuka Ghosal (2011)** highlights in the article the new and changing market for the industry. Major players such as Surat diamonds, Gili, and johareez have given online sales of their Jewellery as an important option for growth and sales. They have been able to tap the young target market of the working professionals of ages from 22-26 years. These professionals need diamond Jewellery which is easily ordered, low priced and delivered with a brand name. This article mainly focuses on the young untapped and tapped market in India which is fast growing for low prices diamond Jewellery. **Bell, James (2011)** in the article concludes a comparative study of customer preference between brick and mortar and online retail of Jewellery. The greatest advantage with buying product from reputable online sources is that it can be achieved quite readily without the time and effort of going to the store, (that is assuming that there is a store in the first place) whilst still being able to get the right product at the best price. It is a new and innovative market which reduces efforts of consumers and even makes products available to them of varied varieties and at lower prices.

Ray, Sarbapriya (2011) in her research states that with the advancements in technology there have been changes in the methodology for business transactions. India, being a rapid adaptor of technology is apace with the current scenario of electronic data exchanges and has taken to e-commerce. In view of this, this article tries to present a snapshot of the evolution of e-commerce business indicating the chronological order, category of e-commerce business, description of organizations involved in e-businesses in India, key characteristics of the firms engaged in e-commerce application, to examine the growth of e-commerce in both physical and financial terms, to evaluate the benefits obtained from e-business, to critically analyze the barriers and constraints involved in flourishing e-commerce businesses in India and finally to develop a framework for effective dissemination of e-commerce in India.

Thomas, Melvyn (2013) This article describes the initiatives taken by the Surat Diamond Association to promote the small and medium scale diamond jewelers of Surat who lack resources such as staff and capital by opening an online portal. These Surat small and medium scale businesses will have to upload their inventories on the website which would cater to customers worldwide. As surat is the biggest polisher and cutter of diamonds in India. It is expected to obtain and sell diamonds at attractive prices to customers worldwide. Moreover, it is a boon for these businesses as they are getting the correct modern platform to supply their Jewellery worldwide with a recognized organization backing them. **Sharma, Anukrati (2013)** writes in her paper that with the changing market scenario and economic growth, the demand for online shopping has increased. Explosion of e-commerce has changed the buying patterns and preferences of customers. The important brands are also moving towards e commerce technology for increased sale of their products. There is no doubt about it that ecommerce has made the transactions smooth, quick, faster and easier. Both the sellers and the buyers get benefited by his technology. As we all are aware that Commerce and Business are the backbones of a country's development, if they were supported by the electronic technology and tools like e-commerce, it will make wonders in the economic growth of the country.

Research Objectives:

- **To study the key inducing factors for online jewelry shopping:** From the study researchers want to find out which are the factors that mostly influences the customers to shop jewellery online.

- **To identify the issues faced by the users while shopping online:** Customers encounter few problems while shopping online. With the help of this survey it was to be found that what are the important issues faced by the customers while shopping jewellery online.

- **To study the category of jewelry purchased online:** From this survey researchers would like to find the category and the type of jewellery purchased online.

Research Design

The research design adopted was the multi-cross sectional design. The study includes online buyers' in NCR who have purchased different jewellery items from online shopping site. Structured questionnaire was developed in Google forms with Likertt type scale rating, from strongly agree to disagree. Sampling unit of 120 for the study have been chosen from students and professional employees. Firstly, the respondents were made aware about the purpose of study and then they were requested to give their unbiased responses.

Data Analysis

In order to identify perception of respondents towards the online jewellery cross tabulation with the demographic characteristics of the respondents was performed. The respondents were given a questionnaire pertaining to different issues related to the purchasing on-line jewellery.

Gender Vs Shopping online Jewellery: Table-1 highlights the relationship between the Gender of the respondents and they prefer shopping of online jewellery.

Table 1: Jewellery Shopping Online* Gender

Gender	Do you Shop Online		Total
	Yes	NO	
Male	27	26	53
Female	58	9	67
Total	85	35	120

The table shows that out of 53 male surveyed only 27 of them tend to shop jewellery online and the rest 26 male do not shop online. Out of 67 female surveyed 58 female shops jewellery online and only 9 female do not shop online. It can be concluded that online jewellery shopping is more female oriented.

Table 2: Age and Jewellery Shopping Online.

Age	Do you Shop Online		Total
	Yes	NO	
18-22 Years	17	6	23
23-27 Years	32	5	37
28-32 Years	18	7	25
33-37 Years	9	11	20
Above 37 Years	9	6	15
Total	85	35	120

From this table it can be concluded that, mostly respondents in the age group of 23-27 years end to Shop jewellery online, followed by respondents in the age group of 28-32 years and 18-22 years. Respondents in the age group above 33 years don't tend to shop jewellery much through online mode. It represents more of youth oriented.

Table 3: Occupation and shopping online.

Occupation	Do you Shop Online		Total
	Yes	NO	
Student	22	4	26

Homemaker	16	5	21
Business	16	7	23
Government Job	10	6	16
Private Job	21	13	34
Total	**85**	**35**	**120**

From table 3 it can be concluded that mostly students tend to shop jewellery online followed by Homemaker, businessmen. Customers employed in private and government jobs shop least from online site. It is representative of emerging trend of online jewellery market.

Table 4: Monthly Income and Shopping Online.

Monthly Income (Rs)	Do you Shop Online		Total
	Yes	NO	
10,000-15,000	22	4	26
15,001-20,000	16	5	21
20,001-25,000	16	7	23
25,001-30,000	10	6	16
Above 30,000	21	13	34
Total	**85**	**35**	**120**

Table 4 clearly depicts that, Customers having a monthly income of Rs 15,001-20,000 tend to shop jewellery online followed by respondents having monthly income of Rs 10,000-15,000. Customers having monthly income of more than 25,000 are happy shopping at jewellery store rather than from online site. Customers with low income are more inclined towards online mode of shopping.

Table 5: Descriptive analysis of the factors that influencing shop jewellery online.

Factors	N	Mean	Std. Deviation	Rank
Convenient Time	85	4.0000	.80178	1st
Price/value	85	4.0588	.74567	3rd
Variety	85	3.7882	.78822	6th
Style & Design	85	3.9176	.69371	5th
Brands Availability	85	3.9412	.77694	4th

Payment options	85	3.9412	.77694	4th
Home delivery	85	4.1412	.74247	2nd
Valid N (list wise)	85			

Note : Respondents were asked to rate the above mentioned factors according to their viewpoint. **1 being the least important factor and 5 being the most important factor.**

Based on the mean score, ranking of factors has been done from 1st (most important) to 6th (Least important) From the table it can be concluded that due to convenience of shopping from their place online mode of shopping was preferred by customers followed by the home delivery service and price factor. Variety, Style & design, Brands availability and payment options moderately influences customers to shop jewellery online. Hence convenience factor was most prominent in online jewellery shopping.

Figure 1: Category of jewellery Purchased online
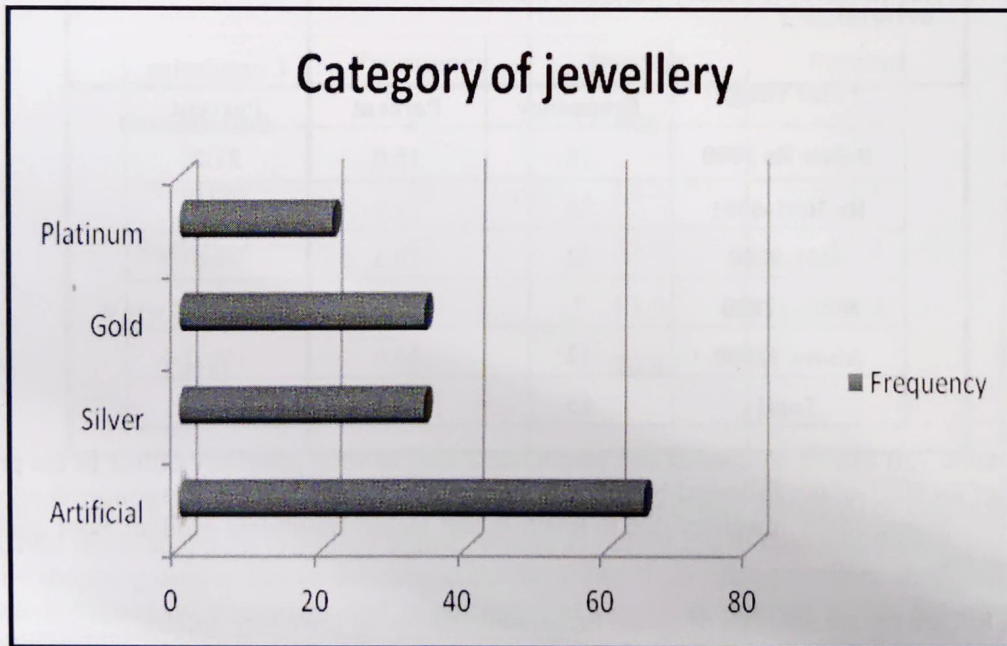
From the graph it is clearly understand that respondents mostly shop artificial jewellery followed by Silver and gold Ornaments. It may be because customers get wide variety of artificial jewellery online at great price compared to normal stores. Moreover less of risk taking capacity is displayed here.

Table 6: Type of Jewellery Purchase online

Type	Frequency	Percentage
Earrings	59	29%
Rings	31	15%
Pendants	47	23%
Necklaces	24	12%
Bracelets	17	8%
Anklets	24	12%

From the table it can be concluded that customers mostly tend to shop earrings followed by pendants and rings, bracelets being their last choice. This is because there many online portals selling jewellery at best price specially earrings and pendants compelling consumers shop from online. Also because earrings and pendants are jewellery of daily wear.

Table 7: Price range of jewellery purchase online.

Price range	Frequency	Percent	Cumulative Percent
Below Rs 3000	18	15.0	21.2
Rs 3001-6001	26	21.7	51.8
6001-9000	22	18.3	77.6
9001-12000	7	5.8	85.9
Above 12000	12	10.0	100.0
Total	85	70.8	

From table 7, it can be concluded that respondents tend to shop jewellery online in the price range of Rs 3001-6000, followed by in the price range of Rs 6001-9000. Respondents refrain from purchasing costly jewellery due to touch & feel factor, fraudulent product, poor quality product etc.

Table 8: Descriptive analysis of issues faced while shopping jewellery online.

Issues	N	Mean	Std. Deviation	Rank
Security & Privacy	85	3.7765	.82197	3rd
Lack of physical examination	85	4.1529	.76385	1st

Shipment Delays	85	3.4118	.90362	5th
Unaware of buying procedure	85	3.1647	1.13229	6th
Fraudulent Product	85	3.6588	.82452	4th
Below quality Standards	85	3.9059	.92097	2nd
Valid N (list wise)	85			

Note: Respondents were asked to rate the above mentioned issues according to their view point. **1 being the least important factor and 5 being the most important factor.**

Based on the mean score, ranking was done on issues from 1st (most important) to 6th (Least Important) From the table it can be concluded that lack of physical examination of the product is one of the most important issues faced by customers shopping online. Products being below quality standards ranks the second followed by security & Privacy issue. The least important issue is unaware of buying procedure.

Table 8: Satisfaction level while shopping online

	Frequency	Percent	Cumulative Percent
Dissatisfied	11	9.2	12.9
Neutral	16	13.3	31.8
Satisfied	42	35.0	81.2
Very Satisfied	16	13.3	100.0
Total	85	70.8	

From the table it can be concluded that 48.3% [satisfied and very satisfied] of customers are satisfied while shopping jewellery online. Where as only 9.2% of customers are dissatisfied while shopping online. Hence conclusion can be drawn that online jewellery shopping has a positive impact on customers and is emerging as one of prominent trends for jewellery shopping.

