# INTERNATIONAL JOURNAL OF RESEARCH IN COMMERCE, IT & MANAGEMENT



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SCOPE FOR FURTHER RESEARCH

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## A STUDY OF IMPORTANCE OF ETIQUETTES FOR A PROFESSIONAL

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# A. K. NEERAJA RANI RESEARCH SCHOLAR SANTHIRAM ENGINEERING COLLEGE NANDYAL

#### ABSTRACT

In emerging trends every employee should know about his behavior and its result. The behavior and manners are imposed on the job position of the candidate. For potential; candidate jobs are readily available but to sustain in the job he must know business etiquette. It would help to adopt the corporate cultures who are newly entered in to the corporate sector. This brings the changes in behavior of candidates. It develops new attitude and new spirit to the candidates.

#### KEYWORDS

Etiquettes, professionalism.

#### I. INTRODUCTION

usiness etiquette is in essence about building relationship with people. In the business world, it is people that influence your success or failure. Etiquette, and in particular business etiquette, is simply a means of maximizing the business potential. If you feel comfortable around someone and vice versa, better communication and mutual trust will develop. This comfort zone is realized through presenting yourself effectively. Business etiquette helps to achieve this.

Business etiquette revolves around two things. Firstly, thoughtful consideration of the interests and feelings of others and secondly, minimizing misunderstandings. Both are dependent upon self conduct. It polishes this conduct. It varies from region to region, country to country and people to people. For the international business person, focusing too deeply on international business etiquette would leave no time for business. However, there are some key pillars upon which good business etiquette is built.

In 2011 a group, of etiquette experts and international business group formed a non-profit organization called IITTI(pronounced as "ET") to helps Human Resource (HR) Department of multinationals in measuring the etiquette skills of prospective new employees during the recruitment process by standardizing image and etiquette examination, similar to what ISO does for industrial process measurements.

#### **II. DEFINITION**

The business etiquette means a limit of rules that regulate the direction of people to interact with each other in business concern, with buyers, providers, with internal or external bodies. They are altogether about imparting the correct icon and reporting in a suited path. In simple, the expected behaviors and expectations for individual actions within society, group, class or within a place of business. It involves treating coworkers and employer with respect and courtesy in a way that creates a pleasant work environment for everyone.

The business etiquette is basically about building up the human relationship with employees and public. They are the people who work for the success. The etiquette, and particularly business concern etiquette, is just intends of increasing the business prospective. The business etiquette facilitates the individual to reach etiquette.

#### **III. IMPORTANCE OF BUSINESS ETIQUETTE**

Etiquette is a set of unwritten rules that apply to social situations, professional workplaces and relationships. In the business world, good business etiquette means that you act professionally and exercise proper manners when engaging with others in your profession. Good business etiquette is a valuable skill-set that will make you stand out from others, enhance your chances at success and help you land that dream job.

#### EFFECTS

Good business etiquette is the recipe for advancing your career. In the business world, people with good etiquette are rewarded for their professional and polite skills. For example, an employee who arrives at a meeting on time (or early) and is ready to take notes has a better chance of impressing his supervisor than the employee who shows up to the meeting late, and forgets to bring a pen. Those who exemplify good business etiquette are proving that they respect their position, job, coworkers and take their performance seriously. As such, these individuals win promotions and get ahead in their careers.

Netiquette is etiquette that takes place over virtual mediums, such as email. Virtual communication is popular in the business world, so it is critical that businessmen and women have the right netiquette to maintain professionalism. Compose emails the way you would write a letter. Use complete sentences and proper grammar, and check your email for correct punctuation usage and other technical errors. Avoid using jargon, abbreviations and emoticons. Do not type emails in all capital letters, as this is construed as yelling, according to Oakton Community College in Illinois.

#### IMPRESSIONS

As a businessman or woman it is important that one has to make a good impression. The way the individual dress, for instance, impacts the way they are perceived by others. Other peoples' impressions on individual should be positive so that they continue doing business with that person. To accomplish this, start with the attire. Ask one's self if they look professional, or if they outfit needs some fine-tuning. Looking sloppy, messy and dirty will put off the coworkers and turn away potential clients.

#### CONSIDERATIONS

Business etiquette extends beyond the office. When the individual is required to attend a business lunch or dinner, it is important that he/she adhere to tableside etiquette standards as well as business etiquette. People with good dining manners can win over their colleagues and counterparts, whereas people with poor conduct may miss out on business deals (according to the International Etiquette Centre).

#### **IV. TYPES OF BUSINESS ETIQUETTE**

Business etiquette is the set of manners and social standards considered respectful in the business world. Business etiquette comes in to play in a number of situations, including when dealing with coworkers, clients, service providers and supervision. Although there are countless situations that involve business

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etiquette --from etiquette during conference calls to etiquette during clients' dinners--most from of business etiquette can be grouped into one of several different types.

#### **IV.1 DRESSING ETIQUETTE**

It is rightly said that "a man is known by his dress and address".

Donning the right business attire will not only help you make a mark of your own but also climb the success ladder in the shortest possible time span. Do not just pull out anything from your wardrobe and wear it to work. Remember you can't wear your party outfit to work just because it is expensive and looks good on you. It is not necessary that a shirt which looked good on you five years ago will still look good on you. Know what you are wearing. Do not step out of your home unless you see yourself in a full length mirror.

- Do not wear loud colors to work.
- Never wear gaudy accessories to work.
- Make you sure your clothes are clean and ironed properly.
- Be very careful about the fit of your dress.
- Men should always tuck their shirts into pants to look professional.
- Make sure the shirt you are wearing is crisp and clean.
- Do not wear a tie just for the sake of it.
- Last but not the least do not forget to flash your trillion dollar smile. No dress would look good on you if you look sad and gloomy.

#### **IV.2 RESUME ETIQUETTE**

Job opportunities are readily available for potential candidates who have the passion and interest for the job. If you are a jobseeker, you have to realize that you are not alone in the search. The competition in the world of employment is tough and stiff. So many preparations have to be made and one of these is preparing your resume. The first step in seeking for a job is to list your potential strengths and work that match your skills and abilities. Once you have made this list, you are ready to present yourself to these companies. The initial means of contact with them is submitting your resume or curriculum vitae along with a cover letter. A resume makes you sell or market yourself to the employer. It contains pertinent information about you being a candidate of a certain job position. The employer initially assesses you and your qualifications through your resume which means that it has to be presentable and professional. If there is etiquette in the workplace, there is also proper etiquette in creating and preparing a resume. Jobseekers have to be aware of this in order to create an impression and become eyed for the job.

- The job must match with their resume specifications.
- The resume must contain a career objective that is realistic and achievable according to your qualifications.
- Information on your education is very important. Apart from school any accomplishment must be listed.
- If candidates have any previous experience should be listed recent to past.
- Skills and qualities have to be highlighted to catch the attention. But don't make lengthy paragraphs.
- The pages of resume must not be stapled if it has two pages. This may difficult to the employer to view side by side. If it has more than two you can stapled.
- The ideal paper size is the short bond or letter size.
- If it need you can place the document ion an envelope large enough.
- Don't provide any fake information to specify and recognition of employer.
- Resume doesn't completely speak for your qualifications. When given the chance to be interviewed you can impress them even more.

#### IV.3 INTERVIEW ETIQUETTE:

Interview etiquette refers to codes of conduct an individual must follow while appearing for interviews.

Let us go through some interview etiquette:

- While appearing for telephonic interviews, make sure you have your resume in front of you. Move to a quiet place and keep a pen and paper handy to note down address or other necessary details.
- An individual must be present at the interview venue before time. Start from your home a little early and allow a margin for traffic congestions, car problems, route diversions and other unavoidable circumstances. Check the route well in advance to avoid last minute confusions.
- Make your arrangements to present at least 10 minutes before the given time at venue.
- Be very particular about your appearance. Follow the professional dress code for an everlasting first impression. Wear something which looks good on you. Coordinate a light color shirt with a dark color well fitted trouser. Make sure your shoes are polished and do not make noise. Hair should be neatly combed and do apply a mild perfume. It is essential to smell good.
- Enter the interviewer's cabin with confidence. Greet him with a warm smile. A firm handshake says that an individual is confident, aggressive and willing to take challenges. Do not offer to shake hands if the interviewer is a female. Do not sit unless you have been told to so.
- Make an eye contact with the interviewer. Avoid looking here and there.
- Be honest with the interviewer. Remember a single lie leads to several other lies. Avoid fake stories. It might land you in trouble later.
- Take care of your pitch and tone. Be polite but firm.
- Stay calm. Avoid being nervous during interviews.
- One must sit straight for the desired impact. Avoid fiddling with pen and paper. It is important to have the right attitude as it helps you stand apart from the crowd.
- Keep your cell phone in the silent mode while attending interviews.
- Chewing gum during interview is childish.
- Do not fold your resume; instead keep it in a proper folder
- Slangs and one-liners must not be used in interviews.
- Avoid cracking jokes with the interviewer.
- Once you are done with the interview, do not forget to thank the interviewer.

#### **IV.4 WORKPLACE ETIQUETTE**

The rules an individual must follow while he is at work. One must respect his organization and maintain the decorum of the place. Corporate Etiquette refers to behaving sensibly and appropriately at the workplace to create an everlasting impression. No one would take you seriously if you do not behave well at the workplace. Remember we can't behave the same way at work place as we behave at our homes. One needs to be professional and organized. It is important to behave well at the workplace to earn respect and appreciation. Let us go through some Do's and Don'ts at workplace:

- Never adopt a casual attitude at work. Your office pays you for your hard work and not for loitering around.
- Don't peep into other's cubicles and workstations..
- Put your hand phone in the silent or vibrating mode at the workplace.
- Don't open anyone else's notepads registers or files without his permission.
- It is bad manners to sneeze or cough in public without covering your mouth..

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- Stay away from nasty politics at the workplace. Avoid playing blame games.
- Keep your workstation clean and tidy..
- Never criticize or make fun of any of your colleagues.
- Take care of your pitch and tone at the workplace.
- Never attend meetings or seminars without a notepad and pen.
- Pass on information to all related recipients in the desired form.
- Reach office on time.
- No organization likes to have a shabbily dressed employee..
- Never wear revealing clothes to work.
- Don't pass lewd comments to any of your fellow workers.
- While having lunch together, do not start till the others have received their food.
- Respect your fellow workers and help them whenever required.
- It is unethical to share confidential data with external parties.
- Office Stationery is meant to be used only at work. Taking any office property back home is equivalent to stealing.
- Make sure you turn off the monitor while you go out for lunch or tea breaks..
- Don't bring your personal work to office. Avoid taking kids to office unless and until there is an emergency.
- Park your car at the space allocated to you.
- Never ever drink while you are at work.
- Do not leave the restroom with taps on.
- Female Employees should stick to minimal make up.

#### **IV.5 EATING ETIQUETTE**

Whether you work in a culture where lunch is 'for wimps' or it's simply commonplace to find people snacking or even taking their lunch at their desk or you've been asked to work overtime and a quick bite to eat at your desk or work station is all you can fit in to your schedule. There are some very important dos and don'ts when it comes to eating etiquette at work. Here are some basic rules to follow.

- Don't Eat In front Of the Customers or Whilst You're On the Phone
- Watch Your Timing
- Don't bring food that makes the whole office smell –Please bring food that does not make the rest of the office smell for the rest of the day. Or you could just take your food out of the office to eat it.
- Chew with your mouth closed. It's disgusting to hear you chomp your food. Geez! And to go with that, take smaller bites so you can close your mouth.
- Consider Your Colleagues -- Remember that whilst you might be on your break, your colleagues might still be working so show them some respect and keep chat to a minimum if you have to eat at your work station
- Practice Good Hygiene --Once you have finished eating and have cleared up, go to the bathroom and clean your teeth.

#### **IV.6 E-MAIL ETIQUETTE**

E-Mail is rapidly becoming the communication medium of choice in business. Most e-mail messages inform employees request data, supply responses, confirm decisions and give directions. As an effective alternative to the phone and courier, email enables you to contact, at the same time, a large number of people spreading over side geographical areas to build new business relationship.

- Be concise and to the point
- Answer all questions and pre-empt further questions.
- Use proper spelling, grammar and punctuation, where needed.
- Use templates for frequently used responses.
- Answer swiftly.
- Don't attach unnecessary files.
- Don't overuse the high priority option.
- Don't write in capital letters.
- Read the e-mail before you send.
- Don't overuse reply to all.
- Be careful with formatting and HTML.
- Don't forward chain letters without requesting delivery and read receipts.
- Don't ask to recall a message or attach a message without prior permission.
- Never use e-mail to discuss confidential issues.
- Use active voice instead of passive.
- Don't ever forward any junk email related to offence or obscene remarks.
- Don't reply to spam and know your cyber laws.

#### **V. CONCLUSION**

In business, the relationships you build are critical. Establishing good rapport is significant if you want to progress your professional future such as take on new clients, impress your boss or close that final sale. The way to build positive relationships in the business world is by exercising good etiquette, specifically by exhibiting top-notch communication skills. Your manners and etiquette are not just actions...they are an attitude....an attitude that is closely related to your self-confidence, your position in business and personal life, as well as your ability to build successful relationships, teams in the organizations.

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## COPYRIGHT PROTECTION FOR RGB WATERMARK IMAGE USING IN LSB

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#### ABSTRACT

in this paper presents a simple and robust watermarking algorithm is by using the third and the fourth least significant bits (LSB) technique. The proposed algorithm is more robust than the traditional LSB technique in hiding the data inside the image. LSB is used because of its little effect on the image. Digital watermarking is one of the proposed solutions for copyright protection of multimedia data. A watermark is a form, image or text that is impressed onto paper, which provides evidence of its authenticity. In this paper an invisible watermarking technique (least significant bit) is implemented. Colour watermark image is scrambled using sequence numbers generated by a secret key and cover image. Each bit of the encoded watermark is embedded by intensities of a nonoverlapping block of 8\*8 0f the blue component of the host image. The extraction of the watermark is applied after the descrambled watermarked image. We compare our proposed algorithm with the Huang's algorithm and Weng's algorithm using Peak signal-to-noise ratio (PSNR). This new algorithm improved its quality of the watermarked image. This work has been implemented through MATLAB.

#### **KEYWORDS**

Digital watermarking, RGB images, secret data, LSB, PSNR.

#### **I INTRODUCTION**

Ilegal copying, modifying, tampering and copyright protection have become very important issues with the rapid use of internet [1]. Hence, there is a strong need of developing the techniques to face all these problems. Digital watermarking [2] emerged as a solution for protecting the multimedia data. Digital Watermarking is the process of hiding or embedding an imperceptible Signal (data) into the given signal (data). This imperceptible signal (data) is called watermark or metadata and the given signal (data) is called cover work. The watermark should be embedded into the cover work, so that it should be robust enough to survive not only the most common signal distortions, but also distortions caused by malicious attacks. This cover work can be an image, audio or a video file. A watermarking algorithm consists of two algorithms, an embedding and an extraction (or detection) algorithm. The idea of watermarking first appeared hundreds of years ago [3]. Watermarking technology was used to mark information authenticity by many different means. Watermarking technology has been used in computer as Well. Most of the work on computer watermarking technology was for embedding a watermark into images, audio, and video files. Media watermarking research is a very active area and digital image watermarking became an interesting protection measure and got the attention of many researchers since the early 1990s [3].

#### **II RELATED WORK**

The watermark is a signal embedded into the host media to be protected, such as an image or audio or video. It contains useful certifiable information for the owner of the host media, such as producer's name, company logo, etc; the watermark can be detected or extracted later to make an assertion about the host media. There are two important properties of a watermark; the first is that the watermark embedding should not alter the quality and visually of the host image and it should be perceptually invisible. The second property is robustness with respect to image distortions. This means that the watermark is difficult for an attacker to remove and it should be also robust to common image processing and geometric operations, such as filtering, resizing, cropping and image compression [4,5,]. Overviews on image watermarking techniques can be found in [6, 7, 8,]. Watermarking techniques can be classified into two categories: spatial domain and transform domain techniques. In spatial domain technique [9, 10, 11, 12, 13, 14,], the watermark embedding is achieved by directly modifying the pixel values of the host image. The most commonly used method in the spatial domain technique is least significant bit (LSB). In [9], the watermark is embedded into DC components of color image directly in spatial domain. The results show that the proposed method provided robust performance, except for images with high frequency components attacked by rotate-scaling operations. In [10], a watermarking scheme is presented based on embedding the watermark. The proposed methods are quite robust against some common image processing operations, such as median filter, scaling and rotation; however, they are less robust to cropping attack because the watermark bits are embedded into the whole image hence some data must be lost in cropping.

In [11], the least significant bit (LSB) of each pixel in the host image was modified to embed the secret message. In [12], the watermark is embedded in saturation on the HIS (hue, saturation, intensity) color space. The results in show that the proposed method can only resist some attacks. In [13] Proposes a spatial domain probability block based watermarking method for color image, which is divided into blocks of size 8\*8 and the intensities of all pixels in the block are modified in order to embed a watermark bit. In this method the number of total bits of the watermark must be less or equal to the half of the total number of 8\*8 blocks and redundant information is added to the watermark using convolution code. The proposed methods are quite robust against some common image processing operations, such as median filter, scaling and rotation; however, they are less robust to cropping attack because the watermark bits are embedded into the whole image hence some data must be lost in cropping. In [14], the proposed method based on chaotic maps in order to encrypt the embedding position and to determine the pixel bit for embedding in host image. In [15] a robust watermark scheme based on a block probability for color image is presented, which operates in spatial domain by embedding the Watermark image four times in different positions in order to be robust for cropping attack. The extraction of the watermark depends on the original image, so it is a non-blind watermarking scheme. In [16], proposed a new LSB based digital watermarking scheme with the fourth and third LSB in the grayscale image. Embedded the secret data in the third and fourth LSB in the image in determine coordinates, we got watermarked image without noticeable distortion on it. Therefore, this digital watermarking algorithm can be used to hide data inside image. Gil-Je Lee et al [17] presented a new LSB digital watermarking scheme by using random mapping function. The idea of their proposed algorithm is embedding watermark randomly in the coordinates of the image by using random function to be more robust than the traditional LSB technique. Saeid Fazli et al [18] presented trade-off between imperceptibility and robustness of LSB watermarking using SSIM Quality Metrics. In their algorithm, they put significant bitplanes of the watermark image instead of lower bit-planes of the asset picture. Debjyoti Basu et al [19] proposed Bit Plane Index Modulation (BPIM) based fragile watermarking scheme for authenticating RGB color image. By embedding R, G, B component of watermarking image in the R, G, B component of original image, embedding distortion is minimized by adopting least significant bit (LSB) alteration scheme. Their proposed method consists of encoding and decoding

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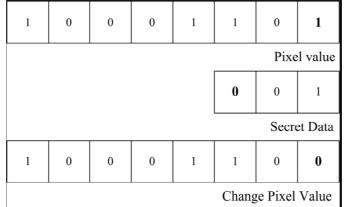
#### http://ijrcm.org.in/

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methods that can provide public detection capabilities in the absences of original host image and watermark image. To overcome the drawback of existing techniques, we would like to introduce a new alternative technique by inserting watermark text in grayscale images by using watermarking approach. **REVIEW OF LSB** 

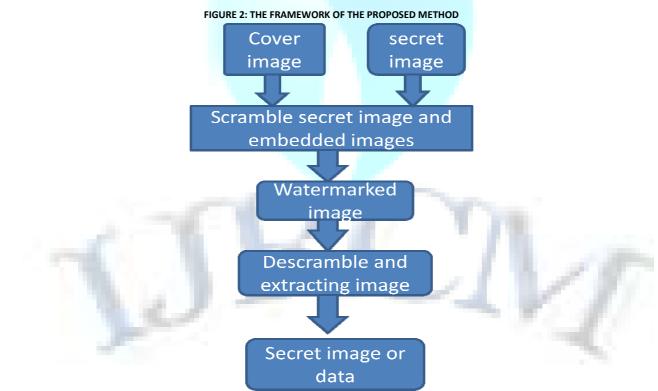
The least significant bit (LSB) technique is used for Simple operation to embed information in a cover image. The LSB technique is that inside of cover image pixels are changed by bits of the secret message. Although the Number was embedded into the first 8 bytes of the grid, The 1 to 4 least bits needed to be changed according to the embedded message. On the average, only half of the bits in an image will need to be modified to hide a secret message using a cover image. Because the quality of the Watermarked image is low, less than over the 4-bit LSB, changing the LSB of a pixel results in small changes in the intensity of the colors. These changes cannot be perceived by the human visibility system. However, a passive attacker can easily extract the changed bits, since; it has performed very simple operation. For example, Figure 1 shows the 1-bit LSB. In Figure 1, the pixel value of the cover image is 141(10001101)2 and the secret data is 0. It applies to LSB-1 that the changed pixel value of the cover is 140(10001100)2. LSB can store 1-bit in each pixel. If the cover image size is 256 x 256 pixel image, it can thus store a total amount of 65,536 bits or 8,192 bytes of embedded data.