In order to find the significant difference between the internet usage aptitude and usage satisfaction perceived by respondents, an ANOVA test was performed and the result of the test is shown below.

Hypothesis 3: There is no significant difference between internet users' aptitude and usage satisfaction.

Table 9: Descriptive Analysis of types of Internet Users

	N	Mean	Std. Deviation	Std. Error
Beginners	23	2.26	0.91	0.10
Moderate	60	2.51	1.17	0.11
Excellent	37	3.36	1.29	0.39
Total	120	2.71	1.10	0.08

Table 10: ANOVA TEST I

	Sum of Squares	df	Mean	Square F	Sig.
Between Groups	9.77	2.00	5.91	5.05	0.007
Within Groups	221.34	203.00	1.17		
Total	249.36	205.00			

Table 11: ANOVA TEST-II

Dependent Variable	(I) Skill rating	(J) Skill rating	Mean Difference(I-J)	Std. Error	Sig.
	Beginners	Moderate users	0.11	0.16	0.63
		excellent users	1.09	0.35	0.00
	Moderate users	Beginners	0.11	0.16	0.63
		excellent users	0.96	0.34	0.01
	Excellent users	Moderate users	0.96	0.34	0.01
		Beginners	1.10	0.35	0.00
*The mean difference is significant at the .05 level.					

The F value 5.05 for the mean difference in usage satisfaction between various usage competency of internet consumers is significant ($p < 0.005$). It emphasis that there is significant difference between internet usage competency of the consumers and usage satisfaction. The post hoc test reveals that excellent users of various online shopping have more satisfaction than their other counterparts: Moderate and beginners level competency. Hence, the hypothesis is not accepted.

Findings

Data analysis of this study has showcased interesting insights in the jewelry segment of online shopping.

Category study of the online jewellery purchase:

Study of the demographics in the study has indicated that, online purchase of the jewellery is more female oriented and majorly purchased by the customers of 23 – 27 years, major users of e-commerce are. However, customer segment of 33 above are not so comfortable in purchasing jewellery online. Online purchase of jewellery is found to be dominant with

students and homemakers, but government and professional employees are prefer physical purchase instead of online purchase.

Inducing factors for purchasing jewellery online

Insights regarding the customer's preference to shop jewellery online are similar to any other ecommerce category. Convenient timing, availability of home delivery and price value are major factors driving customers to go online. However the customers seeking for good designs and variety in the product prefer for physical purchase.

Issues faced by the users while shopping online

In terms of Issues faced, Lack of physical examination is one of the most important issues faced by the customers. Other important issues are products being below quality standards followed by security & privacy; the least important issue is unaware of buying procedure. The study shows that the willingness for online jewellery -shopping in females are high. People across the different ages are highly encouraged for online shopping. The people are appreciated online shopping for various conveniences and brand varieties reasons, effective presentation, gifts and offers, payment facility etc. Despite all this, risk is also an important factor, which bothers a lot while doing online shopping for any expensive products including jewellery. At the same time, majority of the respondents also reveals that inexpensive, fashionable and trendy, good design and elegant look fascinate them much for purchasing online.

Category of the jewellery purchased online

Customers prefer shopping artificial jewellery over gold, silver and platinum while shopping online. This may be because of the fear of being cheated or due to lack of touch & feel Factor. In terms of type of jewellery, customers mostly purchase earrings followed by pendants and rings. The readiness and willingness for such fashionable jewellery is comparatively high than those made of gold or some other precious metals. The respondents are also happy and ready to shop online gems and stones embedded jewellery. Thus, these variables can be said crucial factors that play an important role in coherent understanding of the impact of relevant factors on online attitudes and behavior. However consistent identification of other relevant independent and dependent variables need to be found out for even better exposure of what factor influence the most to consumers for online shopping in different age-group. Therefore, the shopping behavior for expensive and important products like jewellery is still traditional. It might take some more time to change the attitude of consumers for online shopping for jewellery.

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  http://www.gjepc.org/trade_information/trade_information

Customer perception towards shopping jewellery online

It is a survey to measure the perception of consumers shopping jewellery online. I would request everyone to give an honest response as it is part of my project work.

* Required

1. **Name** *

   _____

2. **Gender** *
   Mark only one oval.

   ⬭ Male

   ⬭ Female

3. **Age** *
   Mark only one oval.

   ⬭ 18-22 Years

   ⬭ 23-27 Years

○ 28-32 Years

○ 33-37 Years

○ Above 37 Years

4. **Occupation** *
Mark only one oval.

○ Student

○ Home maker

○ Business

○ Government Job

○ Private Job

5. **Monthly Income** *
Mark only one oval.

○ 10,000 - 15,000

○ 15,001 - 20,000

○ 20,001 - 25,000

○ 25,001 - 30,000

○ Above 30,000

CUSTOMER PERCEPTION TOWARDS ONLINE JEWELLERY - Google Drive

6. **Do you shop jewellery online?** *
If yes, kindly proceed with the questionnaire or else kindly click the submit button.
Mark only one oval.

○ Yes

○ No

7. **Factors influencing your purchase online?**
1 being "LESS IMPORTANT and 5 being " MOST IMPORTANT"
Mark only one oval per row.

	1	2	3	4	5
Convenient time	○	○	○	○	○
Variety	○	○	○	○	○

Price/ Value	◯	◯	◯	◯	◯
Style & Design	◯	◯	◯	◯	◯
Brands Availability	◯	◯	◯	◯	◯
Payment options	◯	◯	◯	◯	◯
Home delivery	◯	◯	◯	◯	◯

8. **What category of jewellery do you purchase online?**
   You can select more than one option
   Check all that apply.

   ☐ Artificial
   ☐ Silver
   ☐ Gold
   ☐ Platinium

9. **What type of jewellery do you purchase online?**
   You can select more than one option
   Check all that apply.

   ☐ Earrings
   ☐ Rings
   ☐ Pendants
   ☐ Necklaces
   ☐ Bracelets
   ☐ Anklets

10/19/13   CUSTOMER PERCEPTION TOWARDS ONLINE JEWELLERY

10. **Price range of jewellery you purchase online**
    Mark only one oval.

    ◯ Below Rs 3000

    ◯ Rs 3001- 6000

    ◯ Rs 6001- 9000

○ Rs 9001- 12,000

○ Above Rs 12,000

11. **How often do you purchase jewellery online?**
Mark only one oval.

○ Bi-weekly (In 2 weeks)

○ Monthly (after 1 month)

○ Quaterly (after 3 months)

○ Half yearly (after 6 months)

○ Yearly (after 12 months)

12. **Purpose for purchasing jewellery online?**
You can select more than one option
Check all that apply.

☐ Gift

☐ Investment

☐ Self consumption

13. **Issues faced while shopping online?**
kindly rate according to your importance, 1 being the "LESS IMPORT
MOST IMPORTANT.
Mark only one oval per row.

	1	2	3	4	5
Security & privacy	○	○	○	○	○
Lack of phsical examination	○	○	○	○	○
Shipment delays	○	○	○	○	○
Unaware of Buying procedure	○	○	○	○	○

Fradulent products

Below quality standards

CUSTOMER PERCEPTION TOWARDS ONLINE JEWELLERY - Google Drive

14. How satisfied are you from shopping jewellery online?
Mark only one oval.

	1	2	3	4	5	
Very Dissatisfied	◯	◯	◯	◯	◯	Very Satisfied

A Study on the Business Applications of Predictive Analytics using Artificial Neural Network (ANN)

Shounak Mukhopadhyay

Abstract

This paper examines the application of artificial neural network (ANN) in predictive analytics in the business context. It covers discussions on the framework of neural network and how it is related to areas of pattern recognition, learning, output optimization and use of neural network optimized decision making. The discussions have been elaborated in the applications of predictive learning in business covering areas of marketing, fraud detection and the artificial intelligence based security system for specific types of online transaction. Predictive analytics of transaction processing system has been described through Neural Fraud Management System (NFMS), a framework that leverages the state-of-the-art technology.

Key words

1. Introduction

Artificial neural nets were originally designed to model the functionality of the biological neural networks which are a part of the human brain. An artificial neural network (ANN) is a computational model based on the structure and functions of biological neural networks. Information that flows through the network affects the structure of the ANN because a neural network changes - or learns, in a sense - based on that input and output. ANNs are considered nonlinear statistical data modeling tools where the complex relationships between inputs and outputs are modeled or patterns are found.

A single software artificial neuron consists of a processing element which has a number of input connections, each with an associated weight, a transfer function which determines the output, given the weighted sum of the inputs, and the output connection itself. The network may be trained by adjusting the weights associated with the connections in the net to try and obtain the required outputs for given inputs from a training set.

It can be seen from the above that there is an analogy between biological (human) and artificial neural nets. The analogy is summarized in table 1.1.

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Table 1.1

Human	Artificial
Neuron	Processing Element
Dendrites	Combining Function
Cell Body	Transfer Function
Axons	Element Output
Synapses	Weights

Neural networks are typically organized in layers. In multilayered network, first layer may be dealing with raw inputs from sensors, second layer specializing in seeking particular pattern groupings from processed outputs of first layer, third layer organizing those groupings into higher levels of abstractions. Layers are made up of a number of interconnected 'nodes' which contain an 'activation function'. Patterns are presented to the network via the 'input layer', which communicates to one or more 'hidden layers' where the actual processing is done via a system of weighted 'connections'. The hidden layers then link to an 'output layer' where the answer is output. Most ANNs contain some form of 'learning rule' which modifies the weights of the connections according to the input patterns that it is presented with. In a sense, ANNs learn by example as do their biological counterparts; a child learns to recognize dogs from examples of dogs.

Although there are many different kinds of learning rules used by neural networks, this demonstration is concerned only with one; the delta rule. The delta rule is often utilized by the most common class of ANNs called 'back propagation neural networks' (BPNNs). Back propagation is an abbreviation for the backwards propagation of error. With the delta rule, as with other types of back propagation, 'learning' is a supervised process that occurs with each cycle or 'epoch' (i.e. each time the network is presented with a new input pattern) through a forward activation flow of outputs, and the backwards error propagation of weight adjustments. More simply, when a neural network is initially presented with a pattern it makes a random 'guess' as to what it might be. It then sees how far its answer was from the actual one and makes an appropriate adjustment to its connection weights.

2. Literature Review

Framework of this study covers the building of NFMS model using artificial neural network pattern recognition and how transaction security can be provided with the help of predictive analysis technique. Introduction to artificial neural networks (Sivanandam, 2013) and discussions onthe firing operations of neural network(Schalkoff,2005), modern approach to AI (Norvig&Russel, 1992) has been referred in the study. Artificial intelligence helps to get the training concept and provides idea to get the best result (Rich, 2000). The paper has also referred the study on transaction records like transaction credentials, transaction details, IP and MAC address of frequently used system used in transaction, general transaction gap, and frequency of transaction within a certain period and create a most suitable and optimized output of all the results with elaboration on MCP model (McCulloch & Pitts, 1943). If the transaction violates the optimized output the transaction is monitor by artificial system (Leu,2001) helps to get this concept.

3. Neural Networks and Conventional Computing

A serial computer has a central processor that can address an array of memory locations where data and instructions are stored. Computations are made by the processor reading an instruction as well as any data the instruction requires from memory addresses, the instruction is then executed and the results are saved in a specified memory location as required. In a serial system (and a standard parallel one as well) the computational steps are deterministic, sequential and logical, and the state of a given variable can be tracked from one operation to another (Sivanandam, 2013).

In comparison, ANNs are not sequential or necessarily deterministic. There are no complex central processors, rather there are many simple ones which generally do nothing more than take the weighted sum of their inputs from other processors. ANNs do not execute programmed instructions; they respond in parallel (either simulated or actual) to the pattern of inputs presented to it. There are also no separate memory addresses for storing data. Instead, information is contained in the overall activation 'state' of the network. 'Knowledge' is thus represented by the network itself, which is quite literally more than the sum of its individual components. In practice, neural networks are not programmed but are 'trained'. The real power of neural networks is evident when the trained network is able to produce good results for the data that the network has never seen before.

Depending on the nature of the application and the strength of the internal data patterns you can generally expect a network to train quite well. This applies to problems where the relationships may be quite dynamic or non-linear. ANNs provide an analytical alternative to conventional techniques which are often limited by strict assumptions of normality, linearity, variable independence etc. Because an ANN can capture many kinds of relationships it allows the user to quickly and relatively easily model phenomena which otherwise may have been very difficult or impossible to explain otherwise.

4. Human and Artificial Neurons - investigating the similarity

In the human brain, a typical neuron collects signals from others through a host of fine structures called dendrites. The neuron sends out spikes of electrical activity through a long, thin stand known as an axon, which splits into thousands of branches. At the end of each branch, a structure called a synapse converts the activity from the axon into electrical effects that inhibit or excite activity from the axon into electrical effects that inhibit or excite activity in the connected neurons. When a neuron receives excitatory input that is sufficiently large compared with its inhibitory input, it sends a spike of electrical activity down its axon. Learning occurs by changing the effectiveness of the synapses so that the influence of one neuron on another change (figures 1).
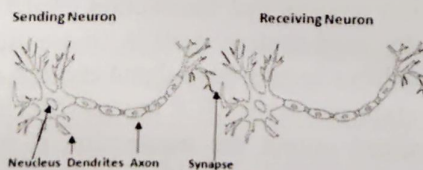
Sending Neuron Receiving Neuron

Figure 1: Neuron Cell

We conduct these neural networks by first trying to deduce the essential features of neurons and their interconnections. We then typically program a computer to simulate these features.
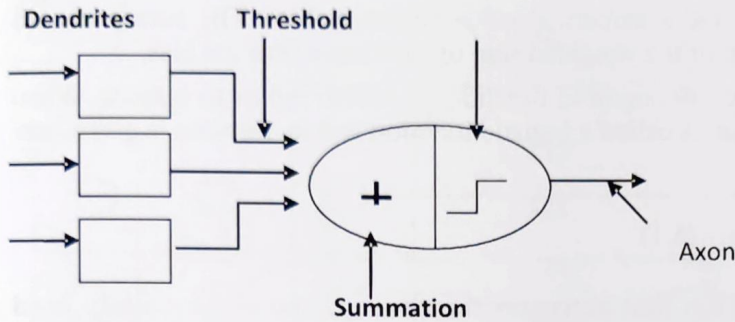

Figure 2 : Artificial Neurons

5. Structural Framework of Neural Network Algorithm

The structure of a neural-network algorithm has three layers(figure 3):

■ **Input layer** feeds past data values into the next (hidden) layer. The black circles represent nodes of the neural network.

■ **Hidden layer** encapsulates several complex functions that create predictors; often those
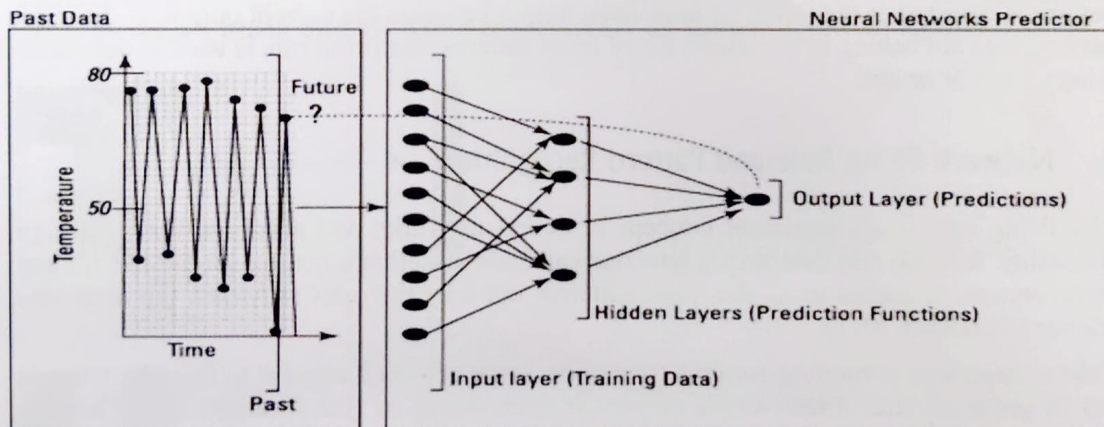

Figure 3 : Framework of Neural Network

functions are hidden from the user. A set of nodes (black circles) at the hidden layer represents mathematical functions that modify the input data; these functions are called neurons.

■ Output layer collects the predictions made in the hidden layer and produces the final results: the model's prediction

Here's a closer look at how a neural network can produce a predicted output from input data. The hidden layer is the key component of a neural network because of the neurons it contains; they work together to do the major calculations and produce the output (Murthy 2005). Each neuron takes a set of input values; each is associated with a weight (more about that in a moment) and a numerical value known as bias. The output of each neuron is a function of the output of the weighted sum of each input plus the bias.

Neurons in a neural network can use sigmoid functions to match inputs to outputs. When used that way, a sigmoid function is called a logistic function and its formula is given here (refer equation 5.1).

$$f(input) = 1/(1+e^{output}) \qquad \ldots\ldots(5.1)$$

Here f is the activation function that activates the neuron, and e is a widely used mathematical constant that has the approximate value of 2.718(Olivier, 2012).

An artificial neuron is a device with many inputs and one output. The neuron has two modes of operation; the training mode and the using mode. In the training mode, the neuron can be trained to fire (or not), for particular input patterns. In the using mode, when a taught input pattern is detected at the input, its associated output becomes the current output. If the input pattern does not belong in the taught list of input patterns, the firing rule is used to determine whether to fire or not.

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6. Network Firing Rule and Pattern Recognition

The firing rule is an important concept in neural networks and accounts for their high flexibility. A firing rule determines how one calculates whether a neuron should fire for any input pattern. It relates to all the input patterns, not only the ones on which the node was trainee (Schalkoff 2011).

Take a collection of training patterns for a node, some of which cause it to fire (the 1-taught set of patterns) and others which prevent it from doing so (the 0-taught set). Then the patterns not in the collection cause the node to fire if, on comparison, they have more input elements in common with the 'nearest' pattern in the 1-taught set than with the 'nearest' pattern in the 0-taught set. If there is a tie, then the pattern remains in the undefined state.

An important application of neural networks is pattern recognition. Pattern recognition can be implemented by using a feed-forward neural network that has been trained accordingly. During training, the network is trained to associate outputs with input patterns. When the network is used, it identifies the input pattern and tries to output the associated output pattern. The power of neural networks comes to life when a pattern that has no output

associated with it, is given as an input. In this case, the network gives the output that corresponds to a taught input pattern that is least different from the given pattern.

Figure 4 : Network building block
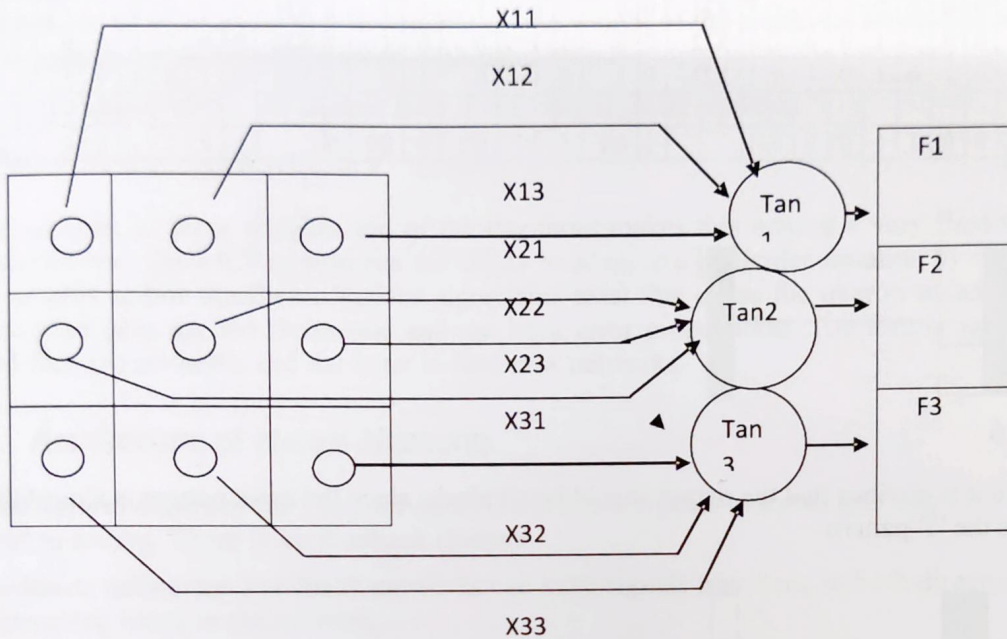
The network of figure 4 is trained to recognize the patterns T and H. The associated patterns are all black and all white respectively as shown below in figures 5,6,7,8.
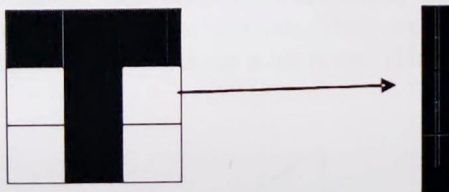

Figure 5: "T" pattern output

Figure 6:"H" pattern output

If we represent black squares with 0 and white squares with 1 then the truth tables for the 3 neurons after generalization are tabulated in Table 6.1

Table 6.1:

Nodes	Top Neuron									Middle Neuron									Bottom Neuron							
XI1	0	0	0	0	1	1	1	1	X21	0	0	0	0	1	1	1	1	X21	0	0	0	0	1	1	1	1
X12	0	0	1	1	0	0	1	1	X22	0	0	1	1	0	0	1	1	X22	0	0	1	1	0	0	1	1
X13	0	1	0	1	0	1	0	1	X23	0	1	0	1	0	1	0	1	X23	0	1	0	1	0	1	0	1
Output	0	0	1	1	0	0	1	1		1	0/1	1	0/1	0/1	0	0/1	0		1	0	1	1	0	0	1	0
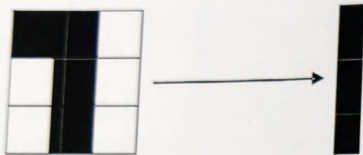
Figure 6

Figure 6 it is obvious that the output should be all blacks since the input pattern is almost the same as the 'T' pattern.
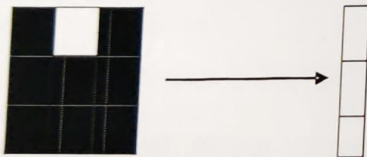

Figure 7

In Figure 7, the output should be all whites since the input pattern is almost the same as the 'H' pattern
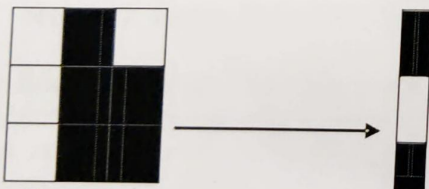

Figure 8

These weighted inputs are then added together and if they exceed a pre-set threshold value, the neuron fires. In any other case the neuron does not fire.
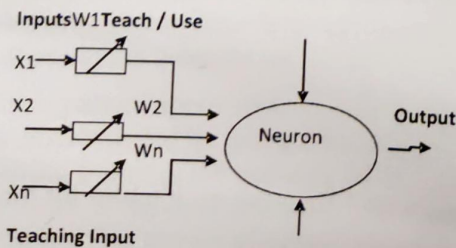

Figure 9 : MCP Neuron

The previous neuron doesn't do anything that conventional computers don't do already. A more sophisticated neuron (figure 9) is the McCulloch and Pitts model (MCP). The difference from the previous model is that the inputs are 'weighted', the effect that each input has at decision making is dependent on the weight of the particular input. The weight of an input is a number which when multiplied with the input gives the weighted input,

In mathematical terms, the neuron fires if and only if (refer equation 6.1);

$$X1W1 + X2W2 + X3W3 + ... > T \quad .....6.1$$

The addition of input weights and of the threshold makes this neuron a very flexible and powerful one. The MCP neuron has the ability to adapt to a particular situation by changing its weights and/or threshold. Various algorithms exist that cause the neuron to 'adapt'; the most used ones are the Delta rule and the back error propagation. The former is used in feed-forward networks and the latter in feedback networks.