#### **III PROPOSED METHOD**

Based on LSB technique, we propose a new watermarking algorithm. Most of researchers have proposed the first LSB and the third and forth LSB for hiding the data but our proposed watermarking algorithm is using the third and fourth LSB for hiding the data. And using the RGB watermark image embedding in blue component of original image because of less sensitivity. This is because of the security reason. So, no one will expect that the hidden data in the third and the forth LSB. Figure 2 shows the framework of the proposed method. First, we select the image which is a colour image and we will transfer the data to binary value after Typing it. Then, we hide the data in the image using the proposed algorithm. Figure 3 shows the embedding algorithm in MATLAB. Then, we will get the watermarked image. Then, the receiver will retrieve the data back. Scramble applying before the proses of embedding extraction and then descramble we received the output this is PSNR and MSE value. Figure 4 shows the extracting algorithm in MATLAB. The data will be extracted from the watermarked image.



#### EMBEDDING ALGORITHM

After we select the image and type the secret data, we transfer the secret data to binary values and determine the coordinates of the image which the data will be in this section, we describe the embedding algorithm. Embedded in First, we will embed the length of the data in five pixels starting from the first coordinate which we select and jump by 5 until we embed it in the five pixels in the 3rd and 4th LSB, but if the length of data is more than 1023 characters, it will ask us to rewrite the data and it should be not more 1023 characters. Then, the data will be embedded in the image in the 3rd and 4th LSB. Then, watermarked image will be produced and it will be saved. Figure 3 shows the embedding algorithm.

RY)
FIGURE 3: EMBEDDING ALGORITHM
B= Read the image
Type the secret message:
D=transfer the secret data to double values;
[m n]=size(B)
Coordinate y=200;
Coordinate x=1;
LM=the length of (D);
while LM>1023
It will appear a message (rewrite the secret
message which is supposed to be less than
1024 characters)if LM>1023
Type the secret message:
D= transfer the secret data to double;
LM=the length of (D);
end
w=transfer the double values (D) to binary
values;
LMbin=transfer the length of (D) from double to
binary;
for i=1:2:10
put the value of (LMbin(i)) in the fourth LSB
in(B(y,x))
put the value of (LMbin(i+1)) in the third
LSB in(B(y,x))
x=x+5;
end
for i = 1 : LM
for j=1 :2:8
if x>m
y=y+5;
x=1;
end
put the value of (w(i,j)) in the fourth LSB
in(B(y,x))
put the value of (w(i,j+1)) in the third LSB
in(B(y,x))
x = x+5;
end
end
imwrite(B,'watermarked_image.bmp','BMP')
······································

#### EXTRACTING ALGORITHM

In this section, we will describe the extracting algorithm. After receiving the watermarked image, we will get the length of the secret data from the 3rd and 4<sup>th</sup> LSB in the five pixels starting from the determined coordinates and jump by 5 until we get it from the five pixels. Then, we will get secret data also from the 3rd and 4th LSB in binary values. After that, we transfer the binary values to characters which will be shown as the secret data. Figure 4 shows the extracting algorithm.



FIGURE 4: EXTRACTING ALGORITHM B=imread('watermarked\_image.bmp'); LMbin=we make a vector for the length of the secret data contain from 10 elements; Coordinate y=200; Coordinate x=1: for i=1:2:10 put the value of the fourth LSB in(B(y,x)) in(LMbin(i)); put the value of the third LSB in(B(y,x)) in(LMbin(i+1)); x=x+5: end d=Transfer LMbin from binary to double; wb=we make zeros matrix for the secret data contain from 8 columns and LMbin rows; for i = 1 : LMbin for j=1 :2:8 Put the value of the fourth LSB in(B(y,x)) in(wb(i,j)); Put the value of the third LSB in(B(y,x)) in(wb(i,j+1)); x = x+5; end end c= Transfer wb from binary to double; ws=Transfer c from double to char;



In our experimental results, 256x256 colour images, Which are shown in Figure 5 was used as original images. Once, we embed the secret data which contain from 128 bytes in determined pixels in the forth and the third LSB and then, this secret data is also be a colour images. We apply the scramble the secret image before embedding process by using secure purpose and descramble the watermarked image, Fig6 (a) and (b) shows, the descramble image and the extracted watermark shows in Figure7. We got good result and we calculate the Peak signal-to-noise ratio (PSNR). The PSNR value was used to evaluate the quality of the watermarked images. The phrase peak signal-to-noise ratio (PSNR) is most commonly used as a measure of quality of reconstruction in image compression [4]. It is the most easily defined via the Mean Squared Error (MSE) which for two mXn images I and K where one of the images is considered as a noisy approximation of the other. MSE is defined as the following equation (2) and the PSNR is defined in equation (1). Where MAX is equal to 255 in color images, and MSE is the mean square error, which is defined as: where I is the original image and K is the watermarked image. Peak signal to noise ratio (PNSR) and the mean square error (MSE) are used to evaluate perceptual distortion of our watermark scheme. The equations used are defined as follows: MSE is defined as the following equation (2) and the PSNR is defined in equation (1).

$$PSNR = 10 \log_{10} \left( \frac{255^2}{MSE} \right)$$
$$MSE = \frac{1}{3 \times m \times n} \sum_{i=1}^{m} \sum_{j=1}^{n} \left[ \left[ \mathbf{r}(i,j) - \mathbf{r}^*(i,j) \right]^2 + \left( \mathbf{g}(i,j) - \mathbf{g}^*(i,j) \right)^2 + \left( \mathbf{b}(i,j) - \mathbf{b}^*(i,j) \right)^2 \right]$$

Where r (i, j), g (i, j) and b (i, j) represents a color pixel in location (i, j) of the original image, r \*(i, j), g\*(i, j) and b \*(i, j) represents a color pixel of the watermarked image and m, n denote the size pixels of these color images. FIG5 (A) COVER IMAGE;



(B) SECRET WATERMARK;



FIG 6 (A) SCRAMBLE WATERMARK IMAGE;



FIG 7 (A) EXTRACTION THE IMAGE;



(B) EMBEDDING THE IMAGE:



(B) DESCRAMBLE THE IMAGE;



# Cover Image Watermark Image Dsramble Image Load Image I

FIG 8: RESULT FOR PROPOSED SCHEME

Fig 8 results of PSNR and MSE value of proposed various methods.

#### TABLE (1): COMPARISONS OF RESULTS OF PSNR AND MSE USING VARIOUS METHODS

RESULRS	Somchok's Huang's		Weng's	Proposed	
	method	method	method	metdod	
PSNR dB	32.21	44.06	38.9260	56.093	
MSE	0.99	0.87	0.75	0.162	
NOISE	1.0	1.0	1.0	0.5	

Table shows comparisons different methods

	TABLE (2)						
Watermarking method	Medi-an filter7*7	Ss1	Ss2	Ss3	Crop25%	s.5	S2
Weng's Method for lena(38.9260dB)	0.75	1.0	0.69	1.0	1.0	1.0	1.0
Proposed Method (PSNR=56.089dB)	0.79	1.0	0.70	1.0	1.0	1.0	1.98
Weng's method for Peppers (39.0641dB)	0.66	1.0	0.66	0.72	1.0	0.65	0.84
Proposed method (PSNR=56.0641dB)	0.65	0.89	0.56	0.71	1.0	0.63	0.91

This table shows on result value of PSNR in our base paper proposed method we apply color images original and secret images are color image. Typical values for the PSNR are between 30dB and 40dB [4]. If the PSNR of the watermarked image is more than 30, it is hard to be aware of the differences with the cover image by the human eyes system. The cover images are shown in Figure 5, the watermarked images and the difference between them and the original images are shown in Figure 7. As they are shown, the invisibility of the watermark is good quality and the original image and the watermarked image cannot be distinguished by human Visibility system (HVS). Calculate the PSNR and the result is shown in table 1. The result of PSNR of the Images are more than 52 when we embed 1023 byte as a secret data and if embed less secret data we will get better PSNR as table 1 shown the PSNR is more than 61 when we embedded 128 bytes. We calculate the PSNR and result show in table 2 the result of PSNR of the images are more than 56db when we embedded 128x128 as a secret data and cover image is 512x512we calculated PSNR is 56.093 db and MSE value is 0.162.

#### **VI CONCLUSION**

A digital watermarking based on copyright protection for RGB in LSB is presented, which operates in spatial domain by embedding the watermark image.. The extraction of the watermark depends on the original image, so it is a non-blind watermarking scheme. The experimental results show that our scheme is highly robust against several of image processing operations. Campier the Somchok's, Huang's, and Weng's method our result is highly PSNR value calculated. Two advantages are our proposed method first is both of images are color image these images are cover image and watermark image and second is size of watermark image is half of cover image. This technique is having a great scope of opportunities; especially in the field of cyber frauds, court evidences and certificate or identity forgery and even in the preservation and transmission of cultural heritage images. The large need of networked multimedia system has created the need of copyright protection. It is very important to protect intellectual properties of digital media. Internet playing an important role of digital data transfer. Digital watermarking is the great solution of the problem of how to protect copyright. Digital watermarking is the solution for the protection of legal rights of digital content owner and customer. It is also secure scheme, only the one with the correct key can extract the watermark.

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## HOW LEADERSHIP AFFECTS ORGANIZATIONAL CHANGE PROCESS

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#### ABSTRACT

Leadership seems to be the chief factor which aligns and coordinates with the organizational processes. Leadership of the organization is linked with the functioning and performance of the organization and it reflect how effective they are in achieving their desirable outcomes, (Lewis, Packard, and Lewis, 2007). Leadership styles, traits, approaches and strategies are the starting point of the change process. It goes to the large extent in affecting the management capacity by designing different systems in the organization

#### **KEYWORDS**

change process, leadership, Pakistani public sectors.

#### **1- INTRODUCTION**

#### 1.1 BACKGROUND OF THE STUDY

eadership seems to be the chief factor which aligns and coordinates with the organizational processes. Leadership of the organization is linked with the functioning and performance of the organization and it reflect how effective they are in achieving their desirable outcomes, (Lewis, Packard, and Lewis, >2007). Leadership styles, traits, approaches and strategies are the starting point of the change process. It goes to the large extent in affecting the management capacity by designing different systems in the company. Therefore it is extremely important for the leaders to monitor and evaluate the contingency factors working in the internal and external environment. It is also Leadership seems to be the chief factor which aligns and coordinates with the organizational processes. Leadership of the organization is linked with the functioning and performance of the organization and it reflect how effective they are in achieving their desirable outcomes, (Lewis, Packard, and Lewis, 2007). Leadership styles, traits, approaches very important to assess the situation, and staffs by considering the characteristics of the staffs and employing different leader to member process for shaping the culture and climate of the organization. Other factors like service delivery mode and characteristics of the clients also have impact on the attainment of ultimate outcomes (McNeece & Thyer, 2004).

Leadership of the company has direct affect on the organizational change process by the implication of the evidence based practice. Leaders have power to observe the performance of the organization at different levels like teams, agencies, groups, communities, programs, countries/societies and even in world (House, & Mitchell, 2004). The focus of this research is based on the leadership of the Pakistan public sectors and their performance and change level.

#### PROBLEM STATEMENT 1.2

Leadership seems to be an essential factor which has direct impact over the performance of an organization. Despite of extensive studies on this topic, there is lot more to discover about the affect of leadership in bringing change in the organization. The major aim of this research project is going to shed light on the attitude, behavior, strategies and practices of the leadership in defining the change process in the Pakistani organizations, so to ensure the attainment of effective outcomes

#### AIMS AND OBJECTIVES OF RESEARCH 1.3

This research is conducted by aiming to explore the determinants of leadership which have direct impact on the organizational change process. It is aimed to highlight those factors which has dictated the attainment of positive performance outcomes for the Pakistani organizations.

The stated objectives are:

- To investigate different leadership styles adopted in Pakistani organizations
- To examine the factors of leadership which has resulted in enhances the performance of the organizations
- To explore determinants of leadership which has resulted in bringing change in the organizations

#### 1.4 **RESEARCH QUESTION**

Q1 How different leadership styles are adopted in Pakistani organizations

Q2 What are the factors of leadership which has resulted in enhances the performance of the organizations

Q3 What are the determinants of leadership which has resulted in bringing change in the organizations

#### 1.5 SCOPE OF RESEARCH

Research work conduction is very supportive for the public sector of Pakistan. This research work will shed light on different leadership styles which have ensued in bringing positive change in the Pakistani organizations. Top management of the organizations will take advantage of this research and can easily design their strategies for the adaptation of effective leadership style.

#### LIMITATION OF THE RESEARCH 1.6

Research work done here is facing some limitations, like other researches. This research is geographically limited to Pakistan and it will be only studying the leadership style of public sectors. It is assumed that public sectors is having effective leadership styles adoption and their change process is very clear. Howsoever, only two to three public sectors will be studied because of limited time and monetary resources. This project is assigned by the university and thus it has to be finished within the give time period.

#### 1.7 HYPOTHESIS

- H1: Leadership style has direct impact on climate of organization
- H2: Leadership style is linked with culture of organization
- H3: Leadership style is associated with behavior of the organizations
- H4: Leadership style dictates the adopted strategies for the growth of the company

H5: Leadership style has impact over the performance of the organization

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R	r²	Adj.R <sup>2</sup>	F.stat	P.value
0.436	0.190	0.182	23.021	0.000

#### 2- METHODOLOGY

#### 2.1 RESEARCH APPROACH

The approach of the research is defined by the research onion, which is sub-divided into three groups. These are entitled and renowned as qualitative, quantitative and mixed approach. Researchers have defined quantitative research approach as the measure of numeric figures. These outlay their results on the basis of calculative figures and numbers for the attainment of solution to the desired problem. This approach is best when there is shortage of time and unavailability of qualitative data. On the other end, researchers have defined qualitative research approach as the attainment of solution to the desired problem by investigating deeply from the victims. This research is entirely based upon the deep views of the persons linked with the problem studied. Lastly, Researchers have defined mixed approach as the combination of qualitative and the quantitative research. This research is going to focus over the mixed approach. Qualitative and the quantitative both data will be assembled for reaching towards the solution of the problem.

#### 2.2 RESEARCH DESIGN

As research is multidimensional, the research is also following more than one design. The first design is co relational design, which is adopted for the quantitative research approach. A correlation design is deemed to illustrate the relation or association among the discussed variables. This is intended to shed light over the degree of relationship among the defined variables. Second design of the research is exploratory design which is adopted for the qualitative approach. This design is used to explore the phenomenology by making keen observation of the data.

#### 2.3 DATA COLLECTION

Collection of the data depends upon the nature of the data employed. There are two major sub-divisions of data, as primary and secondary. The primary data is fresh and first hand collected data, whereas secondary data is already collected and gathered by other and is only used in the research. In this project, the data which researcher will use is going to be primary in nature for gathering the data from the interviews and secondary in nature for gathering the data about the organisational change. Primary data is going to be availed from the employees and top management of the public sector of Pakistan. The secondary data is going to be get from the financial statements of the companies.

#### 2.4 SAMPLING TECHNIQUE

Sampling technique which is applied in this work is going to be convenient and purposive sampling. Convenient sampling is adopted to ensure the attainment of interviews from the easily approachable organizations. Public sectors will be approached and their top management and employees will be interviewed

T/	ABLE 1.1: OF SAMPLING	TECHNIQU	Е
	Institutions	Officers	
	Pakistan railways	100	
	Pakistan post office	100	
	Total	200	

#### 2.5 MEASURING TOOL

The tool which is designed to measure the interview includes the preparation of the questionnaire. This tool is specially designed for the collection of the data. Data is collected via asking different questions. These are answered by the officers of public sector and they have been asked to give review about their personal experiences while working with their managers. They have been given proper environment so to answer the viable questions.

#### 2.6 DATA ANALYSIS TOOL

Tool selected for data analysis is observation and the trend analysis. Observation technique is applied for extracting the information from the taken interviews. This tool will help in shedding light over different phenomenologies and themes. From the interviews of top management and officers of public sectors of Pakistan, result will be derived about the organisational change and the different leadership style adopted. In order to further study the change in the organisational performance, the profitability will be studied with the help of trend analysis. MS Excel will be employed for grabbing the trend through line charts. 5 years of data will be studied by extracting it from the financial statements of the companies.

#### 2.7 SUMMARY AND CONCLUSION

This research is going to focus over the mixed approach. Qualitative and the quantitative both data will be assembled for reaching towards the solution of the problem. Correlational design and exploratory design is adopted as the nature of research design is two dimensional. Primary data is going to be availed from the OFFICERS and top management of the public sector of Pakistan. The secondary data is going to be get from the financial statements of the companies. Tool selected for data analysis is observation and the trend analysis. Observation technique is applied for extracting the information from the taken interviews. In order to further study the change in the organizational performance, the profitability will be studied with the help of trend analysis.