7. Architecture of Neural Networks

Feed-forward networks: Feed-forward ANNs allow signals to travel one way only; from input to output. There is no feedback (loops)

Feedback networks: Feedback networks can have signals travelling in both directions by introducing loops in the network.

Perceptron: The most influential work on neural nets in the 60's went under the heading of 'perceptron' a term coined by Frank Rosenblatt. The perceptron (figure 10) turns out to be an MCP model (neuron with weighted inputs) with some additional, fixed, pre-processing. Units labeled A1, A2, A3 are called association units and their task is to extract specific, localized featured from the input images. Perceptron mimic the basic idea behind the mammalian visual system. They were mainly used in pattern recognition even though their capabilities extended a lot more. (Haykin ,2009).
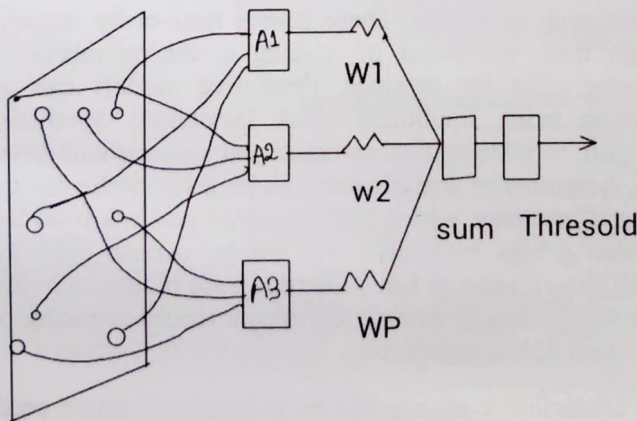

Figure 10 : Perceptron

ANN Learning Process

- **Auto-association** an input pattern is associated with itself and the states of input and output units coincide. This is used to provide pattern completion,

- **Regularity detection** in which units learn to respond to particular properties of the input patterns.

- **Fixed networks** in which the weights cannot be changed, i.e., dW/dt=0. In such networks, the weights are fixed a priori according to the problem to solve.

- **Adaptive networks** which are able to change their weights, i.e., dW/dt not= 0.

- **Supervised learning:** supervised learning is the machine learning task of inferring a function from labeled training data. The training data consist of a set of training examples

- **Unsupervised learning:** In machine learning the problem of unsupervised learning is that of trying to find hidden structure in unlabeled data.

- **Back-Propagation Algorithm**

  Back propagation, an abbreviation for "backward propagation of errors", is a common method of training artificial neural networks used in conjunction with an optimization method such as gradient descent. It is one kind of supervised learning to find out the best maps between set of input and the correct output. It is a high performing predictive analytics tool, when we put the input of different features of an image then back propagation algorithm try to match the features with that image and find out the bet output result. The performance is too high for multilayer neural network with weighted nodes. It can also be used as a single layer perceptron (Brakto,2012).

8. Predictive Models and its applications

Predictive models typically analyze current and historical data on individuals to produce easily understood metrics such as scores. These scores rank-order individuals by likely future performance, e.g., their likelihood of making credit payments on time, or of responding to a particular offer for services. Predictive models can also detect the likelihood of a transaction being fraudulent (Risk Detection). Predictive models are frequently operationalized in mission-critical transactional systems and drive decisions and actions in near real time. A number of analytic methodologies underlie solutions in this area including advanced "neural" systems, which learn complex patterns from large data sets to predict the probability that a new individual will exhibit certain behaviors of business interest. Neural Networks (also known as Deep Learning) are biologically inspired machine learning models that are being used to achieve the recent record-breaking performance on speech recognition and visual object recognition.

The time horizon for a predictive system could be reduced to 'instant prediction', that is correct guessing of what has been asked for and delivering the wish list of the user instantly. Larry Page, Google CEO, described the "perfect search engine" as something that

"understands exactly what you mean and gives you back exactly what you want." The shift toward contextual or predictive search is driven by data — Big Data.

Google Now is the next version of predictive search, serving as a valet or personalized assistant that can predict your needs, wants, and deep desires. This is basically taking multiple buckets of data and intelligently connecting them to facilitate decisions. Everyday data supported decision making. For some, Google Now delivers important information about the traffic on your morning commute, your updated flight itinerary, and the results of last night's hockey game on your phone, without you even asking.

Fraud Detection and NFMS

Sentinel is a framework designed to prevent, detect, analyze and follow up banking fraud in any entity or corporation in the financial business. Specific fraud detection solutions may include:

■ Credit and debit transactions
■ ATM operations
■ A company can monitor the activities of accounts, cardholders and merchants by using a robust and powerful technology based on rules, parameters and indicators.
■ Process data from any origin, whether it comes from transactions, merchants or cardholders.
■ Monitor issuer, acquirer or banking activities.
■ Examine information by strategic business units such as countries, regions, banks, etc.
■ Analyze data from a managerial perspective, through a technology known as "Business Intelligence."

Neural Fraud Management System (NFMS) is a completely automated and state-of-the-art integrated system of neural networks, Fraud Detection Engine, Automatic Modeling System (AMS), supervised clustering, and system retune. Combined with Sentinel the NFMS can automatically scale the relative importance of fraud to non-fraud, group symbols to reduce dimensionality, and evolve over time to detect new patterns and trend types in frauds. The building block of NFMS is illustrated in the following diagram (figure 11).
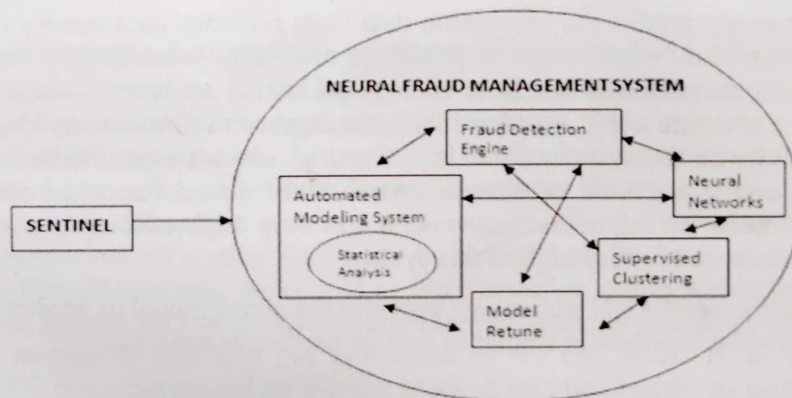

Figure 11 : NFMS Building Block

- Neural Networks are completely adaptive able to learn from patterns of legitimate behavior and adapting to the evolving of behavior of normal transactions and patterns of fraud transactions and adapting to the evolving of the behavior of fraud transactions. The recall process of the Neural Networks is extremely fast and can make decisions in real time.

- Supervised Clustering uses a mix of traditional clustering and multi-dimensional histogram analysis with a discrete metric. The process is very fast and can make decisions in real time

- Statistical Analysis ranks the most important features based on the joint distribution per transaction patterns. In addition, it finds the optimal subset of features and symbols with maximum information and minimum redundancy

- Fraud Detection Engine can apply the generated model by AMS on input data stream and output the detection results by specified model: Neural Networks, Clustering, and Combined. Fraud Detection Engine supports both Windows and UNIX platforms.

- Retuning the basic model created by AMS to adapt to the recent trend of both the legitimate behavior and fraud behavior and update the model for Fraud Detection Engine.

  The Automatic Modeling System (AMS) chooses the important inputs and symbols, train and create clustering and neural network models (Leu,2001).

After making secured payment transaction through Sentinel and followed by a neural fraud management system, NFMS processes the data for predictive analytics.

Now neural network is fully adaptive to learn the security systems and pattern recognition. Now neural network negotiate with the second block automated modeling system which uses optimization to find out best and real time way out of transaction and then supervised cluster helps to get real time decision, and if any kind of mismatch is found fraud detection blocks the transaction. Otherwise the data passes through sentinel for final transaction. NFMS continuously predict the transaction data from previous data history through back propagation algorithm, which helps in predictive analytics. Actually grid coordination is needed between the different blocks to execute predictive analytics. Actually predictive analytics helps to create a grid based artificial intelligence to find out any kind of fraud or irrelevant activity on the system. This kind of neural network model is based on process optimization, and if any kind of fault or unauthorized access happened then it will be immediately traced by the neural network. It has very high efficiency. As we use the optimization the speed is very high in this system.

Sentinel's framework of ANN technology provides the above model of predictive analytics. IBM SPSS provides products in similar in line for predictive analytics.

CAMELS Analysis

Bank failures threaten the economic system as a whole. Therefore, predicting bank financial

failures is crucial to prevent and/or lessen the incoming negative effects on the economic system. This is originally a classification problem to categorize banks as healthy or non-healthy ones. This study aims to apply various neural network techniques, support vector machines and multivariate statistical methods to the bank failure prediction problem in a Turkish case, and to present a comprehensive computational comparison of the classification performances of the techniques tested. Twenty financial ratios with six feature groups including capital adequacy, asset quality, management quality, earnings, liquidity and sensitivity to market risk (CAMELS) are selected as predictor variables in the study. Four different data sets with different characteristics are developed using official financial data to improve the prediction performance. Each data set is also divided into training and validation sets. In the category of neural networks, four different architectures namely multi-layer perceptron, competitive learning, self-organizing map and learning vector quantization are employed. The multivariate statistical methods; multivariate discriminant analysis, k-means cluster analysis and logistic regression analysis are tested. Experimental results are evaluated with respect to the correct accuracy performance of techniques. Results show that multi-layer perceptron and learning vector quantization can be considered as the most successful models in predicting the financial failure of banks (Malek et al, 2009).

Marketing Applications

There is a marketing application which has been integrated with a neural network system. The Airline Marketing Tactician (a trademark abbreviated as AMT) is a computer system made of various intelligent technologies including expert systems. This is a step up from the conventional predictive model; rather it is aligned to adaptive technique with predictions of profitability in the business. A feed forward neural network is integrated with the AMT and was trained using back-propagation to assist the marketing control of airline seat allocations. The adaptive neural approach was amenable to rule expression. Additionally, the application's environment changed rapidly and constantly, which required a continuously adaptive solution. The system is used to monitor and recommend booking advice for each departure. Such information has a direct impact on the profitability of an airline and can provide a technological advantage for users of the system (Hutchison & Stephens, 1987).

Future Roadmap

This paper has focused on the transaction parameter optimization (TPO) for example, it will identify a genuine transaction on the basis of frequent transaction optimization data, and optimization of risk factor has not been taken into account. If the transaction comes under transaction parameter optimization the transaction is genuine, but this is not always true, fraud may occur even also, and it may happen sometimes the transaction is out of TPO range even though the transaction is valid it will detect as a fraud. That's why it is necessary to consider another master control which can be operated on the basis of optimization of standard deviation (SD) of risk, which told us if a transaction comes within the permissible SD, then it will process for transaction, for e.g. if a transaction is passed through TPO but it has a higher amount of risk then this is blocked by SD risk block. If the transaction is blocked by TPO block but passed by SD risk block, it will be consider as valid transaction. A transaction is treated as an invalid one if and only if it is blocked by both of the two blocks. To draw a big picture, it may be possible to apply both adaptive and predictive models to

identify persons and track transactions collated through integration and analyzing variants of input patterns, namely, optical pattern, like fingerprint, corona photograph, finger pressure sensors, sound pattern, like, heartbeat, speech and transaction pattern from the input data etc. Evidently, this calls for large scale integration of such network of information using Big Data technology.(Haykin 2009)

Conclusion

To experience certainty is the USP of big business houses. ANN plays a potential role in forging a paradigm shift to transform probabilistic decision to near deterministic state. This is particularly the case for fraud detection and ensuring transaction security. Applying the concept of pattern recognition and artificial neural network, it is possible to provide the next level security to the terminals& ATM. For example security of ATM can be provided by identity detection of a client by ANN in the ATM counter. An ANN system would be able to recognize a particular user with the help of biometric details through which security of transaction would be robust and highly authentic. To draw a big picture, it may be possible to apply both adaptive and predictive models to identify persons and track transactions collated through integration and analyzing variants of input patterns, namely, optical pattern, like fingerprint, corona photograph, finger pressure sensors, sound pattern, like, heartbeat, speech and transaction pattern from the data etc. Evidently, this calls for large scale integration of such network of information using Big Data technology. Thus, the demand for ANN based predictive analysis has become more focused to ensure all pervasive security of the users, realistic business predictions. Particularly in the domain of banking and finance, there is a growing need in the implementation of security of transactions. Analytics coupled with genetic algorithm and ANN is expected to cater to such requirements.

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Skills & Training Needs Analysis For Officers And Workers – An Empirical Study Of A Manufacturing Unit

Dr. Madhuree Mahato

Abstract

Human resources have long been considered as a source of competitive advantage. Having good competent and talented employees who can readily contribute is an asset for today's organizations. Also the Training and Development for employees has always been considered the core and essential aspect of a sound Human Resource policy. Its criticality has been emphasized more for the manufacturing units because of the huge costs that are involved. This paper aims to chart out a skills matrix and accordingly evaluate the training needs analysis for both officers and workers of a leading manufacturing unit in Eastern India. The sample size chosen for the study was 161employees who belonged to various departments. The data collected was utilized to segregate the employees into Technical mentors and Leaders. This study will prove useful to many HR managers because of its precise and defined way of dealing with employee capabilities.

Key words

Competitive Advantage, Skills Matrix, Training Needs Analysis, Officers, Workers

Introduction

Training and development is considered as significant human resource function, as it gains competitive advantage for an organization over its competitors. During 1980s, Japanese management practices clearly indicated that business success based on high standards of performance was dependent on a highly trained and developed workforce (Brown and Read, 1984). Development is the most effective tool in motivating and retaining high quality human resources within organization. (Kate Hutchings, Cherrie J.Zhu, Brain K, Cooper, Yiming Zhang and Sijun Shao, 2009). Lowry, Simon, and Kimberley (2002) concluded that training is a factor that enhances employee commitment and maximizes employee potential. The training process is one of the most pervasive methods for enhancing the productivity of individuals and communicating organizational goals to personnel.

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Literature Review

Oatey (1970) has opined that training is an activity which deliberately attempts to improve a person's skill at a task. Training both socially, intellectually and mentally are very essential in facilitating not only the level of productivity but also the development of personnel in any organization. According to Yoder (1970) the use of the terms, training and development in today's employment setting is far more appropriate than training alone since human resources can exert their full potentials only when the learning process goes far beyond the simple routine.

Many research studies have pointed in the direction indicating a strong linkage between training and performance. (Chi, Wu & Lin, 2008) have in their study explored the relationships between small- and medium-sized enterprises (SMEs) foreign direct investment (FDI), FDI-related training programs and organizational performance. The research data taken from a large-scale company-level data within Taiwan suggests that FDI leads to higher SME performance. This relationship was partially mediated by the implementation of FDI-related training programs. Unexpectedly, the results also suggest that higher levels of training need attenuate the positive relationship between FDI-related training implementations and SME performance. Training and Development activities in organizations are primarily associated with skills and training needs assessment. According to (Dierdoff and Surface, 2008) have defined Training needs assessment (TNA) as a primary phase in the design and development of training programs. Such assessment captures information spanning where and why training is needed (organization focus), who needs to be trained (person focus), and what must be incorporated as program content (task focus). Conducting systematic needs assessment can significantly impact the overall effectiveness and quality of training programs. (Cekada, 2010) has also defined training needs analysis as that which often reveals the need for well-targeted training. By conducting an effective assessment, a company verifies that training is the appropriate solution to a performance deficiency.

With a history that can be traced in part back to 1952, the needs assessment process has become integral part of many organizations. Private and public sector organizations alike are making great strides at identifying and prioritizing performance problems, intervention requests and/or resource requirement as well possible organizational contributes. Training needs assessment is recognized as the first step in any Human Resource Development intervention. It helps in assessing and analyzing the needs of employees because this stage builds the foundation by identifying the kinds of HRD intervention needed for an effective effort (Sunita & Ajeya, 2010). Also (Shipley & Golden, 2013) have strongly felt that conducting a training needs analysis (TNA) is the best way to determine which training requests are valid and which are not. TNA should be done both proactively and reactively and is most effective when aligned with the corporate strategy. This helps to identify the types of learning programs needed for a given period based on overall company needs.

Desimone et al. (2002) identified four levels of needs to be analyzed for Training Needs Analysis (TNA)—the needs of the organization, individual employees' skills, knowledge and attitudes and their functional responsibilities as well as the needs of departments. McArdle (1996) proposed two types of needs assessments. The first type is based on problem analysis focusing on identification of work problem and offering training solutions.

The second type is based on required competency considering the available opportunities by identifying and acquiring new knowledge, skills and attitudes. In order to explore training needs for different trainee groups and organizations, training managers must record the current and future work situations, clarify the business objectives integrating with training strategy and ensure top management support

Methodology

The present study has chosen a sample of 161 employees who are currently employed on a permanent basis in a leading manufacturing unit in Eastern India. The study was conducted for an overall period of 2 months in 2014. Around 250 hard copy questionnaires were sent out for the purpose of data collection. Around 161 questionnaires were returned of which all 161 were found usable. Thus, an effective response rate of 64.4% was achieved. The sample was chosen only for making an assessment regarding the Training Needs Analysis (TNA) while interviewing technique was followed for the Skills Analysis assessment.

Data Analysis

The below documented chart indicates the skills analysis of the employees. The skills analysis was basically done by adopting the interviewing technique of which the HR manager, Training manager and respective Production heads were asked to participate alongside the researchers. The analysis was done for a total of 30 skills for each worker based on four standards taken as scales. The scale details indicate that 1 (Can't do) and 2 (Can do) require immediate training. 3 (Can do well) indicated technical/skill proficiency while 4 (Can teach) indicated Leadership capabilities.

Sl. No.	NAME	PIN	CC	MACHINE NO.	Use of maintenance tools	Can tighten the bolt correctly	Can lock the nut correctly	Can lubricate	Production tools	Bobbin loading and unloading	Pointing	Welding	Die fitting	Threading	Bobbin driving pin change	Die draft	Die alignment	Coder meter set and read	Under standing of work instruction	Knowledge of Soap lubrication	Operation of lay gear box	Micrometer reading	Cast checking, and trevese	Surface checking	Problem Solving	Knowledge of quality of product	Diameter checking	Temperature checking	Knowledge of inspection method	Use of PPE	Safety Observation	Knowledge of S.O.P.	Knowledge of Jishu Hozen	Knowledge of Production Target	Sein (remove unwanted things)	Seiton (Sort in order)
1	S. B. Mishra	15482	D203	W30A	2	2	2	3	4	2	3	3	4	3	1	3	3	3	3	3	1	3	3	2	3	3	2	3	2	2	3	2	2	3	3	
2	N. Ram	29861	D203	W24E	3	3	3	4	3	4	3	3	3	3	3	3	3	3	1	3	2	3	3	2	2	2	3	3								
3	J. P. Singh	21179	D203	W24A	2	2	2	3	3	2	3	4	3	3	1	3	3	3	4	3	1	3	3	2	2	3	3	2	2	3	2	2				
4	B. Singh	21517	D203	W26C	3	3	3	3	3	2	3	3	3	3	3	3	4	3	3	3	1	3	3	3	4	3	3	3	2	2	3	3	3			
5	B. Pandit	24178	D203	W24B	3	3	3	3	3	2	3	3	4	3	2	3	3	3	3	1	3	3	3	4	3	2	4	2	2	2	3	3	3			

Figure 1: Grading of Employees Skills

Table 1 – Distribution of Sample in the Skills Matrix

Scale	No. of Employees	% of Employees
1 - Can't do	35	21.74
2 - Can do	40	24.84
3 - Can do well	54	33.54
4 - Can teach	32	19.88
TOTAL	161	100
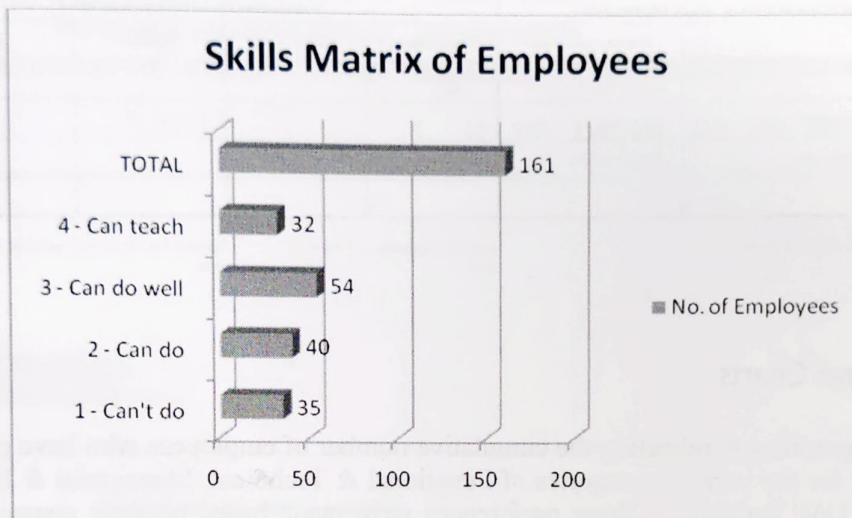
Figure 2: Skills Matrix of Employees

After distributing the sample into the skills matrix, we concluded that in this manufacturing unit, there were more Technical Mentors than Leaders. The same sample was also utilized in conducting a Training Needs Analysis (TNA) for both officers and workers. The TNA was done for three categories of trainings i.e. Functional & Technical Trainings, Managerial & Behavioral Trainings and TPM / TQM Trainings.