#### **3- DISCUSSIONS**

#### **3.1 INTRODUCTION**

The chapter of literature review is designed to illustrate the theories and models of leadership style, discussed by the previous researchers and theorists. In this chapter, researcher has extensively reviewed the past literatures and has confined to develop their own contextual framework for the further studies.

#### 3.2 OVERVIEW OF THE LEADERSHIP

In the recent studies, different leadership practices and theories have concluded that there are almost different definitions of leadership. Each of the researchers has differently defined leadership. According to Northouse, (2004), leadership is a process by which individual put influence on the group of individuals for the attainment of one common goal. Those who follow leaders or get influenced by their decisions are known as *followers* and in the organisational setting, they are known as *subordinates*.

Gill, (2006) has defined the shared leadership as the quality of interaction instead of hierarchical levels and team problem solving. They are more conservative rather than having shared beliefs and values. They have desire to achieve the common good for the company. Leadership can also best understand by comparing it with the management style. In this domain, Kotter, (1990) has defined management for the production of orders, contingency and predictability for the attainment of key results. Their work includes organizing, planning, controlling, budgeting, problem solving and staffing. On contrary, leadership style is the production of change. Their work includes the establishment of directions by aligning the people, visioning the future and development of strategies. Their work also comprises of motivating and inspiring the employees working under them. Roberts-DeGennaro & Packard, (2002) has defined the concept of leadership in combination of management. They believed that leadership comprises of strategy development, visioning, community collaboration, change management and culture management. Alternatively, the work of management is to design the program, do financial management, human resource management, project management, program evaluation and mange information system. In order to perform these functions effectively, managers must have effective leadership style.

Leadership of the company has direct affect on the organizational change process by the implication of the evidence based practice. Leaders have power to observe the performance of the organization at different levels like teams, agencies, groups, communities, programs, countries/societies and even in world (House, & Mitchell, 2004). The focus of this research is based on the leadership of the public sector of Pakistan and their performance and change level.

#### 3.3 LEADERSHIP.ORGANIZATIONAL DYNAMICS AND PERFORMANCE

Leadership seems to be the major factor in aligning and coordinating with the organisational processes. Unlike other functions of the organizations, leadership is also associated with the performance of organization towards the achievement of desired goals, (Lewis, Packard & Lewis, 2007). The starting point of the leadership is the styles, approaches and traits they have. This has direct impact over the management capacity through which organisational systems are designed. It is extremely important for the leaders to monitor and evaluate the contingency factors working in the internal and external environment. It is also very important to assess the situation, and staffs by considering the characteristics of the staffs and employing different leader to member process for shaping the culture and climate of the organization. Some other elements which affect the leadership style and performance of the firms consists of clients characteristics and capacity of the program. Leaders can have impact over the capacity of program by adaptation of evidence based practice. Here the importance of job satisfaction cannot be denied and it is key for the outcomes of the organizations.

#### 3.4 TYPES OF ORGANISATIONAL CHANGE

There have been three types of changes in the organization, according to the Proeh, (2001). These are developmental change, transitional change and transformational change. These are thoroughly explained as:

#### 3.4.1 DEVELOPMENTAL CHANGE

It comprises of adjustment in the current operations or improvement in the process, skills or methods which are currently not fulfilling the standards. This level of change is not threatening for the employees and quite easy to manage. Example of this type of change can be training, improvement in communication and problem solving.

#### 3.4.2 TRANSITIONAL CHANGE

This type of change involves the implementation of the new ideas and abandoning the old ways. This type of change requires time and patience as it moves from the transitional period to the future state. Examples are new technology system, implementation of new program and reorganization.

#### 3.4.3 TRASNFORMATIONAL CHANGE

This is the most extreme type of the change which necessitates major shifting in the structure, system or vision strategy. Example includes the major change in the policy which requires managed care and welfare reform. It also includes the new beliefs, awareness and new culture for new possibilities. Privatization and the managed competition are also example of transformational change.

#### 3.5 PERFORMANCE

Performance of the organization can be measured with numerous aspects. These aspects can be measured with the aid of return on asset, return on equity and the net income. These are accessed with the assistance of financial performance of the firm. These mentioned aspects are measurable with the accounting terms. Companies perform audits in the firm so that they can easily manage the viable condition. These are also important for making decision and making investment choice by evaluating risk.

#### 4. SUMMARY AND CONCLUSION

Leadership is quite important aspect of the firms. Firms are liable to adopt different leadership and management style to perform organizational function. The performance is evaluated with regards of the adopted leadership style. Leadership seems to be an essential factor which has direct impact over the performance of an organization. Despite of extensive studies on this topic, there is lot more to discover about the affect of leadership in bringing change in the organization. The major aim of this research project is going to shed light on the attitude, behavior, strategies and practices of the leadership in defining the change process in the public sector of Pakistan , so to ensure the attainment of effective outcomes.

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## FACTORS INFLUENCING CUSTOMERS' LOYALTY IN ONLINE SHOPPING

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#### ABSTRACT

This research aims to find out relationships among factors affecting customer Loyalty in online shopping. This study includes three dimensions to judge online shopping experience, i.e. technology acceptance factors, website service quality and specific holdup cost and its outcome variables e-satisfaction and e-loyalty of customers. The study collected responses of 245 respondents who have frequent exposure of online purchasing in business to consumer market, using convenience sampling method. The reliability test has shown that all the dimensions used in the study are found to be reliable. The regression analysis has shown that all three components of online shopping quality have significant effect on e-satisfaction. It is found that the repeated satisfied interaction help building loyalty in online shopping encounters.

#### **KEYWORDS**

Online Shopping, Technology Acceptance, Website Service Quality, E-Satisfaction, E-Loyalty, Specific Holdup Cost.

#### **1. INTRODUCTION**

The Internet has a dramatic impact on business operations. The online business to consumer has been growing rapidly and brought a great impact on etailers and boosted the development of e-business. Companies take advantage of the internet as a critical channel for selling goods and services and ecommerce sales, especially, online retail sales jumped greatly. Online shopping refers to the buying and selling of products or services over electronic systems such as the internet and other computer networks. The increases in online shopping and the rapid growth in the number of retailers selling online have made the marketplace extremely competitive, which created importance to systematically measure customer satisfaction and loyalty while online shopping.

#### 2. REVIEW OF LITERATURE

The conceptualization of this research is based on certain factors like technology acceptance factors, website service quality, specific holdup cost, and customer e-satisfaction, e-trust and e-loyalty.

#### TECHNOLOGY ACCEPTANCE FACTOR

Many studies have found that the technology acceptance factors positively influence the e-satisfaction, e-trust and e-loyalty of customers directly. Technology acceptance factor has been accepted as a measure of willingness of customers to consume online (Lin and Sun, 2009). Technology acceptance factor was conceptualized as technology acceptance model (TAM) to predict user acceptance of information technology (Davis, 1989). Later, Shih (2004) confirmed that perceived ease of trading online (PEOUT) and perceived usefulness (PU) significantly determined individual loyalty toward e-shopping.

WEBSITE SERVICE QUALITY

The literature reveals that website service quality has positive relationships with e-satisfaction, e-trust and e-loyalty of customers directly (Devaraj et al., 2002). Website service quality is defined as the perception by the customer of the shopping website's ability to respond to customer's needs, be concerned about customers, and provide a secure shopping environment. Ribbink et al. (2004) found that website service quality can positively influence the e-satisfaction, e-trust and e-loyalty.

#### SPECIFIC HOLDUP COST

Specific holdup cost is defined here as a "particular intangible and tangible asset made in the course of the buying and selling" (Chiu, 2006). Lin and Sun (2009) observed when customers and shopping websites make a specific holdup cost; customers' e-satisfaction and e-loyalty will be enhanced. The higher the specific holdup cost made by customers and shopping websites, the higher the level of e-satisfaction and e-loyalty.

#### E-SATISFACTION

E-Satisfaction is defined as satisfaction based on technology-mediated marketing relationships (yang and Tsai, 2007). The literature reveals that technology acceptance factors and website service quality affect customers' e-satisfaction. Anderson and Srinivasan (2003) defined e-satisfaction as "the contentment of the customer with respect to his or her prior purchasing experience with a given e-commerce firm". Van Riel et al. (2004) found that web site characteristics (e.g. ease of use) and the web site service quality factors are the main drives of E-satisfaction.

#### E-LOYALTY

Anderson and Srinivasan (2003, p. 417) identified e-loyalty as "a customer's favorable attitude toward an electronic business resulting in repeat buying behavior". Ashim and Hashmi (2005) have found that web site content and its service quality are important factors influencing customer E-loyalty. Rodgers et al. (2005) mentioned the impact of website service quality on customer loyalty in online transactions.

#### **3. IMPORTANCE OF THE STUDY**

Today, the technology has become the source of gaining competitive advantage through mass customization and individual responsiveness. Firms have started integrating the sales functions and services with internet and website technologies. So, it becomes important that website and online technology should provide superior customer experience that leads to higher satisfaction and loyalty in long-term. Also, many factors create significant impact on customers' acceptance of technology. So, it becomes imperative to understand online shopping experience of customers and its impact on customer-firm relationships in long term.

#### 4. OBJECTIVES

- 1. To explain the components of online shopping effectiveness
- 2. To measure the importance of the technology acceptance factors, website service quality and specific holdup cost on maintaining customer e-satisfaction and e-loyalty.
- 3. To measure the relationship among customer satisfaction and loyalty in online shopping

#### 5. HYPOTHESIS

H<sub>1</sub>: There is a significant impact of Technical acceptance factor on E-Satisfaction of consumer in online shopping.

H<sub>2</sub>: There is a significant impact of Web Service Quality on E-Satisfaction of consumer in online shopping.

H<sub>3</sub>: There is a significant impact of E-Satisfaction on E-Loyalty of consumer in online shopping.

H<sub>4</sub>: There is a significant impact of Special Holdup Cost on E- Satisfaction of consumer in online shopping.

H<sub>5</sub>: There is significant impact of Special Holdup Cost on E-loyalty of consumer in online shopping.

#### 6. RESEARCH METHODOLOGY

This study is descriptive in nature. The samples were selected on convenience basis. The personal interview method was used to collect the data. The total sample size is 245. The sample consists of respondents who have frequent experience of online shopping. Structured questionnaire was used having close-ended questions. Five dimensions, i.e., technology acceptance factors, website service quality, specific holdup cost, e-satisfaction and e-loyalty have been conceptualized on the basis of earlier work done by Lin and Sun (2009). All statements were rated using Likert scale with 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree and 5 = strongly agree. They were asked to rate the each question in terms of the strength of their agreeableness or disagreeableness with respect to online shopping experience.

#### 7. DATA ANALYSIS AND DISCUSSION RELIABILITY ANALYSIS

#### TABLE 1: RELIABILITY OF ONLINE SHOPPING VARIABLES

Variables	Cronbach Alpha
Technology Acceptance Factors	0.678
Website Service Quality	0.689
Specific Holdup Cost	0.833
E-satisfaction	0.764
E-loyalty	0.798
Overall Scale	0.802

The Cronbach Alpha is used to check the reliability. As shown in table 1, the calculated Cronbach Alphas for all the factors are well ahead of the cut off rate of 0.70 to prove good reliability (Hair et al., 2009). **REGRESSION ANALYSIS** 

#### TABLE 2: REGRESSION ANALYSES OF ONLINE SHOPPING VARIABLES

Sr.No.	Independent	Dependent	β	t-value	sig.	R <sup>2</sup>	VIF	ANOVA	R
1	TAF	E-sat	+0.356	3.222	0.003	0.502	1.479	F = 58.563, df (2,242), sign. 000	0.342
	WSQ		+0.723	7.865	0.001		1.479		
2	E-sat	E-loyalty	+0.737	4.305	0.000	0.535	-	F = 178.361, df (1,243), sign. 000	-
							-		
3	SHC	E-sat	+0.698	8.742	0.000	0.415	-	F = 153.324, df (1,243), sign. 000	-
4	SHC	E-loyalty	+0.889	10.647	0.000	0.515	-	F = 198.653, df (1,243), sign. 000	-

#### REGRESSION OF TECHNICAL ACCEPTANCE FACTOR AND WEB SERVICE QUALITY ON E-SATISFACTION

The table 2 shows that Technological Acceptance Factor creates significant positive impact on Consumer E-Satisfaction. An increase in Technological Acceptance Factor will bring about a significant increase in Consumer E-Satisfaction by number of times the value of regression co-efficient. Web Service Quality creates significant positive impact on Consumer E-Satisfaction. An increase in Web Service Quality will bring about a significant increase in Consumer E-Satisfaction by number of times the value of regression co-efficient. The variance analysis shows F = 58.563 at a significance level of 0.000 with df (2, 242), which indicates that all regression co-efficients will be non zero. The adjusted R<sup>2</sup>, i.e. the co-efficient of determination stands at 0.502 indicating that the equation can explain 50.2% variations in E-Satisfaction. The co-efficient of correlation two independent variables technology acceptance factor and website service quality is found to be 0.342. The VIF statistics in table 2 also depicts the value of 1.479 for technology acceptance factor and 1.479 for website service quality, which are very much far from cut off rate of 10 for VIF statistics. Hence there is no cause of concern from viewpoint of multicollinearity among the independent variables.

#### **REGRESSION OF E-SATISFACTION ON E-LOYALTY**

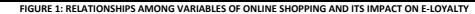
The table 2 shows that E-Satisfaction creates significant positive impact on Consumer E- Loyalty. An increase in E-Satisfaction will bring about a significant increase in Consumer E- Loyalty by number of times the value of regression co-efficient. The variance analysis shows F = 203.798 at a significance level of 0.000 with df (1, 243), which indicates that all regression co-efficients will be non zero. The adjusted R<sup>2</sup>, i.e. the co-efficient of determination stands at 0.535 indicating that the equation can explain 53.5% variations in E-Loyalty.

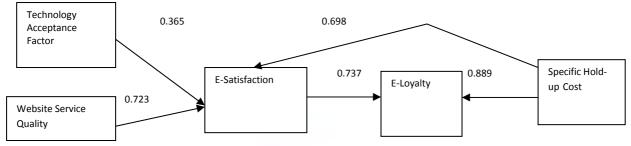
#### **REGRESSION OF SPECIFIC HOLDUP COST ON E-SATISFACTION**

The table 2 shows that Specific Holdup Cost creates significant positive impact on Consumer E- Satisfaction. An increase in Specific Holdup Cost will bring about a significant increase in Consumer E- Satisfaction by number of times the value of regression co-efficient. The variance analysis shows F = 153.324 at a significance level of 0.000 with df (1, 243), which indicates that all regression co-efficients will be non zero. The adjusted R<sup>2</sup>, i.e. the co-efficient of determination stands at 0.415 indicating that the equation can explain 41.5% variations in E- Satisfaction.

#### **REGRESSION OF SPECIFIC HOLDUP COST ON E-LOYALTY**

The table 2 shows that Specific Holdup Cost exerts significant influence over Consumer E-loyalty. An increase in Specific Holdup Cost will bring about a significant increase in Consumer E-loyalty by number of times the value of regression co-efficient. The variance analysis shows F = 198.653 at a significance level of 0.000 with df (1, 243), which indicates that all regression co-efficients will be non zero. The adjusted R<sup>2</sup>, i.e. the co-efficient of determination stands at 0.515 indicating that the equation can explain 51.5% variations in E-loyalty.





As shown in the above diagram, technology acceptance factors and website service quality create significant positive impact on E-satisfaction. Website service quality is creating more significant impact than technology acceptance factors. Technology acceptance factor is useful to motivate customers to try to use particular website for online shopping and creating reasonable satisfaction. While website service quality is more important to satisfy customers. So, it can be inferred that each time customers feel ease in using technology and getting good service quality through online shopping, customers are get satisfied. It is also empirically confirmed that repeated e-satisfaction leads e-loyalty. Specific hold up cost is also one of the important factors to maintain e-loyalty due to fear of wastage of efforts to learn the current online shopping as well as loyalty benefits given to regular customers.

#### 8. CONCLUSION AND IMPLICATIONS

This research has found that technology acceptance factors positively influence the e-satisfaction and e-loyalty of customers. The website technologies provided should be able to save time and effort of customers while having greater shopping efficiency, resulting in enhanced customer satisfaction and loyalty. The results have shown that the convenience and usefulness of website leads to more positive e-satisfaction. But, the consistency and customization in website service quality leads to more positive e-satisfaction. It is also empirically confirmed that repeated e-satisfaction leads e-loyalty. It is also observed when customers and shopping websites make a specific holdup cost; customers' e-loyalty is enhanced. It means the higher the specific holdup cost made by customers and shopping websites, the higher the level of e-loyalty. This study brings following implications for online retailers: (1) It is not only important for online retailers to satisfy customers through providing service, but it is the consistency in service quality, keeping specific hold up cost at higher level and providing security during financial transactions, which are more important to gain trust of customers, which ultimately leads to loyalty. (2) The online retailers can use loyalty programmers to retain business class as well as local customers in customized manner. (4) The online shopping websites can provide more value added services to customers having long term experience to bring their loyalty, while to focus on core services to attract new customers.

#### 9. LIMITATIONS AND SCOPE FOR FUTURE RESEARCH

The future research can be done to find out more suitable factors creating significant impact on online shopping experience of customers in particular online shopping encounters. This research can be extended to study the particular website's service quality and hold up cost and its impact on customer loyalty. The future research can also be done to find out specific demographic characteristics of customers which may create positive/negative impact on their online shopping experience.

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## A STUDY ON THE ROLE OF EMOTIONAL SATISFACTION IN RETAIL OUTLETS

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#### ABSTRACT

This study empirically examined the role of emotional satisfaction in service encounters. Specifically, this study seeks to investigate the relationship between emotional satisfaction and key concepts such as service quality, customer loyalty and relationship quality and clarify the role of emotional satisfaction in predicting customer loyalty and relationship quality. In doing so, this study used the relationship between emotional satisfaction, service quality, customer loyalty and the relationship quality as a context, as well as data from a sample survey of Coimbatore retail customers concerning their evaluation of their shopping experiences to address this issue. The result shows that service quality is positively associated with both customer loyalties, while feelings of happiness serve as the best predictor of relationship quality. The findings imply the need for a service firm to strategically leverage on the key antecedents of customer loyalty and relationship quality in its pursuit of customer retention and long term profitability. In its contest, research is been done to find out the role of emotional satisfaction in service encounters.

#### **KEYWORDS**

Customer relations, Customer loyalty, Customer emotional satisfaction, Service quality.

#### INTRODUCTION

The behaviors of frontline service employees are critical to customer evaluations of the service encounter. Unexpectedly, organizations can create a distinct and sustainable competitive edge by providing an excellent service in delivery process. A service involves frequent or extended person-to-person encounters between the contact employee and the consumer. In such instances, the service provided is inseparable from the contact employee; hence the contact employee plays an important role in the delivery of service quality as well as in providing the customer satisfaction. The degree of satisfaction, in turn, influences customers' behavioral responses in the form of customer loyalty. The role of emotion is gaining attention as a central element in service quality management.