The following figure indicates the manner in which the TNA was sourced. Each employee was given a list of Functional & Technical, Managerial & Behavioral and TPM / TQM Trainings. They were asked to list out their preferred set of trainings for each category in the Individual TNA forms provided. Each form was cross-verified by the production and HRD departments along with the researcher.

Figure 3: Training Needs Analysis Form

Individual Training & Development Needs & Training Plan

This document should be made only after discussion between the superior & the subordinate.

Name Mr. ABC			PIN 1121	Grade: A1	Designation: Worker	Department Ropery
Training & Development Needs	Functional/Technical	Rope Making				
		Welding				
		Safety				
	Managerial/Behavioral	Leadership				
		Communication skills				
		Motivation				
	TPM / TQM	Overview of TQM				
		Daily Work management				
		Policy Management				

Suggested Means of Training (To be Filled by HOD)		Training Plan (To be filled by Head HRD)			
Means of Training	Training Description	Responsibility	Agency, if any	Target Date	Remark
On-Job Training					
Classroom Training (Inhouse)	Rope Making	HRD			
	Safety			15 Feb 14	
Classroom Training (External)	Motivation	.	ABC		
Any Other					

Name & the signature of the Employee
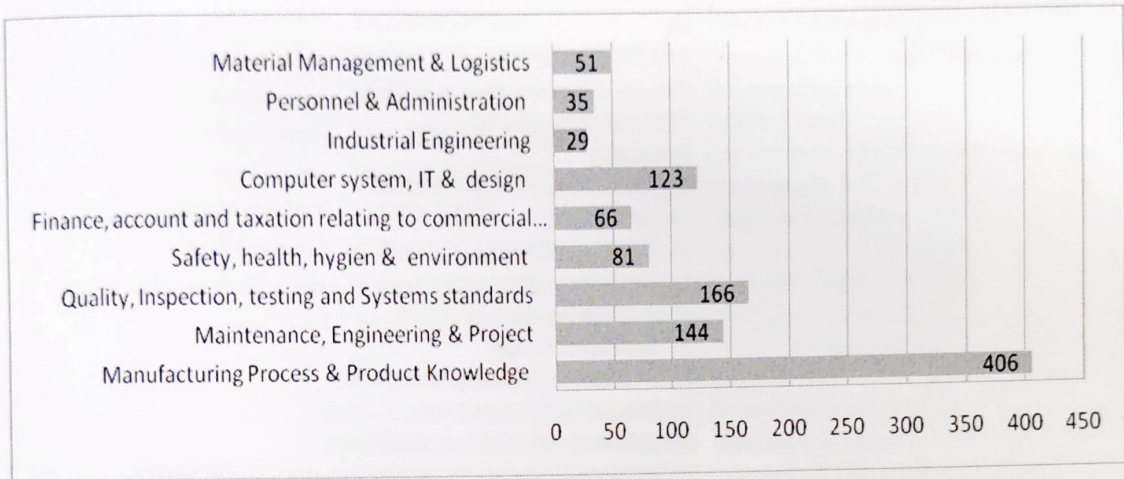Date :

Name & the signature of the HOD
Date :

Name & the signature of the Head, HRD
Date :

Graphs And Charts

The below graphs are indicating the cumulative number of employees who have given their preferences for the various categories of Functional & Technical, Managerial & Behavioral and TPM/TQM Trainings. These preferences were made based on their respective work profiles and their inherent training requirements in accordance to the changing job demands. Each category of training lists out the training preferences for both officers and workers. On a comprehensive basis, the number of trainings required for different types of training under each category of employees has also been analyzed. The study has deliberately considered the cumulative figures under each category of training, only to highlight the pressing need for conducting the training in that particular category for a particular category of employees. The analysis indicates that both officers and workers have considered the Functional & Technical trainings as the most important. This is mainly because of the fact that, manufacturing units stress upon Technical/Functional expertise over other competencies. While Officers have identified Managerial & Behavioral trainings as important over TPM/TQM Trainings, it is the other way round for the workers segment. This is because officers would require a fair amount of leadership skills in order to manage their teams/divisions. Whilst for workers, the maintenance of quality can drastically affect their technical expertise and hence they have shown more inclination for this skill over leadership skills.

Functional & Technical Trainings

OFFICERS

Category	Value
Material Management & Logistics	51
Personnel & Administration	35
Industrial Engineering	29
Computer system, IT & design	123
Finance, account and taxation relating to commercial...	66
Safety, health, hygien & environment	81
Quality, Inspection, testing and Systems standards	166
Maintenance, Engineering & Project	144
Manufacturing Process & Product Knowledge	406

WORKERS

Category	Value
Material Management & Logistics	7
Personnel & Administration	45
Industrial Engineering	10
Computer system, IT & design	81
Finance, account and taxation relating to commercial...	22
Safety, health, hygien & environment	589
Quality, Inspection, testing and Systems standards	201
Maintenance, Engineering & Project	510
Manufacturing Process & Product Knowledge	3113

Managerial & Behavioral Trainings

OFFICERS

Training	Value
Training for trainers	3
Personal Productivity Programme	28
Time management	42
Team building	28
Supervisory development programmmes	13
Managerial effectiveness	43
Interpersonal skills	19
Motivation	20
Presentation Skill	35
Communication skills	38
Attitudinal development	26
Leadership	46
Stress management	48
Change Management	48
Personal Effectiveness	70

(scale: 0 10 20 30 40 50 60 70 80)

WORKERS

Training	Value
Training for trainers	28
	95
Time management	209
	65
Supervisory development programmmes	20
	22
Interpersonal skills	36
	223
Presentation Skill	50
	198
Attitudinal development	259
	166
Stress management	113
	147
Personal Effectiveness	208

(scale: 0 50 100 150 200 250 300)

TPM / TQM Trainings

OFFICERS

Training	Value
Planned Maintenance	38
Jishu Hozen	30
TPM Overview	38
QC Circle Facilitation	29
Data Analysis	36
QC Story Problem Solving	33
Seven QC Tool	24
Policy Management	50
Daily Work Management	97
Overview of TQM	77

WORKERS

Training	Value
Planned Maintenance	137
Jishu Hozen	475
TPM Overview	161
QC Circle Facilitation	195
Data Analysis	84
QC Story Problem Solving	29
Seven QC Tool	278
Policy Management	42
Daily Work Management	366
Overview of TQM	559

Officers

Types of Training	Trainings Required
Functional and Technical	1095
Managerial and Behavioral	507
TPM TQM	452

Trainings Required
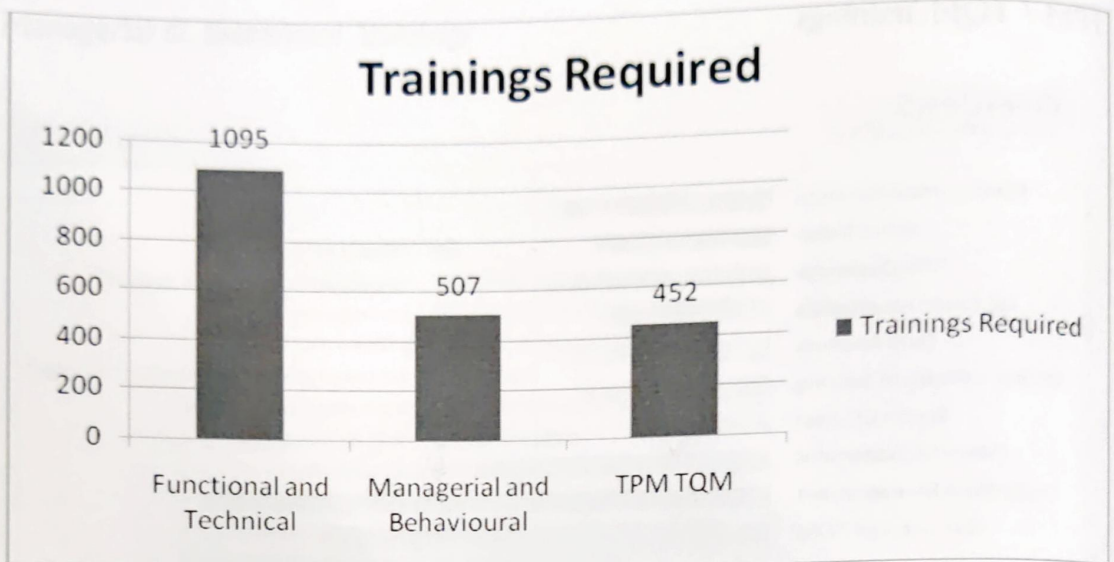
Workers

Types of Training	Trainings Required
Functional and Technical	4591
Managerial and Behavioral	1804
TPM TQM	2326

Trainings Required
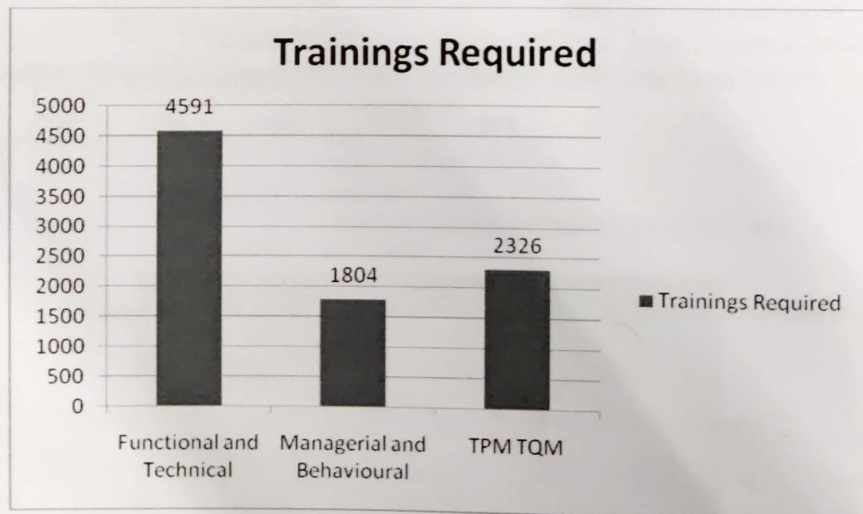
Conclusion

The training intervention has to be designed to meet the needs of the organization by satisfying the competence development requirements of the individual. By achieving this goal we have a rational and justifiable case for training and we are able to prove that training really does deliver tangible benefits, not least to the "bottom line".

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Corporate Social Responsibility: Step towards Social Accountability

Dr. Twinkle Prusty
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Abstract

Corporate Social Responsibility (CSR) is an umbrella term that refers to a variety of initiatives ranging from voluntary codes of conduct to programs whereby companies can undergo external audits to verify the adequacy of their practices in a variety of areas of social concern. CSR is a concept whereby organizations consider the interests of society by taking responsibility for the impact of their activities on customers, suppliers, employees, shareholders, communities and the environment in all aspects of their operations.

This obligation is seen to extend beyond the statutory obligation to comply with legislation and sees organizations voluntarily taking further steps to improve the quality of life for employees and their families as well as for the local community and society. The present study highlights how CSR has necessitated companies to initiate steps to increase their social accountability.

Key words

CSR, Industry Implementation, Risk Management, Ethical Business

Introduction

The practice of CSR is subject to much debate and criticism. Proponents argue that there is a strong business case for CSR. In that, corporations benefit in multiple ways by operating with a perspective broader and longer than their own immediate, short-term profits. Critics argue that CSR distracts from the fundamental economic role of businesses, others argue that it is nothing more than superficial window-dressing, still others argue that it is an attempt to pre-empt the role of governments as a watchdog over powerful multinational corporations.