There have been some studies of the effects of emotions on satisfaction with service quality. Recent studies suggest that emotion is a fundamental attribute in satisfaction and that customer satisfaction should include a separate emotional component. Indeed, Stauss and Neuhaus contend that most satisfaction studies have focused mainly on the cognitive component of emotion, while seemingly important affective component has been largely ignored. Further, Liljander and Strandvik argue that customer satisfaction includes both affective and cognitive components. The authors found that negative emotions have a stronger effect on satisfaction with quality than positive emotions. Despite the above, consumer behavior scholars have limited information about the nature of emotion in the consumption environment, and no conclusive guidance for management has yet been found. Consequently, it is integral to understand the role of emotion in service encounters. First, a brief synthesis of the extant literature on key conceptual issues concerning the role of emotion in service encounters is presented. The retailing consists of the sale of goods and merchandise from a fixed location, such as departmental store in small or individual lots for direct consumption by

The retailing consists of the sale of goods and merchandise from a fixed location, such as departmental store in small or individual lots for direct consumption by the purchaser. Some retailing business sells combination of goods and services. For example, an automobile dealer that sells automobile (goods) may also be providing automobile repairs (services). Since the last decade, the field of retailing has experienced significant changes. Specialty and discount stores have been edging in departmental stores turf, with cost conscious and breadth of selection strategies.



The marketers at both department stores and hypermarkets have to face seriously, the multi faceted challenge of delivering tangible goods, intangible services and ideas for the purpose of satisfying consumers' needs. Due to the nature of the service offered, purchasing decisions, consumption experience and post purchase evaluation of services is often problematic to service consumers. When consumers patronize a store, they first encounter the physical environment or service scope; then, they engage in personal interaction with the sales people; finally, the store processes and finishes the transaction. During this transaction, the consumers' emotional response and perceived monetary value will be impacted by the service scope, service people, and service context or core service. Supermarkets are considered to be the major form of retailing all over the world. Moreover services quality has being long regarded to be a critical element in enhancing the perception of overall merchandise quality in supermarkets. Services quality excellence has been shown to assist in both the retention and expansion of the existing customer base. But only few studies have attempted to identify key dimensions of services quality as well as to investigate the prevailing services quality in the supermarket industry, thus this study attempts to fill this gap by examining the key dimensions of retail service quality across the supermarket industry in Sri Lanka as well as to test the most commonly used scale to measure retail service quality.

#### **REVIEW OF LITERATURE**

Parasuraman et al., (1980) conducted an exploratory investigation in the attempt to define service quality and develop a model of service quality. The results showed that regardless of the type of service, consumers used basically the similar criteria in evaluating service quality. They labeled those criteria as "service quality determinants". Since then, service quality was defined through 10 dimensions: Access, Communication, Competence, Courtesy, Credibility, Reliability, Responsiveness, Security, Tangibles and Understanding the customer. Later they simplified into five dimensions such as Tangibles, Reliability, Responsiveness, Assurance and Empathy.

Izard et al., (1980) suggested the consumption emotions have been conceptualized as distinct categories of emotional experience and expressions, such as joy, anger, fear; or as a limited number of dimensions underlying emotional categories, such as pleasantness/unpleasantness, relaxation/action, or calmness/excitement.

Kotler et al., (1981) suggested customer loyalty constitutes an underlying objective for strategic marketing and management planning Kotler et al., (1984) represents an important basis for developing a sustainable competitive advantage.

Gro"nroos et al., (1984) define service quality as a perceived judgment, resulting from an evaluation process where customers compare their expectations with the service they perceive to have received.

Shostack et al., (1985) suggested that a service encounter is defined as "a period of time during which a customer directly interacts with a service". This definition includes discrete, separate, and distinct events and behavior, as well as a customer's interaction with all the dimensions of a service, such as the physical surroundings and the service contact employees (Bitner, 1990). Subsequently, this study seeks to:

(1) Investigate the relationship between emotional satisfaction and key concepts, such as service quality, customer loyalty, and relationship quality; and

(2) Clarify the role of emotional satisfaction in predicting customer loyalty and relationship quality.

Levitt et al., (1986) concluded the marketing literature as relationship quality has been discussed as a bundle of intangible values which augments products or services and results in an expected interchange between buyers and sellers.

#### STATEMENT OF THE PROBLEM

This research is prepared to find the emotional satisfaction of the customers. The service provided to the customers by the retail outlet should be satisfied by the customers emotionally. On this base, the customer's opinion and the emotional satisfaction can be found out in this research. By this base, the influence of the retail outlet can be found by the customer's. The friendliness of the member of staff, politeness and the advice provided to the customers are noted. The customer rating of importance of several attributes associated with supermarket shopping.

#### **OBJECTIVES OF THE STUDY**

- To investigate the relationship between emotional satisfaction and service quality, customer loyalty, and relationship quality.
- To determine the influential factors of service quality of shopping in retail outlets.
- To determine the relationship between age and emotional satisfaction of shopping in retail outlets.

#### **HYPOTHESIS**

 $H_0$  1- There is no significant relationship between age of the respondents and shopping in retail.

 $H_0$  2- There is no significant relationship between emotional satisfaction and service quality.

#### **RESEARCH METHODOLOGY**

The research problem is the preparation of the design of the research project, popularly known as the "research design". "A research design is the arrangement of conditions for collection and analysis data in a manner that aims to combine relevance to the researcher purpose with economy in procedure". First hand information i.e. primary data was used for this research and it was collected using questionnaire. Being primary data, the data collected is believed to be original in its characteristics. Secondary data are collected from internet and through book references.

#### **RESULTS AND DISCUSSION** ANALYSIS USING CHI- SQUARE TEST

#### TABLE NO. 1: DIFFERENCE BETWEEN AGE AND EMOTIONAL SATISFACTION OF SHOPPING IN RETAIL OUTLETS

Age Ret	Retail S	Store	Total
1	L	2	
Below 30 67	57	11	78
31-40 30	30	15	45
41-50 17	17	4	21
Above 50 3	3	3	6
Total 117	17	33	150
ge * Retail Store Cross tabulation HI-SQUARE TESTS		Value	df
		Value 9.051(	
II-SQUARE TESTS	are	9.051(	a) 3

#### INTERPRETATION

The calculated value 9.051 is greater than the table value 7.815, hence we reject the hypothesis. So we conclude that there is a significant relationship between age of the respondents and shopping in retail.

TABLE NO.2: ANALYSIS OF VARIANCE BETWEEN RESPONDENT OPINION AND SERVICE QUALITY OF SHOPPING IN RETAIL OUTLETS

OPINION	SERV	TOTAL			
	Α	В	С	D	
REPLACING	16	49	17	68	150
DELIVERY	102	48	0	0	150
PROPER TIME	49	93	1	7	150
AVAILABILITY	83	66	1	0	150
ALL TYPES OF OPINION	250	256	19	75	600

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In order to simplify the calculations, we code the data by subtracting 16 from each figure.

Correlation Factor =

Sum of squares	Degree of freedom	Mean square	F
11005.5	3	3668.5	3.86
0	3	0	3.86
6520.5	9	724.5	
	11005.5 0	11005.5     3       0     3	11005.5         3         3668.5           0         3         0

COMPARISON OF THE SERVICE VARIANCE AND THE RESIDUAL VARIANCE

3668.5 F =724.5 F = 5.06V1 = 3 V2 = 9 @5% level of significant F0.05 = 3.86INTERPRETATION

The calculated value (5.06) is more than the table value (3.86). So we conclude that the service from various customer differ significantly. COMPARISON OF THE OPINION VARIANCE AND THE RESIDUAL VARIANCE

 $F = \frac{1}{724.5}$ F = 0V1 = 3 V2 = 9 @5% level of significant F0.05 = 3.86

#### INTERPRETATION

0

The calculated value (0) is less than the table value (3.86). So we conclude that the opinion from various customer do not differ significantly.

TABLE NO. 3: FACTORS DETERMINING SERVICE QUALITY (RANK ANALYSIS)

S.NO	ITEM	4	3	2	1	WEIGHTAGE	RANK
1.	Price	32	30	33	36	0.98	IV
2.	Quantity	45	18	24	44	1.00	П
3.	Quality	13	14	56	48	1.01	1
4.	Availability	30	50	25	26	0.99	

#### INTERPRETATION

The study include an analysis of user preference to the retail outlets for convenient, four character are identified as indicator for the preference to the retail outlets. Four point scales is used in ranking the order of attributes as is found in the tale. This reveals the following findings of all the attributes. Quality ranks first which reveals that users are quality conscious. It suggests that the retail outlets are to pay serious thought for quality to get regular customer. Next to quantity and availability follows. Users are quantity conscious in deciding a particular product. It is followed by price. Price has only fewer roles to play. The analysis reveals that the users give more importance to the quality and less number of importance to quantity, availability, and price.

#### FINDINGS

The service attitude provided by the retail outlets are much satisfied to the customers. First comparison is with the service variance and the residual variance in that the calculated value (3.98) is more than the table value (3.86). So we conclude that the service from various customer differ significantly. Second comparison is with the opinion variance with the residual variance in that the calculated value (0) is less than the table value (3.86). So we conclude that the opinion from various customer do not differ significantly. The quality provided by the retail outlets are given first rank, while the quantity and the availability of goods provided in the retail store are given second rank. The price rates of the goods are given fourth rank by the retail store.

#### SUGGESTIONS

The service provided by the retail outlet should be enhanced in a better way that they would not purchase from other retail shops. Replacing the damaged goods should be made satisfactory by the retail outlet to the customers. The retail outlet should provide the overall shopping environment to the customer in a better way. The customers with huge family do not prefer the retail outlet as their expenses is more. Customers prefer the quality to be the best and the quantity and availability to be in the second rank, while price is given last rank.

#### CONCLUSION

The purpose of this research is to examine the role of retail characteristics on shoppers' attitudes, and to examine the mediating role of retail-specific emotions in the store characteristic-store attitude relationship. The results clearly show that store characteristics induce shoppers' in-store emotions. Specifically, the store characteristics examined here to find the emotions, and each of these store characteristics attracts the customers emotionally. When shoppers perceive that the store offers a wide product assortment and that the products offer good value, they feel positive emotions like pleasure, excitement, contentment, pride, and satisfaction. Most of the customers prefer retail outlets than other retail shops. Based on their income and the nature of the family, they prefer the retail outlets. With the income and the times of purchase in retail outlets is positive and favorable. While on the bases of the nature of the family and the shopping in retail outlets are negative and unfavorable. Also there is a significant relationship between age and shopping in retail, income and spend in retail store etc.

#### LIMITATIONS OF THE STUDY

- Time is not sufficient to collect details from various customer situated in various place.
- Only particular area is been covered to collect the primary data. Area coverage is not possible.
- As sample size is 150, it is not necessary that it truly represents the population/universe.

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#### SCOPE FOR FURTHER STUDY

Emotional satisfaction is one of the important factor in an organization due to increasing competition. This topic is an ever ending one as it plays a vital role in the development of the organization. Thus there is a lot of scope to carry out further research on this topic. Few variables have been taken into consideration to carry out the analysis on service quality prevailing in the manufacturing concern. Further research can be done by taking other variable in a particular sector and also which have direct/indirect impact on emotional satisfaction in retail sectors.

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## STAFF ATTITUDES TO SHELVING AND SHELF READING IN PUBLIC LIBRARIES IN NIGERIA

## JOHN MUYIWA ADENIYI CLN PRINCIPAL LIBRARIAN KOGI STATE LIBRARY BOARD STELLA OBASANJO LIBRARY COMPLEX LOKOJA

#### ABSTRACT

Shelving and shelf reading is an important task in the library, for any library to effectively deliver its services, its collections have to be organized for easy accessibility. For shelving and shelf reading to be accurate, it requires motivated and dedicated staff. The supervisor should not be bossy and be ready to correct them when a book is wrongly shelved. The task is monotonous and boring, having some health implications like squatting for a long time, kneeling or sitting on the ground to read the bottom shelf, lift and push heavy books, look up or stand on small stool to read the top shelf. Shelving and shelf reading is usually done by junior staff, library attendant, and library officers. To relief these staffs of status discrimination, they should be made to know that librarians have more professional duties to perform due to professional career status to make the whole system function to fulfill the library goals. New developments should be put in place to make shelving and shelf reading less tasking.

#### **KEYWORDS**

shelf reading, public libraries, staff attitudes.

#### INTRODUCTION

helving and shelf reading is an essential task in the library to make the library tidy and attractive. Readers consult books and leave them on the reading tables to be returned to the shelves by staff designated to do that. Shelving is described as organizing books by call numbers and placing them in their correct locations on the library shelves. While shelf reading is the process of reading the call numbers on books that are currently in the library shelves and making sure that they are in there proper order. To deliver effective library services the used materials need to be returned to its proper place where it was removed from, if that were not done it becomes difficult for a patron to locate a needed book. In all libraries all consulted materials were to be left on the tables, so that library shelvers will return them to their proper places. Book pillage a time is as a result of heavy use of books and not shelving them as at when due, thereby making the tables and shelves unattractive to library users. It is this pillage of books that make shelving uninteresting. This is why attempts are made to research on the attitudes of staff towards shelving and shelf reading.

Two public libraries were used for the study, Kogi State Library Board, Lokoja and Okene Public Library, Okene. Much has not been written on shelving and shelf reading

### **REVIEW OF LITERATURE**

Literature on shelving and shelf reading is very scanty. The importance of shelving and shelf reading cannot be over stressed. If a book is out of order, the person looking for it will not be able to find it, and we fail in our goal of providing excellent library service. Patrons expect us to keep accurate records of who has what checked out, when we find here on our shelves, our credibility is damaged. The same thing happens when a book that a person has reserved is found out on the shelves.

Inappropriate shelving according to Aliero (2003), is mostly done by library staffs, he pointed the following reasons which includes, ignorance, non- challant attitude, lack of supervision. Users are persistently dissatisfied in the use of library resources, when they look for a material and could not find it.

According to Agboola (1984) shelving is an essential aspect of library work which can determine user satisfaction or frustration as far as locating library material is concerned. Proper shelving and shelf reading maintains patron's confidence. Agboola (1984,) further stressed that shelving is the responsibility of junior staff under the supervision of professional librarians.

While in developed countries, part-time shelvers are engaged in shelving and shelf reading.

Staff can develop negative attitude to shelving and shelf reading because the work is a continuous and monotonous and boring, this can affect staff attitude towards the tasks.

It is as a result of this that the researcher wants to examine the the attitude of staff to shelving and shelf reading in public libraries.

#### **OBJECTIVES OF THE STUDY**

The objectives of the study is

- 1. To examine the attitude of staff to shelving and shelf reading in the public libraries.
- 2. To proffer ways of improving staff attitude.

#### METHODOLOGY

Two public libraries were used for this study. They are Kogi State Library Board Lokoja and Okene Public Library, Okene. All in kogi state. All the library staffs involve in shelving and shelves reading were used for this study, from the public libraries. The total number of library staff ranging from library attendants to library officers were used for the study made up of twenty staff, twenty copies of the questionnaire were administered. The twenty questionnaires were retrieved and all found valid for the study representing 100%.

#### DATA ANALYSIS AND DISCUSSION

The data collected from the administered questionnaire reveals that 10(50%) of the respondents had GCE/WASC, 9(45%) had diploma in library science while 1(5%) had HND in other discipline. This shows that the public libraries under study do not have enough trained shelvers.

Out of the total respondents 12(60%) were male, 8(40%) were female. 14(70%) were married, 6(30%) single. This reveals that most of the respondents are family men and women this had been reflected in the discharge of their duty in respect to their status.

In terms of age of respondents majority fall between the ages of 26-45 year 14(70%), 20-25 years, 5(25%) 46 year above. This shows that they are in the marital status age; therefore they should be responsible men and women.

The other part of the questionnaire was analyzed to determine the attitude of the shelving and shelf reading staff.

Respondents were asked to respond to the questions put before them.

(1) SHELVING OF BOOKS IS INTERESTING

Response	Frequency	Percentage
Agree	2	10
Disagree	17	85
Undecided	1	5
Total	20	100

A Monthly Double-Blind Peer Reviewed (Refereed/Juried) Open Access International e-Journal - Included in the International Serial Directories http://ijrcm.org.in/ Table 1 indicated that majority of the staff disagree 17(85%) that shelving of books was interesting, 2 (10%) agree while 1 (5%) undecided the table shows that shelving is not an interesting task in the library.

#### (2) SHELVING IS NECESSARY IN THE LIBRARY

Response	Frequency	Percentage
Agree	14	70
Disagree	5	25
Undecided	1	5
Total	20	100

Table 2, most of the respondents agree 14(70%) that it is necessary to shelf and shelf read in the library, 5(25%) disagree, while 1(5%) undecided on the necessity to shelf books. It is very necessary to shelve and shelf read so that readers can locate the needed materials when required after been used by other readers.

#### (3) USERS ARE CREATING UNNECESSARY PROBLEM IN THE LIBRARY

Response	Frequency	Percentage
Agree	7	35
Disagree	10	50
Undecided	3	15
Total	20	100

Table 3, 10(50%) respondents disagree that users creates unnecessary problem in the library. 7(35%) agree that they create unnecessary problem while, 3(15%) respondents were undecided. If users were allowed to shelve books after use, the books might be shelved wrongly and this will pose a major problem for new readers to locate needed Books on the shelves

#### (4) IRRESPECTIVE OF STATUS EVERY LIBRARY STAYS SHOULD BE INVOLVED SHELVING

Response	Frequency	Percentage
Agree	17	85
Disagree	2	10
Undecided	1	5
Total	20	100

Table 4, shows that majority of the library staff agreed, 17(85%) that every staff irrespective of their status should be involved in shelving and shelf reading. 2(10%) disagree while, 1(5%) undecided. The study reveals that both junior and senior staff, paraprofessional and professional should partake in shelving and shelf reading.

#### (5) SHELVERS SHOULD BE EMPLOYED

Response	Frequency	Percentage
Agree	19	95
Disagree	1	5
Undecided	-	-
Total	20	100

Table 5, reveals that 19(95%) respondents agree that shelvers should be employed while, 1(5%) disagree. Therefore, shelvers should be employed to take care of shelving and shelf reading in libraries, because the task is very hectic and boredom on few individuals.

#### (6) FREQUENCY OF SHELVING AND SHELF READING

Response	Frequency	Percentage
Daily	2	10
Weekly	12	60
2-times a week	6	30
Total	20	100

Table 6, shows that 12(60%) respondents affirmed that shelving and shelf reading should be done weekly. 6(30%) respondents affirm also that shelving and shelf reading should 2-times a week. while 2(10%) indicated daily shelving and shelf reading.

This shows that due to fewer books collection and less use of books at public libraries in Lokoja and Okene could be a reason for staff response to weekly shelving and shelf reading.

#### CONCLUSION

Shelving and shelf reading is an important task in the library, for any library to effectively deliver its services, its collections have to be organized for easy accessibility.

For shelving and shelf reading to be accurate, it requires motivated and dedicated staff. The supervisor should not be bossy and be ready to correct them when a book is wrongly shelved. The task is monotonous and boring, having some health implications like squatting for a long time, kneeling or sitting on the ground to read the bottom shelf, lift and push heavy books, look up or stand on small stool to read the top shelf.

Shelving and shelf reading is usually done by junior staff, library attendant, and library officers. To relief these staffs of status discrimination, they should be made to know that librarians have more professional duties to perform due to professional career status to make the whole system function to fulfill the library goals.

New developments should be put in place to make shelving and shelf reading less tasking.

#### RECOMMENDATIONS

To improve the attitude of staff to shelving and shelf reading, the following recommendations were drawn.

- (1) Library management should give adequate training to shelving staff before they are assigned shelves. If they are properly trained books will be properly placed at their right places and locating them will not be difficult for patrons to locate on the shelves.
- (2) Shelving staff should be compensated and rewarded for accuracy in shelving at the end of the year. This will motivate them to develop interest in the task.
- (3) Contributions of shelving staff should not be ignored when they offer advisory input to the development of shelving policy, if their contributions are acknowledged they will have sense of belonging and be dedicated to their work. Shelvers should not be looked at as the least staff in the library.

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## A ROAD MAP TOWARDS SECURE CYBER WORLD

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#### ABSTRACT

Information and communication technologies (ICTs) today have impacts on virtually every aspect of society and every corner of the world in information. The more cases of cyber-crimes over the ICTs especially through the fastest growing medium like Internet, the more voices for regulating them in whatever forms. However, cyberspace is being governed by a system of law and regulation called Cyber Law. This paper discusses cyber crime, criminal activity which targets computers and information, or which uses computers as the means of committing an offense.

#### **KEYWORDS**

security, cyber world.

#### **1. INTRODUCTION**

yber Crime may be defined as "unlawful acts wherein the computer is either a tool or target or both". The computer may be used as a tool in the following unlawful acts like- financial crimes, sale of illegal articles, pornography, online gambling, intellectual property crime, e-mail spoofing, forgery, cyber defamation, cyber stalking, unauthorized access to computer/ computer system/ computer networks, theft of information contained in the electronic form, e-mail bombing, data didling, salami attacks, logic bombs, Trojan attacks, internet time thefts, web jacking, theft of computer system, physically damaging the computer system.

This paper discusses how it is a very serious and complicated matter that cannot be taken lightly and how without a true understanding, public and private corporations can easily be mislead in the perspective of its gravity. It analyzes how rapid technological change creates a challenge to the courts and whether existing legal principles can be applied to resolve the issue.

This paper provides a brief history describing the development of new laws for the new crimes, specific cases in history concerning cyber crime and also a description of where cyber crime exists today and its impact on the individual and companies who are its victims."Just like the world of street crime the world of cyber crime needs policing tactics and policing units

#### 2. TYPES OF CYBER CRIME

#### HACKING

Modern-day graffiti has moved beyond scribbles on monuments and subway cars and now takes the form of defacing websites. This may be done for personal notoriety, the challenge, or a political message just as with traditional defacement of property. In addition to the obvious economic threats of hacking there is also real physical danger which can be caused by hacking into computer networks.

The act of gaining unauthorized access to a computer system or network and in some cases making unauthorized use of this access. Hacking is also the act by which other forms of cyber-crime (e.g., fraud, terrorism, etc.) are committed. Hacking in simple terms means illegal intrusion into a computer system without the permission of the computer owner/user.

#### DENIAL OF SERVICE ATTACK

This is an act by the criminal, who floods the band width of the victim's network or fills his e-mail box with spam mail depriving him of the services he is entitled to access or provide. Flooding a computer resource with more requests than it can handle. This causes the resource to crash thereby denying access of service to authorized users. For example attempts to "flood" a network, thereby preventing legitimate network traffic attempts to disrupt connections between two machines, thereby preventing access to a service attempts to prevent a particular individual from accessing a service attempts to disrupt service to a specific system or person[1].

#### VIRUS DISSEMINATION

A program that has capability to infect other programs and make copies of it and spread into other programs is called virus. (Eg. worms, Trojan Horse, Time bomb, Logic Bomb, Rabbit and Bacterium are the malicious soft wares)

#### SOFTWARE PIRACY

Theft of software through the illegal copying of genuine programs or the counterfeiting and distribution of products intended to pass for the original. Retail revenue losses world wide are ever increasing due to this crime. This can be done in various ways such as hard disk loading, counterfeiting, illegal downloads from the internet etc.

#### PORNOGRAPHY

Youths' exposure to pornography while online has become a hot topic with various family-oriented groups seeking to prevent the young's access to such sites. **IRC CRIME** 

Internet Relay Chat (IRC) servers have chat rooms in which people from anywhere the world can come together and chat with each other Criminals use it for meeting conspirators.

#### CREDIT CARD FRAUD

You simply have to type credit card number into www page off the vendor for online transaction If electronic transactions are not secured the credit card numbers can be stolen by the hackers who can misuse this card by impersonating the credit card owner.

#### NET EXTORTION

Copying the company's confidential data in order to extort said company for huge amount.

PHISHING

It is technique of pulling out confidential information from the bank/financial institutional account holders by deceptive means.

#### SPOOFING

Getting one computer on a network to pretend to have the identity of another computer, usually one with special access privileges, so as to obtain access to the other computers on the network.

#### CYBER DEFAMATION

The Criminal sends emails containing defamatory matters to all concerned of the victim or post the defamatory matters on a website. (Disgruntled employee may do this against boss, ex-boys friend against girl, divorced husband against wife etc)

#### THREATENING

The Criminal sends threatening email or comes in contact in chat rooms with victim. (Any one disgruntled may do this against boss, friend or official)

#### SALAMI ATTACK

In such crime criminal makes insignificant changes in such a manner that such changes would go unnoticed. Criminal makes such program that deducts small amount like 2.50 per month from the account of all the customer of the Bank and deposit the same in his account. In this case no account holder will approach the bank for such small amount.

#### **3. CYBER LAWS**

The growth of Electronic Commerce has propelled the need for vibrant and effective regulatory mechanisms which would further strengthen the legal infrastructure, so crucial to the success of Electronic Commerce. All these regulatory mechanisms and legal infrastructures come within the domain of Cyber law. Cyber law is important because it touches almost all aspects of transactions and activities on and involving the internet, World Wide Web and cyberspace. Every action and reaction in cyberspace has some legal and cyber legal perspectives. In short, cyber law is the law governing computers and the internet.

In India, cyber laws are contained in the Information Technology Act, 2000 ("IT Act") which came into force on October 17, 2000. The main purpose of the Act is to provide legal recognition to electronic commerce and to facilitate filing of electronic records with the Government.

Cyber law encompasses laws relating to –

- Cyber crimes
   Electronic and dig
- Electronic and digital signatures
- Intellectual property
- Data protection and privacy

#### 4. PREVENTION OF CYBER CRIME

Prevention is always better than cure. It is always better to take certain precaution while operating the net. Saileshkumar Zarkar, technical advisor and network security consultant to the Mumbai Police Cyber crime Cell, advocates the 5 mantra for online security: *Precaution, Prevention, Protection, Preservation and Perseverance.* A citizen should keep in mind the following things-

- to prevent cyber stalking avoid disclosing any information pertaining to oneself. This is as good as disclosing your identity to strangers in public place.
- always avoid sending any photograph online particularly to strangers and chat friends as there have been incidents of misuse of the photographs.
- always use latest and up date anti virus software to guard against virus attacks.
- always keep back up volumes so that one may not suffer data loss in case of virus contamination
- never send your credit card number to any site that is not secured, to guard against frauds.
- always keep a watch on the sites that your children are accessing to prevent any kind of harassment or depravation in children.
- it is better to use a security programme that gives control over the cookies and send information back to the site as leaving the cookies unguarded might prove fatal.
- web site owners should watch traffic and check any irregularity on the site. Putting host-based intrusion detection devices on servers may do this.
- use of firewalls may be beneficial.
- web servers running public sites must be physically separate protected from internal corporate network.
- Some Other options which are helpful in prevention of Cyber Crime are:

#### PHYSICAL SECURITY

Physical security is most sensitive component, as prevention from cyber crime Computer network should be protected from the access of unauthorized persons. ACCESS CONTROL

Access Control system is generally implemented using firewalls, which provide a centralized point from which to permit or allow access. Firewalls allow only authorized communications between the internal and external network.

#### PASSWORD

Proof of identity is an essential component to identify intruder. The use of passwords in the most common security for network system including servers, routers and firewalls. Mostly all the systems are programmed to ask for username and password for access to computer system. This provides the verification of user. Password should be charged with regular interval of time and it should be alpha numeric and should be difficult to judge.

#### FINDING THE HOLES IN NETWORK

System managers should track down the holes before the intruders do. Many networking product manufactures are not particularly aware with the information about security holes in their products. So organization should work hard to discover security holes, bugs and weaknesses and report their findings as they are confirmed.

#### USING NETWORK SCANNING PROGRAMS

There is a security administration's tool called UNIX, which is freely available on Internet. This utility scans and gathers information about any host on a network, regardless of which operating system or services the hosts were running. It checks the known vulnerabilities include bugs, security weakness, inadequate password protection and so on. There is another product available called COPS (Computer Oracle and Password System). It scans for poor passwords, dangerous file permissions, and dates of key files compared to dates of CERT security advisories.

#### USING INTRUSION ALERT PROGRAMS

As it is important to identify and close existing security holes, you also need to put some watchdogs into service. There are some intrusion programs, which identify suspicious activity and report so that necessary action is taken. They need to be operating constantly so that all unusual behaviour on network is caught immediately.

- Use anti-virus software and firewalls keep them up to date
- Keep your operating system up to date with critical security updates and patches
- Don't open emails or attachments from unknown sources
- Use hard-to-guess passwords. Don't use words found in a dictionary. Remember that password cracking tools exist
- Don't share access to your computers with strangers
- If you have a Wi-Fi network, password protect it
- Disconnect from the Internet when not in use
- Reevaluate your security on a regular basis.

#### USING ENCRYPTION

Encryption is able to transform data into a form that makes it almost impossible to read it without the right key. This key is used to allow controlled access to the information to selected people. The information can be passed on to any one but only the people with the right key are able to see the information. Encryption allows sending confidential documents by E-mail or save confidential information on laptop computers without having to fear that if someone steals it the data will become public. With the right encryption/decryption software installed, it will hook up to mail program and encrypt/decrypt messages automatically without user interaction.

#### **5. CONCLUSION**

The paper concludes that the best protection against cyber criminals will be to enact global laws that are universal by nature, regardless of where the crime originates or ends. The paper concludes that rather than stop using the Internet; the time has come to enact legislation that will provide stronger sentences to

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those who commit Internet crimes. It is not possible to eliminate cyber crime from the cyber space. It is quite possible to check them. The only possible step is to make people aware of their rights and duties (to report crime as a collective duty towards the society) and further making the application of the laws more stringent to check crime.

The criminals have changed their method and have started relying of the advanced technology, and in order to deal with them the society the legal and law enforcement authorities, the private corporations and organizations will also have to change.

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#### FDI IN RETAIL: BOON OR BANE

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#### ABSTRACT

At present India does not allow FDI in multi-brand retail but permits upto 51 percent in single brand retail and 100 percent in cash and carry wholesale trading. There is a ban on FDI in big multi-brand retail stores but there is no restriction on companies accessing the foreign equity market through the American and Global Depository Receipts. The Government of India opened up FDI in 'Single Brand Retailing' in the year 2006. This was done with a primary motive of giving a boost to organized retailing in India. However, there's another equally strong lobby that has been opposing this idea tooth and nail. They claim that it will mop away the corner shops in every locality and chuck inhabitants out of the jobs and bring unthinkable melancholy. The Government cap over FDI in retail, like in many other sectors, has been essentially a personification of the dilemma that confronts policy makers about whether opening up FDI in retail would be a boon or bane for the sector and for the stakeholders involved in it. This Research Paper makes a modest attempt of developing an insight as to what are the trends in the Indian Retail Industry and to the benefits and drawbacks of FDI in this sector. It has also focused on whether this policy will be beneficial for the Indian Economy as a whole or not.

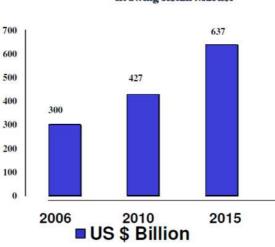
#### **KEYWORDS**

FDI, Customer Satisfaction, Retail industry, Global Retail Development Index.

#### **OVERVIEW OF RETAIL BUSINESS IN INDIA**

s a result of the liberalized policies & reform measures taken by the government since 1991, Indian Economy has achieved commendable growth rates over the last few years with many success stories in many fronts. India's growing retail boom is one such success story. With strong fundamentals rdeveloping in the economy with changes in income levels, lifestyles, taste & habits reflecting in strong consumerism with preference for superior quality and branded products, vast domestic market with a very competitive manufacturing base, India also observed a major retail boom in recent years. Being encouraged by India's growing retail boom many multinational companies also started making beeline to enter India's retail market. India has positioned itself as a promising market for retailers worldwide by virtue of its undernoted strengths:-

- India has witnessed a frenetic pace of retail development over the past five years.
- Goldman Sachs has estimated that the Indian Economic growth could actually exceed that of China by 2015.
- Retail which contributes 10% of our GDP is the largest source of employment after agriculture.
- The Indian Retail market was estimated to be US \$ 637 billion by 2015. FIG. 1



#### **Growing Retail Market**

The retail industry in India is of late often being hailed as one of the sunrise sectors in the economy. AT Kearney, the well-known international management consultancy, recently identified India as the 'second most attractive retail destination' globally from among thirty emergent markets. It has made India the cause of a good deal of excitement and the cynosure of many foreign investors' eyes with a contribution of an overwhelming 14% to the national GDP and employing 7% of the total workforce after the agriculture sector. India's growing economy with a rate of approximately 8% per year makes its retail sector highly fertile and profitable to the foreign investors of all sectors of commerce and economy, of all over the world.

Government has also taken a number of pro-active policy measures in recent times for encouraging growth of retail business. Government has also allowed gradual increase of FDI in single brand retail only.

Till recently, Government of India allowed 51% FDI in single brand retail and 100% in cash & carry only. FDI in multi brand retail has not yet been allowed. One of the major steps taken by the Government recently to encourage the organized retailing in the country was the recent decision of the cabinet to allow 51% FDI in multi brand retail and 100% in single brand retail in Nov 2011. Though the decision was hailed by a cross segment of the industries and business, it was delayed and held back for some time because of the absence of political consensus in the Government and controversies raised in the country.

The government has ultimately taken the bold decision and notified the much-awaited policy allowing 100 % FDI in single brand retail from the existing 51%. The government is yet to take final decision and notify 51% FDI in multi-brand retail.

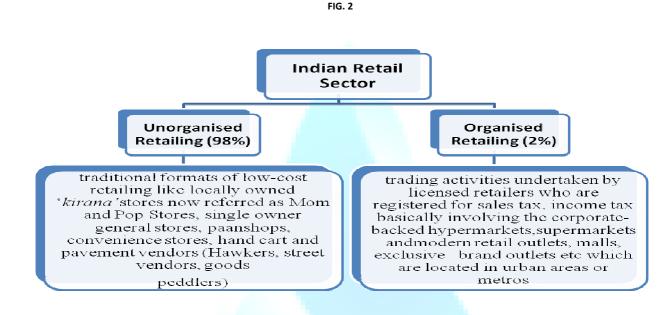
The Retail sector of India is vast, and has huge potential for growth and development, as the majority of its constituents are un-organized. The retail sector of India handles about \$250 billion every year, and is expected by veteran economists to reach to \$660 billion by the year 2015. The business in the organized retail sector of India, is to grow most and faster at the rate of 15-20% every year, and can reach the level of \$100 billion by the year 2015.

#### WHAT IS RETAILING

Retailing is the interface between the producer and the individual consumer buying for personal consumption. This excludes direct interface between the manufacturer and institutional buyers such as the government and other bulk customers. A retailer is one who stocks the producer's goods and is involved in the act of selling it to the individual consumer, at a margin of profit. As such, retailing is the last link that connects the individual consumer with the manufacturing and distribution chain.

#### **DIVISION OF RETAIL INDUSTRY**

Indian retail sector is highly fragmented with 98 per cent of its business being run by the unorganized retailers. The organized retail however is at a very nascent stage, while this has been 20 per cent, 80 per cent and 70 per cent in case of China, USA and UK respectively.



#### **REGULATION REGARDING FDI IN RETAIL**

Earlier following regulations were followed regarding FDI with regard to Retailing in India as issued by the Department of Industrial Policy and Promotion (DIPP):

- a) FDI up to 100% is allowed for cash and carry wholesale trading and export trading under the automatic route
- b) FDI up to 51 % with prior Government approval (i.e. FIPB) for retail trade of 'Single Brand' products permitted from 2006 onwards
- c) FDI was not permitted in Multi Brand Retailing in India

But now scenario has changed the Department of Industrial Policy and Promotion ("DIPP") of the Ministry of Commerce and Industry vide Press Note No. 1 (2012 Series) dated January 10, 2012 ("PN 1") has permitted :-

- 100% FDI in single brand product retail trading under the Government route i.e. with the prior approval of the Secretariat for Industrial Assistance and the Foreign Investment Promotion Board
- 51% FDI in multi-brand retail

#### The government has announced several stringent conditions which would benefit the sector as a whole

- A minimum \$100 million of investments by any foreign investor and that half of this should be in the back-end infrastructure like processing, manufacturing, distribution, warehousing, logistics, design improvement, quality control, packaging, storage, cold chains and expansion of contract farming, etc. This is expected to considerably reduce post-harvest losses.
- Retail stores can come up only in cities with a population of one million and more as per the 2011 census (only 55 towns meet the criterion).
- Retailers will have to source at least 30% of the manufactured and processed products from SMEs. This will provide the scales to encourage domestic value addition and manufacturing, thereby creating a multiplier effect for employment, technology up gradation and income generation.
- Government and its agencies will have the first right on procurement.

#### **STEP-BY-STEP MOVE**

#### 1995

World Trade Organization's General Agreement on Trade in Services, which includes both wholesale and retailing services, came into effect 1997

100% FDI in wholesale cash and carry (wholesale) allowed under the Govt. approval route

#### April 2006

FDI in cash and carry (wholesale) brought under the automatic route and up to 51% investment in single-brand retail outlet permitted

July 2010

Department of Industrial Policy and Promotion invites opinion on FDI in multi-brand retail

#### July 2011

After prolonged discussions, Committee of Secretaries recommends 51% FDI in multi-brand retail with riders

November 2011

Cabinet clears 51% FDI in multi-brand retail and hiking it to 100% in single brand

#### December 2011

Government puts on hold FDI in multi-brand retail succumbing to opposition pressure.