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Corporate activities that harm the environment violate labour and human rights, and some corrupt state actors and institutions remain problems in all market economies. Nowhere are these problems more acute than in developing countries. On the other hand, in developed countries, it is generally thought that state action constitutes a principle remedy to market failure. On this view, domestic regulatory systems can do the work of protecting the environment and worker rights, while the judiciary can ensure that human rights are upheld and corruption prosecuted. Yet the general view is that, whether due to inadequate resources, ineptitude, or perfidy, the same expectations do not hold for developing countries. As evidence of corporate transgressions has mounted, it is noteworthy that there have been few calls for international super-regulators to oversee these matters. Nor has much attention been devoted to remedying the presumed shortcomings in developing country regulatory systems that inhibit effective reductions in these social harms. Instead, the solution among policy makers and many activists has centered on voluntary CSR measures. CSR is an umbrella term that refers to a variety of initiatives ranging from voluntary codes of conduct to programs whereby companies can undergo external audits to verify the adequacy of their practices in a variety of areas of social concern. Although generally lacking formal state power of sanction, these efforts look to international law for their normative authority.

As such, they intend to apply sometimes-latent international legal prescriptions directly to corporations. Following the practices of many state-level regulatory programs in recent years, these initiatives are consistent with the broader trend in regulatory policy away from so-called "command and control" regulatory techniques and towards voluntary firm-level self-regulation and self-policing. While important in helping to galvanize public opinion around the issues, this article contends that, as currently constituted, voluntary CSR initiatives remain problematic.

Properly understood, voluntary CSR measures should supplement not supplant state regulation. Yet, supporters of voluntary CSR initiatives fail to recognize this fact. They equivocate on the role of government regulation and thus create a confused picture as to the proper role of CSR. The reasons for this equivocation are not incidental but rather central to the CSR movement. There are two reasons for this phenomenon. The first issue relates to the competing discourses involved in addressing CSR questions. Roughly stated, these discourses can be defined as globalist or developmentalist. The globalists include those whose inspiration for addressing CSR matters stems from globalization, which they reduce to questions of foreign direct investment (FDI) and outsourcing by multinational corporations in developing countries. Among the globalists are those who posit a declining, even shrinking role for the state. Globalists contend that multinational corporations (MNCs) elude national regulation because they operate in multiple jurisdictions. On the other hand, as the name suggests, developmentalists view matters from a developmental perspective. On this view, the challenge of private sector activities in developing countries is not limited to issues of FDI and outsourcing but rather involves broader issues of institutional and market strengthening and coordination with other development priorities. Today companies and organizations are operating in a market place where stakeholders expect and demand that their business performs its operations in a more responsible way. Companies are required to adopt standards of accountability, transparency, and sustainability. Many are recognizing the benefits of encouraging responsible business practices and

reducing reputational risk through a responsible and sustainable model called Corporate Social Responsibility. CSR is not a new approach. But corporate governance environmental regulations have forced companies to consider CSR as key strategic initiative. Under CSR, companies will have to recognize certain elements of their business environment, such as: commercial issues of compliance and risk management, legislation impacting business operations -- pollution and environmental issues, Investors' expectations for CSR performance indices, the influence and expectations of stakeholders such as non-governmental organizations and lobbying groups the basis for competitive advantage and brand reputation (Figure 1).

Figure 1. Key Stakeholders in CSR initiatives

The following table (Table 1) demonstrates how CSR initiatives can help companies in achieving key strategic goals

Table 1: CSR area, initiatives and activities

CSR Strategic Area	Initiatives	Activities
Environmental	Contribute to a better environment	• Emission management • Carbon footprint reduction • Green house gas reduction • Alternative energy adoption • Board and CEO Commitment • Environment management & measurement
Corporate governance	Establish corporate governance approach	• Define and practice equitable treatment of shareholders Corporate ethics • Clarity and transparency in the roles and responsibilities of the Board and company executives • Disclosure, transparency, and accountability for shareholders

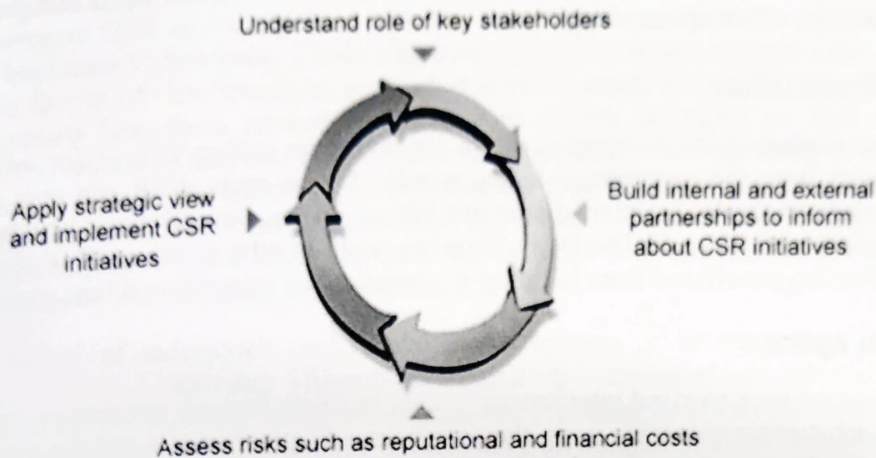Companies can follow a 4-step model to comply with the CSR agenda (Figure 2).

Understand role of key stakeholders

Apply strategic view and implement CSR initiatives

Build internal and external partnerships to inform about CSR initiatives

Assess risks such as reputational and financial costs

Figure 2. 4-step model for CSR compliance

Industry Reimbursement

The scale and nature of the benefits of CSR for an organization can vary depending on the nature of the enterprise, and are difficult to quantify, though there is a large body of literature exhorting business to adopt measures beyond financial ones, found a correlation between social/environmental performance and financial performance. However, usinesses may not be looking at short-run financial returns when developing their CSR strategy. The definition of CSR used within an organization can vary from the strict "stakeholder impacts" definition used by many CSR advocates and will often include charitable efforts and volunteering. CSR may be based within the human resources, business development or public relations departments of an organization, or may be given a separate unit reporting to the CEO or in some cases directly to the board. Some companies may implement CSR-type values without a clearly defined team or programme. The business case for CSR within a company will likely rest on one or more of these arguments:

Creature Property

A CSR programme can be seen as an aid to recruitment and retention, particularly within the competitive graduate student market. Potential recruits often ask about a firm's CSR policy during an interview, and having a comprehensive policy can give an advantage. CSR can also help to improve the perception of a company among its staff, particularly when staff can become involved through payroll giving, fundraising activities or community volunteering.

Risk Management

Managing risk is a central part of many corporate strategies. Reputations that take decades to build up can be ruined in hours through incidents such as corruption scandals or environmental

accidents. These events can also draw unwanted attention from regulators, courts, governments and media. Building a genuine culture of doing the right thing' within a corporation can offset these risks.

Brand differentiation

In crowded marketplaces, companies strive for a unique selling proposition, which can separate them from the competition in the minds of consumers. CSR can play a role in building customer loyalty based on distinctive ethical values. Several major brands, such as The Co-operative Group and The Body Shop are built on ethical values. Business service organisations can benefit too from building a reputation for integrity and best practice.

License to operate

Corporations are keen to avoid interference in their business through taxation or regulations. By taking substantive voluntary steps, they can persuade governments and the wider public that they are taking issues such as health and safety, diversity or the environment seriously, and so avoid intervention. This also applies to firms seeking to justify eye-catching profits and high levels of boardroom pay. Those operating away from their home country can make sure they stay welcome by being good corporate citizens with respect to labour standards and impacts on the environment.

Critical Analysis

CSR is entwined in the strategic planning process of many multinational organizations. The reasons or drive behind social responsibility towards human and environmental responsibility whether driven by ulterior motives, enlightened self-interest, or interests beyond the enterprise, is subject to much debate and criticism. Some critics argue that corporations are fundamentally entities responsible for generating a product and/or service to gain profits to satisfy shareholders and others argue that there is no place for social responsibility as a business function. These critics point to the rule of corporate law that prohibits a corporation's directors from any activity that would reduce profits. Other critics argue that the practice cherry-picks the good activities a company is involved with and ignores the others, thus 'green washing' their image as a socially or environmentally responsible company. Still other critics argue that it inhibits free markets or seeks to pre-empt the role of governments in controlling the socially or environmentally damaging effects of corporations' pursuit of self-interest. Critics of CSR as well as proponents debate a number of concerns related to it. These include CSR's relationship to the fundamental purpose and nature of business and questionable motives for engaging in CSR, including concerns about insincerity and hypocrisy.

CSR and the nature of business

Corporations exist to provide products and/or services that produce profits for their shareholders. And others take this a step further, arguing that a corporation's purpose is to maximize returns to its shareholders, and that since, only people can have social responsibilities, corporations are only responsible to their shareholders and not to society as a

whole. Although they accept that corporations should obey the laws of the countries within which they work, they assert that corporations have no other obligation to society. Some people perceive CSR as incongruent with the very nature and purpose of business, and indeed a hindrance to free trade. Those who assert that CSR is incongruent with capitalism and are in favour of neoliberalism argue that improvements in health, longevity and/or infant mortality have been created by economic growth attributed to free enterprise. Critics of this argument perceive neoliberalism as opposed to the well being of society and a hindrance to human freedom. They claim that the type of capitalism practiced in many developing countries is a form of economic and cultural imperialism, noting that these countries usually have fewer labour protections, and thus their citizens are at a higher risk of exploitation by multinational corporations.

A wide variety of individuals and organizations operate in between these poles. For example, the REAL Leadership Alliance asserts that the business of leadership is to change the world for the better. Many religious and cultural traditions hold that the economy exists to serve human beings, so all economic entities have an obligation to society. Moreover, as discussed above, many CSR proponents point out that CSR can significantly improve long-term corporate profitability because it reduces risks and inefficiencies while offering a host of potential benefits such as enhanced brand reputation and employee engagement.

CSR and questionable motives

Some critics believe that CSR programs are undertaken by some MNCS to distract the public from ethical questions posed by their core operations. They argue that some corporations start CSR programs for the commercial benefit they enjoy through raising their reputation with the public or with government. They suggest that corporations, which exist solely to maximize profits, are unable to advance the interests of society as a whole.

Another concern is when companies claim to promote CSR and be committed to Sustainable Development whilst simultaneously engaging in harmful business practices. Critics concerned with corporate hypocrisy and insincerity generally suggest that better governmental and international regulation andenforcement, rather than voluntary measures, are necessary to ensure that companies behave in a socially responsible manner.

Drivers

Corporations may be influenced to adopt CSR practices by several drivers.

Ethical consumerism

The rise in popularity of ethical consumerism over the last two decades can be linked to the rise of CSR. As global population increases, so does the pressure on limited natural resources required to meet rising consumer demand. Industrialization in many developing countries is booming because of technology and globalisation. Consumers are becoming more aware of the environmental and social implications of their day-to-day

consumer decisions and are beginning to make purchasing decisions related to their environmental and ethical concerns. However, this practice is far from consistent or universal.

Globalisation and market forces

As corporations pursue growth through globalisation, they have encountered new challenges that impose limits to their growth and potential profits. Government regulations, tariffs, environmental restrictions and varying standards of what constitutes labour exploitation are problems that can cost organizations millions of dollars. Some view ethical issues as simply a costly hindrance. Some companies use CSR methodologies as a strategic tactic to gain public support for their presence in global markets, helping them sustain a competitive advantage by using their social contributions to provide a subconscious level of advertising. Global competition places particular pressure on multinational corporations to examine not only their own labour practices, but also those of their entire supply chain, from a CSR perspective.