#### January 2012

Government notifies 100% FDI in single-brand retail and 51% FDI in multi-brand retail

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#### SINGLE BRAND RETAILING

Single brand implies that foreign companies would be allowed to sell goods sold internationally under a 'single brand', viz. Reebok, Nokia, Adidas. Retailing of goods of multiple brands even if such products were produced by the same manufacturer, would not be allowed.

FDI in 'Single brand' retail implies that a retail store with foreign investment can only sell one brand. For example, if Adidas were to obtain permission to retail its flagship brand in India, those retail outlets could only sell products under the Adidas brand and not the Reebok brand, for which separate permission is required. If granted permission, Adidas could sell products under the Reebok brand in separate outlets.

#### **MULTI BRAND RETAILING**

Multi brand retailing is the marketing of two or more similar and competing products, by the same firm under different and unrelated brands.

#### FDI - MORE OF AN OPPORTUNITY, LESS OF A THREAT !!

#### THE CRAWLING ADVANTAGES

Analysis of FDI flows in trade indicates that, over the 1990s, developed countries faced market saturation and became relatively less attractive to foreign investors. Instead, developing countries and Central and East European countries became increasingly attractive to foreign investors.

Adoption of liberalized policy for the Multi-brand retail sector can be a powerful catalyst to spur competition in the retail industry, due to the current scenario of low competition and poor productivity. Thus it will be more of a positive step as it would bring added advantage of the following:

- Foreign retailer as well as Indian partner Foreign players will get local market knowledge, while Indian companies can access global best management practices, designs and technological knowhow.
- Boost up the competition-Welcoming FDI in retail industry can prove advantageous for India as it will increase the competition in retail chain at domestic level. The competition always demands the innovation and differentiation and the out result of these two is the quality goods. As the competition increases, the competitor is compelled to serve quality of goods at competitive at reasonable price and the main beneficiary will be the local consumer as they would benefit due to the availability of more product offerings, lower prices and efficient service and can save much for their betterment which will improve their standard of living. Efficient and customized services of banks today, are a result of effective competition which increases only after the foreign players were welcomed in arena.
- Reduction in prices of the final product- Reduction in price of the final product facilitated by the extent of cut in trading margins effected to by the retail giants such as Walmart and cut in agricultural waste.
- Raising farmer income Intermediaries often flout mandi norms and their pricing lacks transparency. Wholesale regulated markets, governed by State APMC Acts, have developed a monopolistic and non-transparent character. Indian farmers realize only 1/3rd of the total price paid by the final consumer, as against 2/3rd by farmers in nations with a higher share of organized retail. Middlemen who make no contribution to the value chain are the real gainers of the current exploitative system of sourcing of farm produce. Entry of organized retailers will bring transparency into the agricultural marketing process and numerous intermediaries would be restricted. The farmers in the country will get better quotes for their products, thus boosting the primary sector of the country and the farmers would get to enjoy a bigger share of the pie.
- Inflow of investment and funds-Organized players would bring in the much needed investment that would spur the further growth of the sector. This would be particularly important for sustenance of some of the domestic retailers that don't have the resources to ride out the storm during an economic slump such as the case with Vishal, Subhiksha and Koutons, which couldn't arrange for funds to sustain their growth. Foreign investors who earlier wanted to foray only in multi-brand 'retail' and not the watered down avatar of 'wholesale cash and carry 'will now be keen to enter India. Also hike in the limit for FDI in single brand joint venture, will enable foreign investors to increase their stake in the existing ventures where the Indian joint venture partner are unable to further capitalize the ventures keeping their 49 percent stake in perspective. Thus FDI will bring in the foreign currency and hence rupee will become stronger.

#### Increased employment opportunities-

**Urban Employment** Opponents say that employment in small neighbourhood stores goes down when big retailers enter the fray. On the contrary, experience across emerging markets like China, Malaysia, Thailand, Mexico and Brazil show that overall employment opportunities increases with the entry of foreign retailers. The case in India is no different if we look at the experience of the big Indian retail chains. A typical frontend store of an organized food retail chain covering 3000 sqft of space employs 15-17 persons on an average. According to Government estimates opening the sector to FDI can easily create nearly 10 million additional employment opportunities in the country in the next three years. Four million new jobs can be created in the front end stores alone. The back end warehousing and logistics systems can create another 5-6 million opportunities. Instead of job losses, retail reforms are likely to be massive boost to Indian job availability. At least 10 million jobs will be created in the next three years in the retail sector

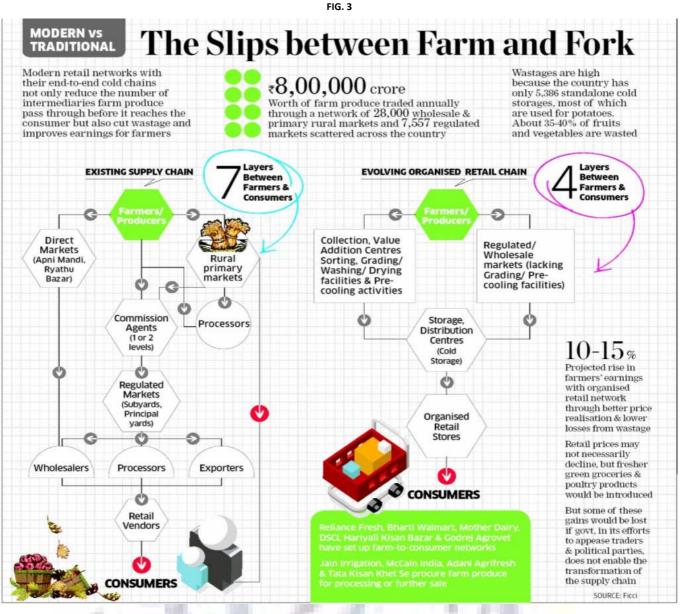
**KPMG** - one of the world's largest audit companies finds that in China, the employment in both retail and wholesale trade increased from 4% in 1992 to about 7% in 2001, post China opening its retail to foreign and domestic innovation and competition.

**Rural Employment**: -Contract Farming is the new mantra of organized retailing in India. The farmers will be benefited as they will have access to latest technology and equipment there by increasing the productivity in agriculture, promote awareness about soil quality, pesticides and fertilizer usage, grading, sorting capabilities and increasing availability of low interest credit for farmers. Hence huge investments in the retail sector will see gainful employment opportunities in agro-processing, sorting, marketing, logistics management and front-end retail.

- Growth of Infrastructure and Supply Chain Improvement-The current fragmented retailing structure is utterly inefficient both in terms of cost economics and quality control. Though India is the second largest producer of fruits and vegetables but it lacks an integrated cold-chain infrastructure and storage facilities. The highly fragmented supply chain, with numerous middlemen (handling points) in between the source of production and the retailers, results in enormous wastage, poor quality and cost escalation. Lack of an efficient back-end infrastructure (cold storage and related supply chain linkages) today results in wastage of 25-30 % of fruit and vegetables and nearly 10% of food grains produced in the country. Storage infrastructure is necessary for carrying over the agricultural produce from production periods to the rest of the year and to prevent distress sales. Allowing FDI in the multi brand retail sector can ease the situation considerably. The provision that 50% of FDI will mandatorily go towards developing backend supply chain would come really handy, as commented by Mr. Rajan Bharti Mittal, Vice Chairman and Managing Director, Bharti Enterprises. Investments which would flow in agricultural back-end and supply chain would ensure food security through curbing wastages and improving quality for future generations. Investments in cold-storage and warehousing will ease supply-side pressures that have driven inflation close to double-digit, according to an analysis by ICRA.
- Storing capacity will increase-P.Sainath wrote a series of damning articles which brought to light the fact that (an average of 15 thousand a year) a quarter of million Indian farmers have committed suicide in1995. (http://www.thehindu.com/opinion/column/Sainath/article995828.ece) as we all know the reason behind these suicides was the low market price where the farmer are unable to cover even their cost. This happened because the supply of agriculture product was increased in the local market. Excess supply of the commodities can be controlled to regulate the price of that particular commodity. And to manage the excess supply we require proper inventory and logistics management. Multinational stores are supposed to eliminate this problem. Big retail houses are able to utilize the excessive quantity as their financial structure enable them to purchase and store in high quantity and in regulating market price.
- Curb Inflation-Walmart, Carrefour, Tesco, Target, Metro, Coop are some of over 350 global retail companies with annual sales over \$1 billion. These retail companies have operated for over 30 years in numerous countries. They have not become monopolies. Competition between Walmart-like retailers has kept food prices in check. Canada credits their very low inflation rates to Walmart-effect. Anti-trust laws and state regulations, such as those in Indian legal code, have prevented food monopolies from forming anywhere in the world. Price inflation in these countries has been 5 to 10 times lower than price

inflation in India. The current consumer price inflation in Europe and the United States is less than 2%, compared to India's double digit inflation. This will reduce India's rampant inflation by reducing waste, spoilage and cutting out middlemen.

- Indirect taxes:-Increase wealth to the state government in the form of indirect taxes. With 51% FDI limit in multi-brand retailers, nearly half of any profits will remain in India. Any profits will be subject to taxes, and such taxes will reduce Indian government budget deficit.
- Improved Public Distribution System ("PDS")-There is a big question mark on the efficacy of the public procurement and PDS set-up and the bill on food subsidies is rising. In spite of such heavy subsidies, overall food based inflation has been a matter of great concern. The absence of a 'farm-to-fork' retail supply system has led to the ultimate customers paying a premium for shortages and a charge for wastages.



Reduction in Wastages- Inbuilt inefficiencies and wastage in distribution and storage account for why, according to some estimates, as much as 40% of food production doesn't reach consumers. Fifty million children in India are malnourished. Food often rots at farms, in transit, or in antiquated state-run warehouses. Cost-conscious organized retail companies will avoid waste and loss, making food available to the weakest and poorest segment of Indian society, while increasing the income of small farmers. Walmart, for example, since its arrival in Indian wholesale retail market, has successfully introduced "Direct Farm Project" at Haider Nagar near Malerkotla in Punjab, where 110 farmers have been connected with Bharti Walmart for sourcing fresh vegetables directly, thereby reducing waste and bringing fresher produce to Indian consumers.

FDI in multi-brand retail is therefore a necessary step that needs to be taken to propel further growth in the sector. This would not only prove to be fruitful for the economy as a whole but will also integrate the Indian retail sector with the global retail market.

#### THREATS OF ALLOWING FDI

Threats to the foreign Investors- Before investment approval is given, the application of foreign investors has to pass through various transfer channels which are dominated by the Bureaucrat. This is referred to as "Red Tapism". This results into delay in decision making regarding investment beginning. Delay in approvals leads to disinterested corporate giants.

Corruption is another major concern. India has a number of anticorruption cells and anti-corruption acts, but some foreign firms have identified corruption as one of the major obstacles to FDI in India. India has requirement for the number of permits and significantly longer median number of days to start a firm than almost all countries, which are included in the **Global Competitiveness Report's Database**. According to the report by **World Bank**, starting a business in *India requires 11 procedures and median time is 71days as compared to china, which has 14 procedures with a median time of 48 days*.

Create unemployment. The inflow of FDI in retailing will restrict the labour absorbing capacity of the retailing sector since the foreign retailing giant will employ labour saving machinery and know how both to add value to their service as well as to enhance their profit. This will hike the rate of both unemployment and underemployment. Like if Walmart is allowed to expand in India, few thousand jobs may be created but millions will be lost. Only 1

employee is recruited in 400 yards of a Wall-Mart's showroom". So it is estimated that on an average only 1 will be able to get job in Multi-brand stores while at least 10 people would be losing their jobs due to FDI. If foreign stores are able to set up their monopoly, then even farmers would have no other option than selling their crops to Multi-brand stores at low prices. This would exploit farmers too.

- Promoting cartels and creating monopoly-The supermarket will typically sell everything, from vegetables to the latest electronic gadgets, at extremely low prices that will most likely undercut those in nearby local stores selling similar goods. Walmart would be more likely to source its raw materials from abroad, and procure goods like vegetables and fruits directly from farmers at preordained quantities and specifications. This means a foreign company will buy big from India and abroad and be able to sell low severely undercutting the small retailers. Once a monopoly situation is created this will then turn into buying low and selling high. Walmart will lower prices to dump goods, get competition out of the way, become a monopoly, and then raise prices. The same we have seen in case of the soft drinks industry Pepsi and Coke came in and wiped out all the domestic brands.
- Give rise to cut-throat competition rather than promoting incremental business-Fragmented markets give larger options to consumers. Consolidated markets make the consumer captive. Permitting the foreign players with deep pockets lead to consolidation. International retail does not create additional retail markets, it merely displaces existing markets.
- Marginalize unorganized players (kirana shops) -The most important factor which is against allowing FDI in retail sector is that small traders will not able to compete with the big players and thus cease to exist. These traders don't have the capital and expertise to compete with big retail chains. They will not be able to buy goods at a lower price from suppliers while big players who have a strong supply chain network across the world which gives them a high bargaining power to buy goods at the lowest price. The big chains also have a capacity to sustain losses for a longer period therefore able to undercut prices of goods which will lead to desertion of small traders.
- > The move is a blatant attempt to promote interests of foreigners. The multinational companies will lure the Indian middleclass by offering cheaper rates at the start. But once they trap them, the big corporates will start fleecing by demanding prices as per their will.
- Put farmers at a disadvantage- "Once they come the farmers who now have several middlemen to sell their goods, will have only a few retail stores to sell in future. Usually that means price he gets will not be as competitive as it is today as *it would* end the economic autonomy of farmers who would be left at the mercy of multi-national companies.
- Impact on customers- This will result in a situation where consumers are not given the freshest produce. They will alter the food habits of the nation. Instead of eating fresh foods they all will be eating canned foods soon!
- Threats to current retailers-The Indian retail sector, particularly organized retail, is still underdeveloped and in a nascent stage and that, therefore the companies may not be able to survive in the ex-parte competition and may give up in front of global giants.
- Advocates of FDI in retail give China as an example, which witnessed enormous growth in retail sector after allowing FDI. But they don't inform that China allowed a gradual increase in FDI in retail it allowed an FDI of up to 26 per cent in 1992 and increased it to 49 per cent in 2002 and allowed 100 per cent in 2004. It is also not justifiable to compare India with China: China is a communist country where job market is regulated in contrast India is a democratic country where people have an option to start their own business. In China, manufacturing sector offers numerous employment opportunities but this is not the case with India. Comparison between India and China is misplaced. China is predominantly a manufacturing economy. It's the largest supplier to Wal-Mart and other international majors. It obviously cannot say no to these chains opening stores in China when it is a global supplier to them. India in contrast will lose both manufacturing and services jobs.
- Lowering of prices-some fear that ,if FDI is allowed in retailing then it would result in lowering of prices because FDI will result in good technology, supply chain etc.. If prices were lowered then it would lower the margin of unorganized players. As a result the unorganized market will be affected. This in turn will affect the employment opportunities provided by the unorganized market.

"Anand Sharma says opening FDI in multi-brand retail will create one crore jobs, but what would be the fate of 17 crore farmers and their families? What will be the fate of the 26 per cent population?"

#### INDIA'S CURRENT POSITION IN RETAILING

Retailing is the largest employer after agriculture (8% of population). India has the highest outlet density in the world around 12million outlets. Around 96 percent of the shops are less than 500 sq. ft.

TABLE 1				
Hypermarket	Department store	Entertainment	Foreign players	
* Big Bazaar	* Lifestyle	* Fame Adlabs	came through the route of franchising are Guess, Esprit, Chanel, Clarks, Mango, Aigner,	
* Giants	* Pantaloons	* Fun Republic	Bvlgari, Hugo Boss, Mark & Spencers and Tommy Hilfiger	
* Shop rite	* Piramyds	* Inox		
* Star	* Shoppers Stop	* PVR		
	* Trent			

#### INTERNATIONAL EXPERIENCE

A decade ago, China was a different story — very little organized retail, virtually no malls and a not-too-significant middle-class, with the average Chinese not exposed to foreign brands. China allowed FDI in the year 1992 when FDI was allowed WTO played an important role today, China's retail industry is worth upwards of \$580 billion with more than 14 global mega retailers setting up shop in the last ten years. China opened up its retail sector completely in December 2004.

#### EFFECT OF OPENING UP OF THE SECTOR

- \$22 billion of FDI attracted 3.6% of total FDI.
- Employment in retailing has grown at 6% p.a. since 1992 to 53 million.
- Since 1992 FDI has improved the quality of experience, choice and prices for the Chinese shoppers.
- Retail sales have grown@13.5% CAGR since FDI was permitted
- Thus there has been impressive growth in retail and wholesale trade after China approved 100% FDI in retail.
- Thailand has experienced tremendous growth in the agro-processing industry.

In Indonesia, even after several years of emergence of supermarkets, 90% of fresh food and 70% of all food is still controlled by traditional retailers.

Asian countries like Malaysia, Taiwan, Thailand and Indonesia see foreign retailers as catalysts of new technology and price reduction; and they have benefitted immensely by welcoming FDI in retail.

India too will benefit by integrating with the world, rather than isolating itself. Experience of the last decade shows small retailers have flourished in harmony with large outlets.

#### SURVEY CONDUCTED BY CII

The Confederation of Indian Industry (CII) has recently undertaken a comprehensive survey on Foreign Direct Investment (FDI) in retail on SME sector, in particular to assess the impact of the government's decision to allow 51% foreign direct investment (FDI) in multi-brand retail and 100% in single brand retail on the Indian SME sector on different aspects of growth based on some select parameters.

The CII Survey conducted during December 2011 January 2012, is based on a large sample size of 250 companies covering small, medium enterprises from different regions of the country. The survey also covers different categories of SMEs according to sales turnover including SMEs with a turnover of Rs.25 lakhs to

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1 crores, (8.3% respondents) between Rs. 1 crore to Rs 5 crore, (25% respondents) Rs 5 crore to 25 crore (37.5% respondents) and SMEs having turnover between Rs 25 crore and 100 crore and above. (14.6% respondents).

#### MAJOR FINDINGS

- 96% of the respondents from SME sector are aware of the Government's earlier decision to allow 100% FDI in single brand retail and 51% FDI in multibrand retail
- A majority of the SME companies, surveyed have supported the government's decision and about 52 percent of respondents also expect earlier and speedier implementation of 51% FDI in multi-brand retail.
- Following questions were asked in survey:

#### 1. ARE YOU IN FAVOUR OF GOVERNMENT'S DECISION TO ALLOW 51 %FDI IN RETAIL?

- 21% perceive it as threat a)
- 12.5% thinks it would have no or little impact h)
- 66.5% respondents see government decision as an opportunity for their sector. c)

#### 2. WHAT WILL BE IMPACT ON SALES?

Majority of the respondents (98.6 percent) are of the opinion that the opening of the FDI in retail will augment growth of sales of their products. Out of them

- a) Around 21 percent respondents foresee the growth of sales of their products to escalate in the excellent range of more than 20 percent.
- b) 31 percent of the respondents expect the impact on growth of sales to be in the high range of 10-20 percent
- 33 percent expect it to be in moderate range 5-10 percent. c)
- 8 percent of the respondents perceive the growth to remain in a low range (0-5) category d)
- 6 percent of the respondents feel that the decision would have a negative impact on the growth of sales of their products. e)

#### 3. WHAT WILL BE THE IMPACT ON SIZE OF INDUSTRY, BUSINESS/CAPACITY ADDITION?

- Around 22.9 percent of respondents perceived that their industry would grow by Excellent rate of more than 20 percent. a)
- 25 percent of the respondents expect the impact on the size or capacity addition to be in the high range of 10-20 percent. b)
- c) 33 percent expects the growth to be in the moderate range of 5-10 percent
- d) 22 percent perceive the growth to be in the low range (0-5 percent) category
- A significantly negligible 2 percent of the respondents feel that the decision would have a negative impact on the growth of size of the industry and e) business.