Social awareness and education

The role among corporate stakeholders to work collectively to pressure corporations is changing. Shareholders and investors themselves are exerting pressures on corporations to behave responsibly through socially responsible. Non- governmental organizations are also taking an increasing role, leveraging the power of the media and the Internet to increase their scrutiny and collective activism around corporate behavior. Through education and dialogue, the development of community in holding businesses responsible for their actions is growing.

Moral values of training

The rise of ethics training inside corporations, some of it required by government regulation, is another driver credited with changing the behavior and culture of corporations. The aim of such training is to help employees make ethical decisions when the answers are unclear. Tullberg believes that humans are built with the capacity to cheat and manipulate, a view taken from, hence the need for learning normative values and rules in human behaviour. The most direct benefit is reducing the likelihood of "dirty hands", fines and damaged reputations for breaching laws or moral norms. Organizations also see secondary benefit in increasing employee loyalty and pride in the organization. Caterpillar and Best Buy are examples of organizations that have taken such steps.

Increasingly, companies are becoming interested in processes that can add visibility to their CSR policies and activities. One method that is gaining increasing popularity is the use of well-grounded training programs, where CSR is a major issue, and business simulations can play a part in this.

Laws and regulation

Another driver of CSR is the role of independent mediators, particularly the government, in ensuring that corporations are prevented from harming the broader social well, including

people and the environment. CSR critics such as Robert Reich argue that governments should set the agenda for social responsibility by the way of laws and regulation that will allow a business to conduct them responsibly. The issues surrounding government regulation pose several problems. Regulation in itself is unable to cover every aspect in detail of a corporation's operations. This leads to burdensome legal processes bogged down in interpretations of the law and debatable grey areas. The second issue is the financial burden that regulation can place on a nation's economy. This view shared by Bulkeley, who cites the Australian federal government's actions to avoid compliance with the Kyoto Protocol in 1997, on the concerns of economic loss and national interest. The Australian government took the position that signing the Kyoto Pact would have caused more significant economic losses for Australia than for any other OECD nation. Critics of CSR also point out those organisations pay taxes to government to ensure that society and the environment are not adversely affected by business activities.

Crises and their consequences

Often it takes a crisis to precipitate attention to CSR. One of the most active stands against environmental management is the CERES Principles that resulted after the Exxon Valdez incident in Alaska in 1989. Other examples include the lead poisoning paint used by toy giant Mattel, which required a recall of millions of toys globally and caused the company to initiate new risk management and quality control processes. In another example, Magellan Metals in the West Australian town of Esperance was responsible for lead contamination killing thousands of birds in the area. The company had to cease business immediately and work with independent regulatory bodies to execute a cleanup.

Stakeholder Priorities

Increasingly, corporations are motivated to become more socially responsible because their most important stakeholders expect them to understand and address the social and community issues that are relevant to them. Understanding what causes are important to employees is usually the first priority because of the many interrelated business benefits that can be derived from increased employee engagement (i.e. more loyalty, improved recruitment, increased retention, higher productivity, and so on). Key external stakeholders include customers, consumers, investors (particularly institutional investors, regulators, academics, and the media).

Abstract

CSR is seen as the business contribution to sustainable development which has been defined as development that meets needs without compromising the ability of future generations to meet their own needs and focusing on how to achieve the integration of economic, environmental and social imperatives. In spite of the difference in views of social impact and degree of corporate commitment majority of experts agree that 5-10 years from now CSR will nonetheless become increasingly mainstream within business, even if not within the public consciousness. CSR tools, resources, language all will become more aligned with business norms and systems. CSR standards- to greater or lesser effect- will be part of business basics and not an add-on.

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Book Review on Business Adventures by John Brooks, Publisher : Open Road Integrated Media, 2014

Sameek Ghosh

Warren Buffett back in 1991, suggested his favorite book about business to Bill Gates. The book was 'Business Adventures,' by John Brooks. It was first published in 1959 and then republished due to public demand on 2014 after the famous suggestion made public by Bill Gates.

Today, after more than four decades after it was first published—"Business Adventures" remains one of the best business books. John Brooks was brought up in New Jersey during the Depression, he studied in Princeton University and, after serving in World War II, he turned to journalism and became a novelist. He had published a handful of books, only some of which are still available. He died in 1993.

We might wonder how such an old issue from the 1960s could be more relevant in today's business. Bill Gates does wonder on the same lines, however amusingly the notices that, "In 1966, when Brooks profiled Xerox, the company's top-of-the-line copier weighed 650 pounds, cost $27,500, required a full-time operator and came with a fire extinguisher because of its tendency to overheat". Though a lot has changed since the first edition but still the learning remains relevant even today.

In the opening article called "The fluctuation" he narrates the beginning of stock market, which started at Amsterdam under an open roof. The behaviors of Dutch stock traders was captured in a book called "Confusion of Confusions," written by Joseph de la Vega in 1688 and translated by Harvard Business School few years back. In the following paragraphs Brooks narrates the story from Vega, about the fluctuations in the market which he found that the traders were cleaver to invent reasons post-facto. Which Brookes correlates with few erratic movements in the Wall Street and its subsequent reasoning by the participants. Interestingly, the fear and greed factors has been well identified by Vega centuries ahead, before the behavioral economists started lending their views and greed and fear.

Exploration of miscommunication, especially intentional miscommunication up and down the corporate ladder at General Electric was inescapably mentioned by Brooks. It was, he writes, "a breakdown in intramural communication so drastic as to make the building of the Tower of Babel seem a triumph of organizational rapport."

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In "The Fate of the Edsel," he refutes the popular explanations for why Ford's flagship car was such a historic flop. The reason was not that the car was overly poll-tested; it was because Ford's executives only pretended to be acting on what the polls said. "Although the Edsel was supposed to be advertised, and otherwise promoted, strictly on the basis of preferences expressed in polls, some old-fashioned snake-oil selling methods, intuitive rather than scientific, crept in." It certainly didn't help that the first Edsels "were delivered with oil leaks, sticking hoods, trunks that wouldn't open and push buttons that…couldn't be budged with a hammer."

"Xerox Xerox Xerox Xerox." is one of Brooks's most enlightening stories. The example of Xerox can be followed by everyone in the technology industry. Interestingly in the early '70s, Xerox invested in a huge R&D effort not related to copiers, but in the areas of Ethernet networks and graphical user interface, which was successfully adopted and marketed by Microsoft and Apple. This was because Xerox executives abhorred them as they did not fit their core business, others took these products and went to market them which became a huge success which we see in Microsoft and Apple. Both Apple and Microsoft used Xerox's work on graphical user interfaces. So, we see the ability to understand and market the available technology into profitable business venture is important for sustainability. Innovation along with marketing is required to make it a profitable business proposition.

Brooks's article tells an important part of the company's beginning. He shows how it was built on original, outside-the-box thinking, which makes even more interesting that as Xerox matured, it would neglect the unconventional ideas developed by its own researchers and loose the opportunity to tap innovative products.

Brooks a master storyteller crafted a masterpiece like "The Last Great Corner," about the owner of Piggly Wiggly grocery chain and his attempt to throttle investor's intent on short selling his company's stock. In "Making the Customer Whole" it is said decades ahead how a single firm's miscalculation can play a havoc on the house. Haupt's capital inadequacy because of default in the Oil contracts had put the whole market into a fix, same as we have seen in Enron. And with some wild imagination Brooks subtle linking to John Kennedy's assassination finds few takers.

"The Last Great Corner" tells us how the common stock of the E. L. Bruce Company, the nation's leading maker of hardwood floors, moved from a low of just under $17 a share to a high of $190 a share, in a single day. This is an example of the great game called "Corner" taken from poker, gets reflected in the stock market. The shareholders were equally astonished by what happened with the stock.

In the stories of "Stockholder Season" he narrates the happening around the annual meetings in a satirical way with a subtle reference to the power of the executives and the helplessness of the common stock holders. "One free bite" is a good example of the power of the common man and what he can do single handedly with the help of his intuition, developed over the years with the help of the knowledge gained. "In Defense of Sterling" we get an understanding of the nexus between the bankers and the political powers to control the world economy.

Brooks's book reminds us that the rules for running a strong business haven't changed, and they have remained the same. The essential human factor in every business endeavor has been reemphasized by Brooks. He has shown that it doesn't matter if you have the best products, production plan and marketing strategy but you'll still need the right people to lead and implement those plans, without which it will fall like a house of cards. Human intervention has been reinforced by Brook's work.

"Business Adventures" is all about the strengths and weaknesses of leaders (executives) in challenging environment and tapping of opportunities in one business or another. The book is still relevant despite its oldness, which interestingly increases its value proposition. John Brooks's work has stood the test of time and is a must read for all the management professionals.

ABOUT THE JOURNAL AND CALL FOR PAPERS

Mission

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NJMRA invites original research-based papers, articles, book reviews and management cases on topics of current concern in the areas of management, development economics and related social sciences. It looks for conceptually sound and methodologically robust articles that harness and extend knowledge in all domains of management through empirical work or by building on existing concepts, and draws out the implication of the research for practitioners. The section on practices on the other hand is expected to extend the knowledge of the academic researchers in this discipline. Consequently, we expect the articles to have the potential to advance both management theory and practice through the bilateral exchange and synthesis of ideas and information.

Frequency

The journal will be published twice a year in the months of June and December.

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In view of the broad spectrum of readership, NJMRA invites contributions to any of the various sections of the journal:

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After the review process is completed, the author(s) will be informed about the decision of the reviewers by email.

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An abstract (150-200 words) should be included in the beginning of the paper followed by key words. The number of keywords should be restricted to a maximum of ten.

All sections and subsections are to be numbered. Example: 1, 1.1, 1.2, etc

All tables, charts, graphs, diagrams should be in black and white and not in color. The images should be of high resolution and in black and white only. Number and complexity of such exhibits should be as low as possible. All charts and graphs should be drawn legibly

and figures should be indicated in suitable and appropriate scale. All charts, graphs, images, etc. should also be numbered and referred to in the body of the text.

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The primary heading should be in capitalized form (Uppercase), and boldface. The sub-headings should be in title-case capitalization (first letter of each word in capital) and in bold

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B. For Articles in Books (Edited Volumes)

Manimala, M.J. (1999): Entrepreneurial Politics and Strategies – The Innovator's Choice, New Delhi: Sage Publications, pp. 114-123.

C. For Working Papers and Thesis

Balasubramanian, N. (1997): Equity Returns in India: An Empirical Study of the Experience of the Nineties, Working Paper No. 5/1997, UTI-IIMB, Centre for Markets Education & Research, Indian Institute of Management, Bangalore.

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If the market exists it would help the victims to get assured good quality treatment at low cost through either risk-pooling (Arrow, 1963) or income-pooling (Nyman, 2003).

One unique thing of private health insurance (PHI) in Canada is the coverage of prescription drugs outside of hospitals that is not provided by public coverage (Glied, 2001; Colombo and Tapay, 2004).

This regulation needed well defined and informative materials regarding the future prospect of the insurance products at the time of sale, claims procedure, proper functioning of policyholders services and so on (USAID, 2008).

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This indicates the presence of substitution relation in richer countries between private and public provisioning of healthcare related services; if quality of public service is not up to the mark relatively more affluent people may opt out (Sekhri et al. 2005).

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