#### 4. WHAT WILL BE THE IMPACT ON HAVE A NEGATIVE IMPACT ON THE GROWTH OF SIZE OF THE INDUSTRY AND BUSINESS?

- Around 31.2 percent of respondents expect the new orders and contract to grow substantially with more than excellent rate of 20 percent) of growth. a)
- b) 27 percent of the respondents expect the impact on the new orders and contracts to be in the high range of (10-20 percent)
- 31.2 percent expect the growth of orders / contracts in respect of their products to be in the moderate range (5-10 percent) c)
- d) Around 6 percent perceive the growth to be in a low range (0-5) category
- 4 percent of the respondents feel that the decision would have a negative impact on the growth of size of the industry in terms of new orders. e)

#### 5. WHAT WILL BE IMPACT ON QUALITATIVE IMPROVEMENTS AND BRANDING OF THE PRODUCTS?

Over 56 percent of the respondents are also of the view that the government's decision of mandatory sourcing of a minimum of 30% from Indian micro and small industry will help in achieving qualitative improvements and branding of the products. This in turn will ensure SMEs in receiving a sure source of market for their products which ensuring higher prices for their products/supplies.

#### 6. WHAT WILL BE IMPACT ON SUPPLY CHAIN EFFICIENCY?

68.7 percent of the respondents are of the opinion that the opening up of the retail would lead to improvements in the supply chain efficiencies in their sector. This will in turn integrate small and medium size enterprises into the modern trade process while reaping benefits of different economies of scale and growing healthily with mutual dependence on each other. As a result, a substantial amount of knowledge and skills transfer would take place in the sector.

#### 7. WHAT WILL BE IMPACT ON EMPLOYMENT?

- around 48 percent of the respondents are of the opinion that the decision would have a positive impact on their employment a)
- 35 percent expect no substantial change in the employment in this sector with opening up of FDI in retail. b)
- Around 16 percent expect the impact on the employment to be negative in this sector. c)

#### PREREQUISITES BEFORE ALLOWING FDI IN MULTI BRAND RETAIL AND LIFTING CAP OF SINGLE BRAND RETAIL

FDI in multi-brand retailing must be dealt cautiously as it has direct impact on a large chunk of population. Left alone foreign capital will seek ways through which it can only multiply itself, and unthinking application of capital for profit, given our peculiar socio-economic conditions, may spell doom and deepen the gap between the rich and the poor. Thus the proliferation of foreign capital into multi-brand retailing needs to be anchored in such a way that it results in a winwin situation for India.

To ensure that the foreign investors make a genuine contribution to the development of infrastructure and logistics, it can be stipulated that a percentage of FDI should be spent towards building up of back end infrastructure, logistics or agro processing units. Reconstituting the poverty stricken and stagnating rural sphere into a forward moving and prosperous rural sphere can be one of the justifications for introducing FDI in multi-brand retailing.

- To actualize this goal it can be stipulated that at least 50% of the jobs in the retail outlet should be reserved for rural youth and that a certain amount of farm produce be procured from the poor farmers.
- Similarly to develop our small and medium enterprise (SME), it can also be stipulated that a minimum percentage of manufactured products be sourced from the SME sector in India.
- PDS is still in many ways the life line of the people living below the poverty line. To ensure that the system is not weakened the government may reserve the right to procure a certain amount of food grains for replenishing the buffer. To protect the interest of small retailers the government may also put in place an exclusive regulatory framework. It will ensure that the retailing giants do resort to predatory pricing or acquire monopolistic tendencies.
- Besides, the government and RBI need to evolve suitable policies to enable the retailers in the unorganized sector to expand and improve their efficiencies. If Government is allowing FDI, it must do it in a calibrated fashion because it is politically sensitive and link it (with) up some caveat from creating some back-end infrastructure

Further, to take care of the concerns of the Government before allowing 100% FDI in Single Brand Retail and Multi- Brand Retail, the following recommendations are being proposed :-

- Preparation of a legal and regulatory framework and enforcement mechanism to ensure that large retailers are not able to dislocate small retailers by unfair means.
- Extension of institutional credit, at lower rates, by public sector banks, to help improve efficiencies of small retailers; undertaking of proactive programme for assisting small retailers to upgrade themselves.
- Enactment of a National Shopping Mall Regulation Act to regulate the fiscal and social aspects of the entire retail sector.
- Formulation of a Model Central Law regarding FDI of Retail Sector.

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#### OPINION

#### EXPERT'S INTERPRETATION-ARGUMENTS IN FAVOR

- Mr B Muthuraman, President, Confederation of Indian Industry (CII) said, "The move to allow foreign direct investment in the retail sector is a significant reform and it would help bring improvement in the investment sentiment in India and entry of foreign funds in retail as envisaged by the Government would go a long way in boosting confidence."
- "Despite about 75% of India's population earning less than US\$2 a day, the Indian retailing context could appeal to foreign firms due to rising income levels of consumers in several segments; the low penetration levels of several product categories; the huge presence of the unorganized sector with regard to offerings that provide scope for penetration of branded goods; the emerging youth population that is going through a radical change of lifestyles; and, of course, the unorganized nature of retail sector itself," says S. Ramesh professor of marketing at the Indian Institute of Management Bangalore.
- "The opening up of the retail sector to foreign investment is a win-win-win scenario for everyone in the economy. It is a big win for consumers as they will have more choice, it is a win for small industries as they will have more retailers creating markets for their products and it is a win for the agri-sectors as investments in the back-end will result in better prices", said Future Group CEO Kishore Biyani.
- Anand Sharma says allowing FDI in retail will usher in huge benefits and create jobs. It will help build the supply chain, cold storages and benefit the farm sector. The government also says the move will help in efforts to reduce wastage of fruits, vegetables and other products and tame inflation. But opposition groups, traders and some allies of the government say that allowing FDI in the sector will hurt small stores and kirana shops and lead to massive iob losses.
- Thomas Varghese, CEO of Aditya Birla Retail Ltd, said he is in favour of allowing 49% FDI in multi-brand retail. "If you are allowing FDI, do it in a calibrated fashion because it is politically sensitive and link it (with) up some caveat from creating some back-end infrastructure,"
- Whereas retailers like Shoppers Stop and Reliance Retail feel with the induction of FDI they can grow at a much more faster rate than now and can cover most of the Tier 2 and Tier 3 towns of India and share the joy and savings with them too and expertise of Wal-Mart and other Multinational retailers can help in building infrastructure which has been a point of concern for all the National retailers as there are no adequate warehouse, cold storage facility and failure of logistics companies in providing highly professional services which can be improved once the foreign retailers will foray into the Indian scenario. EXPERT'S INTERPRETATION-ARGUMENTS AGAINST

Bihar chief minister Nitish Kumar says no FDI in multi-brand retail "It is our considered view that as domestic retailing is underdeveloped and it is in a nascent stage, it is important that this sector should be allowed to grow and consolidate first before any liberalization."

Also the government needs to be cautious "because at stake is the stability of vital pillars of our economy — retailing, agriculture and manufacturing". SWOT ANALYSIS

Strengths	Weaknesses
Fast growing economy.	<ul> <li>Low capital investment in retail.</li> </ul>
Young and dynamic manpower.	<ul> <li>Lack of trained and educated force.</li> </ul>
High growth rate in retail and wholesale.	Lack of competition.
<ul> <li>Presence of big industry houses can easily absorb losses.</li> </ul>	<ul> <li>More prices as compared to specialized shops.</li> </ul>
Opportunities	Threats
Employment generation in future.	Threat to local kirana shops.
Enhancement in the financial position of farmers.	<ul> <li>Less jobs in manufacturing sector.</li> </ul>
Increase in disposable income.	• Work will be done by Indians but profits will go to foreigners.
Efficiency of retailers' will increase.	
<ul> <li>Improved quality with cost reduction.</li> </ul>	

#### WAYS TO MOVE AHEAD!!!

The government needs to carry out 'Second Generation Reforms', i.e. the post liberalization period has endowed us with various achievements, but now the need of hour is to carry out an action plan to reform the policy framework in order to be more liberal taking into consideration the social, political, and economic structure. Some of the suggestions are as follows:

- A National Commission should be set up to study the problems of the retail sector which should also evolve a clear set of conditionality's on foreign retailers on procurement of farm produce, domestically manufactured merchandise and imported goods. This conditionality's must state minimum space, size and other details like construction and storage standards.
- Entry of foreign players must be gradual with social safeguards so that the effects of labor dislocation can be analyzed and policy fine tuned. Foreign players should initially be allowed only in metros.
- ۶ Present scenario says it has no or little harm in getting FDI but it should be done in a phased manner with a beginning of 10% and later to 26% and 51% looking at the situation to pump more money in the Indian Retail sector which is also said to be having cash crunch and many other clauses of procuring, staff recruitment, investments in warehouse, cold storage, infrastructure, competition and retail formats so that not only does the money comes in but also it's a win-win situation for the current national retailer as well as "mom and pop" stores who account for 70% of the retail business even after the arrival of national retailers from the corporate giants like the Tata, Reliance, Future Group and the Birla's.
- India currently lets around Rs1 trillion of fresh produce go waste and more than half of this can be brought to market if the proper farm-to-fork infrastructure is in place. The department has argued that "FDI in front-end retailing is imperative" to fund cold storage for farm produce.
- Half the jobs created by new retail chains should be reserved for rural youth.
- The Government is proposing some safeguards to ensure that non serious players and fly-by-night operators are not entertained. To this end, any player who seeks entry into the Indian market will be required to invest a minimum of Rs.500 crore. The Government is also seeking certain other investment commitments, including establishing backend cold chain outlets.
- The government should formulate "Single Window Systems" in order to reduce complexities on the part of the foreign investors as well as the bureaucratic structure.
- Although by allowing FDI in retail the biggest gainer will be the consumer who will get more choices at attractive prices, if this is achieved by rendering millions unemployed and denying them their livelihood, then such benefit are worthless. The government should realise that its prime responsibility is to create more jobs for unemployed people. It would make sense that any policy which leads to reduction in jobs should be put on hold until new sources of employment are created.
- Instead of opening the sector for FDI in urgency, the government should invest in training of small retailers and traders to guide them on the subject of storing, grading, and refrigerating of perishable goods. Institutes like ITIs and NGOs can be very helpful for implementation of such schemes. Infrastructure of local mandis also need to be upgraded and all kind of facilities and training should be provided to the management of local mandis to reduce the wastage of goods and increase efficiency.
- Proper Land Acquisition policies, socio-economic facilities to farmers & proper infrastructure for cold storage & transportation of grains should be on main agenda of Government.
- Strengthening of Public Distribution System (PDS) would allow a proper chain of demand & supply.

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#### CONCLUSION

In principle, governments should not prevent anybody, Indian or foreign, from setting up any business unless there are very good reasons to do so. Hence, unless it can be shown that FDI in retail will do more harm than good for the economy, it should be allowed.

A major argument given by opponents of FDI in retail is that there will be major job losses. Frankly, the jury is out on whether this is the case or not, with different studies claiming different findings. Big retail chains are actually going to hire a lot of people. So, in the short run, there will be a spurt in jobs. Eventually, there's likely to be a redistribution of jobs with some drying up (like that of middlemen) and some new ones sprouting up.

Fears of small shopkeepers getting displaced are vastly exaggerated. When domestic majors were allowed to invest in retail, both supermarket chains and neighbourhood pop-and-mom stores coexisted. It's not going to be any different when FDI in retail is allowed. Who, after all, will give home delivery? The local kirana. Why would anyone shun them?

The argument that farmers will suffer once global retail has developed a virtual monopoly is also weak. To begin with, it's very unlikely that global retail will ever become monopolies. Stores like Wal-Mart or Tesco are by definition few, on the outskirts of cities (to keep real estate costs low), and can't intrude into the territory of local kiranas. So, how will they gobble up the local guy? Secondly, it can't be anyone's case that farmers are getting a good deal right now. The fact is that farmers barely subsist while middlemen take the cream.

#### FDI NEITHER A BOON NOR A BANE, BUT A NECESSARY REFORM FOR INDIA'S GROWTH

It is widely believed that foreign investment is a key component in the growth process of any developing country. But it is not the only factor that could help for the sustained growth. It must be supported by well-planned micro and macroeconomic policies. These policies taken together create a viable investment climate. FDI in retail impacts the key parameters like inflation, farmers, retailers, consumers, and lastly government

- The overall impact on inflation will be seen only in the long term, at best 2-3 years down the line.
- Farmers stand to increase their earnings by 10-15% through better price realization & lower losses from wastages, subject to willingness of government to augment the necessary back-end infrastructure and remove intermediaries.
- The existing retailers will have to adapt to the new structure, and not necessarily shut shop.
- Consumers stand to gain from Retail FDI due to increased choices, better deals, goods and services due to increased competition, access to fresh agricultural produce due to direct linkages between producers and retail outlets.
- The government can attract fresh investments in the country, generate employment, gain more tax revenue since organized retailers are registered under income tax, sales tax, service tax, VAT, etc., control flow of black money in the economy and can reduce the fiscal deficit, control inflation to some extent, which would allow the RBI to reduce interest rates to some extent to boost industrial output, thus putting the India growth story back on track.

To conclude we can say that FDI in retail is a step in India's growth, and not a boon or bane to the economy. It is a necessary reform. The foreign direct investment and politically sensitive multi brand retail have been facing a lot of trouble being united and worked.

Currently the retail sector contributes close to 14% to the gross domestic product (GDP). With an increase in foreign investments and new technology advancements, the contribution from the retail sector to the GDP will improve incrementally and also create new job opportunities. Further, the development of back-end infrastructure and better farming technology would lead to an improvement in the food supply chain, thereby helping tackle inflation in the long run.

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# WORKING CAPITAL MANAGEMENT AND ITS IMPACT ON PROFITABILITY: A CASE STUDY OF DR. REDDY'S LABORATORIES LTD.

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#### ABSTRACT

Among all the problems of financial management, the problems of working capital management have probably been recognized as the most crucial one. It is because of the fact that working capital always helps a business concern to gain and strength. The objectives of the study is to examine the working capital performance of Dr Reddy's Laboratory during the period 2004-05to 2012-13. Different financial ratios and statistical techniques are also applied for measuring the working capital efficiency. Quick ratio, inventory turnover ratio, Debtors turnover ratio, gross profit ratio, and working capital turnover ratio showed satisfactory performance and current ratio, absolute liquid ratio, operating profit ratio of the company were not found to be satisfactory. The correlation coefficient between liquidity and profitability of the selected company is observed to be (-) 0.0875.

#### **KEYWORDS**

Liquidity, Profitability, Working Capital Management.

#### INTRODUCTION

orking capital means the amount of capital which is required for day to day normal operation of an organization<sup>1</sup>. It is used for running the main operating activities of the concern. for maintaining continuity in main operating activities, a firm has to invest a part of its capital in current assets. It has also to use another part of capital for paying of its current liabilities. It helps by creating income of the firm in an accounting period by means of a recurring rotation of the current assets and current liabilities. The working capital management plays an important role, for success or failure of firm in business because of its effect on firm's profitability as well as on liquidity. Working capital management is about the management of current assets and current liabilities in such a way that a satisfaction level of working capital which maximizes the profits of the firm is maintained.

The basic theme of working capital management is to provide adequate support for smooth and efficient functioning of normal day to day business operation by striking a trade between the three proportions of working capital. They are liquidity, profitability and risk.<sup>6</sup> In the present environment of cut throat competition business does not have any other alternative, than cutting the cost of its operations in order to be competitive as well as financial strong. It is in this connection that effective management of working capital plays a vital role.

Academicians are sharply divided into two schools of thought, according to one school of thought, "Working capital is not a factor of improving profitability and there may be a negative relationship between them". Where as the other schools of thought argue that "Investment in working capital plays a vital role to improve corporate profitability and unless there is a minimum level of working capital output and sales can not be maintained". They argue that inadequacy of working capital keeps fixed assets inoperative.

In fact the relationship between working capital and profitability is still a debatable issue, further more only a few studies on pharmaceutical industry in connection with examining, the relationship between working capital and profitability have been , carried out in India in the recent past. Where as the Indian pharmaceutical industry is playing a vital role in improving average life expectancy; the signing of GATT has injected a series of changes in the industry. Against this backdrop the Indian pharmaceutical industry has been chosen in the present study.

Apparently a large number of considerations play a vital role in the development of arguments and counter arguments in this regard. Against the backdrops of this academic debate an attempt has been made to evaluate the interrelationship between working capital management and profitability of Dr. Reddy's Laboratories during the period 2004-05 to 2012-13.

#### DR. REDDY'S LABORATORIES LTD- A PROFILE<sup>0</sup>

Dr. Reddy's Laboratories is one of popular pharmaceutical companies with base in more than 100 countries. The medicines of Dr. Reddy's Laboratories Limited are easily available all across the globe. Dr. Reddy's Pharmaceutical Company is very much customer friendly. It takes care of the fact that maximum people get benefited by the products of this pharmaceutical company. It commercialized various treatments so as to provide high tech treatment to the masses. It tries to meet the medical needs of the people. Though Dr. Reddy's Laboratories is located in various parts of the world, it has its headquarters in India. The subsidiaries of this company are found at various countries like US, Germany, UK, Russia, and Brazil. 16 countries have representative offices of Dr. Reddy's Laboratories Limited. 21 countries have third party distribution.

#### LITERATURE REVIEW

Peel, M.J.Wilson, N and Howorth, C.A. (2000)<sup>8</sup> in their article entitled " Late payment and credit management in the small firm sector: Some empirical evidence," published in International small journal 18(2), page 52-68, suggested that small firm tend to have a relatively high proportion of current asset, less liquidity. They also opine that small firm exihibit volatile cash flows. They found that small firms are highly reliance on short term credit. The article does not cover the large scale industry and had not highlighted specifically in pharmaceutical industry.

Howorth C and Westhead, PP (2003)<sup>5</sup> in their article on "The focus of working capital management in U.K small firms" published in Management accounting Research, Volume 14 No-2, PP- (94-111) was found that small companies stressed on working capital management to improve marginal returns. But the article had not highlighted specifically on working capital management in pharmaceutical industries. Further it had not focused on how the managerial returns could be maximized.

The article did mention the liquidity and profitability in large firms. The article failed to analyze how the profit could be maximized. Smith K, V (1973)<sup>9</sup> examined the state of the art of working capital management and identified eight major theoretical approaches taken towards the management of the working capital. He stressed the need for the development of a viable model with the duel financial goals of profitability and liquidity, and argues that only such models will assist practicing financial managers in their day to day decision making.

Padaachi, Kesseven (2006)<sup>7</sup> in his article on trend in working capital management and its impact on firm's performance: an analysis of Mauritian small manufacturing firms, published on International Review of Business Research papers, Vol.2, no 2, PP 45-58 was found that the paper and printing industry has been able to achieve high scores on the various component s of working capital. He also found that there is a positive impact of working capital management on its profitability. However the study was constrained by the sample size and the nature of the data which have well affected the result. The study did not also cover the large scale industry.

Eljelly, A. (2004)<sup>4</sup> in his article on "Liquidity and Profitability trade off: An empirical investigation in an emerging market," published in International Journal of Commerce and Management, volume 14, no- 2 PP (48-61) has elucidated that efficient liquidity management involves planning and controlling current assets and current liabilities in such a manner that eliminates the risk of inability to meet short term obligation and avoid excessive investment in these assets. He has

measured the liquidity and profitability by current ratio and cash conversion cycle (cash gap) on a sample of joint stock companies in Saudi Arabia and it was examined by using the correlation and Regression analysis. However he did not consider the other ratios of measuring liquidity and profitability of the firms. Deloof, M (2003)<sup>2</sup> in his article on "Does working capital management affects profitability of Belgian firms?" published in 'Journal of business Finance and Accounting' vol-30, No 3& 4 PP(573-587) discussed that most firms had a large amount of cash invested in working capital. Using correlation and regression test he found a significant relationship between gross operating income and the no. of days account receivables, inventories and accounts payable of Belgians firms. He also suggested that managers could create value for their shareholders by reducing the no. of days accounts receivables and inventories to a reasonable minimum. He also suggested that the negative relationship between accounts payable and profitability is consistent within the view that less profitable firm wait longer to their bills.

#### **RESEARCH GAP**

Although several studies have been studied in the area of working capital management, a few studies have been carried out in the pharmaceutical industry. More over no comprehensive indices were formed to examine the relationship between liquidity and profitability. Hence, the present study is an attempt to contribute to the existing literature.

#### **OBJECTIVES OF THE STUDY**

The main objective of the study is to examine the working capital management of the selected company. To attain the main objective, the following objectives are sought to be achieved:

- i) To examine the working capital performance of the selected company.
- ii) To study the liquidity position of the selected company.
- iii) To examine the relationship between liquidity and profitability of the selected company.

#### HYPOTHESIS

i) Working capital performance of the selected company is healthy.

ii) There is a significant negative relationship between liquidity and profitability

#### METHODOLOGY

To carry out the present study the data has been collected from the published annual reports of the company for a period of nine years from 2004-05 to 2012-13. Data have been suitably arranged, classified and tabulated as per requirement for the study. To analyze the working capital performance of the selected company, the technique of ratio analysis has been used.\*\*\*\*\* To analyze the relationship between liquidity and profitability, Pearson's correlation has been used. To test the significance of the relationship between liquidity and profitability, found out by way of correlation coefficient, t test has been applied. DATA SOURCE

The data required for the study has been collected from the published annual reports of the selected company.

STUDY PERIOD

We have chosen the study period ranging from 2004-05 to 2012-13.

#### TOOLS AND TECHNIQUES OF DATA ANALYSIS

The data collected from the published annual reports of the selected company for the eight years period have been suitably arranged, classified and tabulated as per requirement for the study.

#### WORKING CAPITAL PERFORMANCE OF THE SELECTED SAMPLE COMPANY

To analyze the working capital performance of the selected company, the technique of ratio analysis has been used. The ratios which are taken into consideration are as follows:

#### TABLE 1: DIFFERENT RATIO WHICH ARE TAKEN INTO CONSIDERATION TO ANALYZE THE WORKING CAPITAL PERFORMANCE OF THE SAMPLE COMPANY

Name of the ratios	Measures
Current ratio	Current asset/current liability
Quick ratio	(current asset- stock)/(current liability- bank over draft)
Absolute liquid ratio	(cash and bank balance+ marketable securities)/(current liabilities – bank over draft)
Inventory turnover ratio( in times)	(sale – gross profit)/ closing stock
Inventory turnover ( in days)	365/inventory turnover( in times)
Debtors turnover ratio( in time)	Net sales/ closing debtors
Working capital turnover ratio	Net sales / working capital
Debtors turnover ratio ( in days)	365/ debtors turn over in times

#### ANALYSIS OF THE LIQUIDITY POSITION BY MOTAALS COMPREHENSIVE TEST

In this test the following ratios are taken into consideration. Each of the ratios are expressed as percentage

- Inventory / current asset I)
- II) Debtors / current assets
- III) Cash & bank / current assets.

For i) the lower the ratio the more favorable is the position and ranking has been done in that order. For ii), iii), & iv) the higher the ratio, the more favorable is the position and thus ranking has been done in that order. Ultimate ranking has been done on the principle that lower the points scored the more favorable are the position and vice- versa.

#### **RELATIONSHIP BETWEEN LIQUIDITY AND PROFITABILITY**

.....(i)

To analyze the relationship between liquidity and profitability, spearman's Rank correlation has been used. For this purpose Karl Pearson's c correlation coefficient is computed as below.

r = cov(x,y)/sd(x).sd(y) .....

Where, cov(x,y) = covariance of x and y.

S.d(x)= standard deviation of x

s.d(v)=standard deviation of v

To test the significance of the relationship between liquidity and profitability, found out by way of correlation coefficient, t test has been applied.

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The t statistic is given below

$$t = \frac{r\sqrt{n-2}}{\sqrt{1-r^2}}$$
 .....(ii)

Where r = Correlation coefficient, n= No. of observations

In addition to the above simple statistical measured like mean S.D, coefficient of variation have been used in this study

#### ANALYSIS OF WORKING CAPITAL PERFORMANCE OF DR REDDY'S LABORATORIES

Table 2 shows the different ratios for measuring working capital performance. The current ratios in all the years, except in 2007, 2005 is below 2: 1 (being the standard norms). Again the average of these ratios is 1.62:1 which is also below the standard norms (2:1). It is to say that current ratios of the companies maintained standard norms neither in individual years (except in 2005 & in 2007) nor in that of average. Therefore, current ratios are not in a satisfactory level. However, the standard deviation of current ratio is 0.378. It indicated that current ratio of the different years are more or less steady as its standard deviation is very low and its coefficient of variance 23.35%.

It is observed that firms maintaining the quick ratios above its standard norms (1:1). It is to say that the firm has enough capacity to meet the short term obligation. The quick ratios of the firm range from 1.18:1 to 2.27:1. The mean value of quick ratios is 1.67 with a coefficient of variation 21.92%.

It is observed from the study that the absolute liquid ratio of the firm are ranging from 0.14 in 2005 to .62 in 2013 (standard norms being .5:1) with mean .286 and standard deviation is .142 under the period of study. The co efficient of variation is 49.48%. It is observed from the study that the firm did not maintain the standard norms for the absolute liquid ratio except in 2013.

It is observed from the table that inventory turnover (in times) lies in between 3.99 to 6.02 with a mean of 5.71 (standard norm being 5- 6 times) and standard deviation is 1.65 during the study period. The co-efficient of variation is 29.03%. Again it is observed from the table that inventory velocity lies in between 38.1 days to 74.03 days with an average of 66.59 under the study period. It is observed that the company is maintaining a satisfactory level of inventory which helps to avoid the extra cost for maintaining both the high and low level of inventory under the study period.

Net working capital turnover period of the company is 2.66 on an average with a standard deviation and co-efficient of variation 0.7349 and 27.63% respectively. It is to say that the time taken from cash invested in the business to cash recovery from the business is 137.21 days on an average. If we analyze in depth, it is observed that working capital cycle is a good one.

The gross working capital (sum of current assets) cycle period of the company is 1.50 on average with standard deviation and coefficient of variation 0.267 and 17.85% respectively.

#### TABLE 2: DISTRIBUTION OF DIFFERENT RATIOS OF WORKING CAPITAL IN DR. REDDY'S LABORATORIES, DURING 2004-05 TO 2012-13

	2005	2006	2007	2008	2009	2010	2011	2012	2013	mean	Standard Deviation	CV (%)
CR	2.02	1.21	2.42	1.74	1.64	1.46	1.13	1.48	1.48	1.62	.378	23.35
QR	2.27	1.74	2.44	1.55	1.42	1.18	1.28	1.58	1.60	1.67	.366	21.92
ALR	.14	.38	.37	.24	.16	.19	.24	.24	.62	.286	.142	49.48
ITR (time)	6.03	3.99	9.58	4.93	5.63	5.69	5.01	5.44	5.51	5.71	1.65	29.03
ITR (days)	60.53	91.47	38.1	74.03	64.83	64.14	72.85	67.10	66.24	-	-	-
DTR (time)		5.30	10.12	6.95	6.58	5.37	5.23	4.66	4.14	5.37	2.52	47.028
DT (days)		68.86	36.06	52.52	55.47	67.97	69.79	78.33	88.16	-	-	-
WCT (time)	1.49	1.58	2.62	2.80	3.30	3.96	3.09	2.58	2.54	2.66	.735	27.63
WCT (days)	244016	231.44	139.36	130.25	110.61	92.12	118.12	141.72	143.62	-	-	-
CAT (time)	1.92	1.30	1.95	1.64	1.32	1.55	1.37	1.34	1.14	1.50	.267	17.85

Note: CR = Current ratio, QR = Quick ratio, ALR = Absolute liquid ratio, IR = Inventory turnover ratio, DT = Debtors turnover Ratio, WCT = Working capital turnover, CAT= Current asset turnover, CV = Co- efficient of variation

#### Source: Annual Reports of the Company

From **Table 3**, it is shown the percentage of stock out of total current assets hold by the company during the study period. Higher level of inventory holding indicates the lower level of liquidity position. Considering this, the liquidity rank has been done. In case of debtors to current assets, the rank has been scored by keeping in mind that higher amount of debtors out of its total current assets is the indicator of better liquidity position and vice-versa. The rank of debtors to current assets is 1 in 2009 as it is highest and so on.

The same consideration has been applied in case of calculating rank of cash & bank to current assets and loans & advances to current assets. It is necessary to mention that fixed deposits have been included in cash & bank balance.

After getting individual rank all the ranks on particular year has been added to get the total rank and it is found that total rank in 2013, is the lowest and it got ultimate rank 1. It is indicating that the company under the study period recognizes the most sound liquidity position in the year 2013 followed by 2006, 2005, 2007 and 2011 places the 3<sup>rd</sup>, 4<sup>th</sup> and 5<sup>th</sup> position respectively.

It is observed from the total rank that the trend of liquidity position is more or less steady and it is ranging from 16 to 23.

#### TABLE 3: LIQUIDITY RANKING ANALYSIS OF DR. REDDYS LABORATORYS BY MOTAAL'S TEST

	nventory to CA %)	rs to c CA	ہ bank to CA	& advances (%)	Liquidity rank			rank		
	)	Debtors to c (%)	Cash & (%)	Loans to CA (	1	2	3	4	Total rank	Ultimate rank
	1	2	3	4						
2005	18.08	19.58	47.96	14.38	1	8	2	7	18	3
2006	25.01	19.16	36.76	19.06	3	9	3	2	17	2
2007	19.87	20.78	49.51	9.83	2	7	1	9	19	4
2008	36.09	21.36	24.41	18.14	9	6	4	4	23	7
2009	33.82	36.78	14.35	15.05	7	1	8	6	22	6
2010	34.44	29.83	16.97	18.75	8	5	7	3	23	7
2011	32.82	33.86	11.80	21.52	6	4	9	1	20	5
2012	27.86	36.37	23.03	12.7 <mark>4</mark>	5	3	6	8	22	6
2013	25.03	36.66	23.25	15.06	4	2	5	5	16	1

Note: CA = current assets

#### Source: Computed from Annual Reports of the Company

Table 4 shows the different profitability ratios with mean, standard deviation and coefficient of variation under the study period. On analyzing operating profit margin it is observed that the operating profit of the company during the last five years of the study period is satisfactory as it is within the range of the standard norms, being 20% to 25%. The average operating profit margin is also satisfactory with standard deviation and coefficient of variation 5.16 and 26.01% respectively.

Gross profit margin of the company are lying between 1.76 to 20.22 with mean 13.64 and standard deviation and coefficient of variation of 5.77 and 42.31% respectively. The ratios are much below than the standard norms (25% to 30%). Therefore it is to say that the gross profit ratio of the company is not satisfactory under the study period.

The net profits of the company during the last four years are more or less stable and lying in between 12% to 13%. It is highly fluctuating and ranging between -13.19% to 14.61% for the entire study period with standard deviation of 8.257 and coefficient of variation of 119.72%.

Returns on capital employed during the last five years of the study period are satisfactory. It lies between 3.42% and 24.32% under the study period with mean of 16.184, standard deviation of 7.69 and coefficient of variation of 47.52%. It is observed from the study that returns on capital employed of the company reached 24.32% (being the maximum) in the year 2013.

#### TABLE 4: PROFITABILITY ANALYSIS OF DR. REDDY'S LABORATORIES

	2005	2006	2007	2008	2009	2010	2011	2012	2013	Mean	s.d	CV (%)
Operating profit margin (%)	8.58	14.82	26.02	17.85	21.88	20.73	20.49	25.44	22.98	19.86	5.166	26.01
Gross profit ratio (%)	1.76	7.98	20.22	9.79	14.65	14.82	15.07	20.13	18.33	13.64	5.77	42.31
Net profit ratio (%)	1.74	6.00	14.61	8.58	-13.19	4.96	13.38	13.26	12.74	6.897	8.257	119.72
Return on capital employed (%)	3.42	4.87	21.21	9.04	19.12	21.10	18.64	23.94	24.32	16.18	7.69	47.52

Note: s.d = standard deviation, CV = Co- efficient of variation

Source: Annual Reports of the Company

#### ESTIMATED RELATIONSHIP BETWEEN LIQUIDITY AND PROFITABILITY

To know the relation between liquidity and profitability, only two ratios are taken. Current ratio is taken as the indicator of overall liquidity and return on capital employed is taken as the principal indicator of profitability. Karl Pearson's correlation coefficient has been calculated to know the relationship between the two variables whether exist or not.

To test the significance of the relationship between liquidity and profitability, work out by way of correlation coefficient, 't'-test has been applied. The t- statistic is as follows:

$$t = \frac{r\sqrt{n-2}}{\sqrt{1-r^2}}$$

Where

r = correlation coefficient

n = number of observations

The correlation coefficient between liquidity and profitability of the selected company is observed to be -0.0875 under the study period. The calculated value of t = .23. At 5% level of significance the table value of t (2 tailed) = 3.18. Therefore, the null hypothesis is accepted and concludes that there is an inverse relationship between liquidity and profitability under the study period.

#### LIMITATION OF THE STUDY

The study has been conducted over a limited period of nine years only. It is mainly based on secondary data and thus it carries all the limitations pertaining to the data collected from secondary sources. The study is based on a single company only

#### **FINDINGS AND CONCLUSIONS**

- Current ratios (except in 2005 and in 2007) are below the standard norm. Therefore, it can be said that working capital performance in respect of current i) ratio is not satisfactory.
- ii) The performances of quick ratios are above the standard norms always under the study period.
- Cash holding position of the company is not satisfactory except in 2013 (comparing with the standard norms) under the study period. iii)
- iv) Inventory holding position is much better
- The company's credit policy is found to be liberal under the study period. V)
- The company is in a position to recovery its working capital 2.66 times on an average in a year under the study period which is a good sign for the vi) company.
- Company's liquidity position in the year 2013 is very good. The overall liquidity positions are stable under the study period. vii)

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- viii) The company is maintaining a good return in terms of operation profit margin ratio and return on capital employed during the last five years of the study period.
- ix) Net profit margin of the company is also satisfactory.
- x) The liquidity position by Motaal's test of the selected company is ranked as 2013, 2006, 2005, 2007, 20011, 2012, 2009, 2008, 2010 respectively.
- xi) An inverse relationship between liquidity and profitability is observed for the selected company during the study period.

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10. www.drreddys.com



# QUALITATIVE ANALYSIS OF FDI IN INDIAN RETAIL INDUSTRY

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#### ABSTRACT

The Indian Retail Industry is the fifth largest in the world. Comprising of organized and unorganized sectors, Indian retail industry is one of the fastest growing industries in India, especially over the last few years. Though initially the retail industry in India was mostly unorganised, however with the change of taste and preferences of consumers, the Industry is getting more popular these days and getting organized as well. The Indian retail market has shown greater acceptance for organized retailing formats. Domestic retailing is emerging from a multitude of unorganized family-owned businesses to organized modern retailing. Rapid urbanization, changes in shopping pattern, demographic dividend and pro-active measures by the Government are abetting the growth of the retail sector in India. By taking into account the importance of growing Indian retail industry an attempt has been made to analyze the reforms (Foreign Direct Investment) introduced by Government of India in the Indian Retail Industry, whether they are boom or bane for the country.

#### **KEYWORDS**

Retail Industry, Organized Retail, Unorganized Retail, Foreign Direct Investment.

#### INTRODUCTION

Indian retail industry is one of the rising sectors with huge potential and capability. Indian retail industry is the second largest employer after agriculture, employing around 35 million people with wholesale trade generating additional 5.5 million employments more. Retail sector in India accounts for around 30 to 35 pc of its GDP. Indian retail market is dividing into two parts:



The Indian Retail industry has grown at a CAGR of 14.6% for the period FY07-12(p). The said growth can be attributed to the growing Indian economy, increase in Private Final Consumption Expenditure (PFCE) and the change in consumption pattern of the Indian populace. The changing consumption pattern, in turn, primarily remains driven by higher standard of living, growing middle-class population, greater proportion of working women, increase in penetration levels of organized retail etc. The Indian retail market is currently estimated at 396 USD million. Food segment contributes the largest part of total value of retail market, followed by fashion, leisure and entertainment and fashion accessories and so on. Indian retail market segment is as follows:-

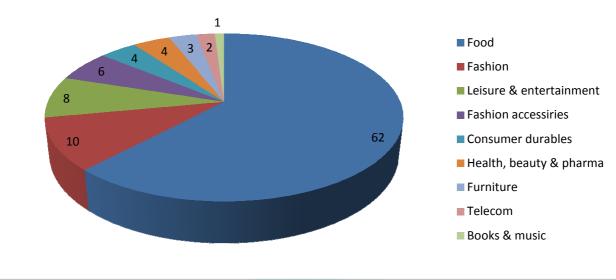


CHART 1: SHARE OF VARIOUS SECTORS OF INDIAN RETAIL INDUSTRY

Source: Big Strategic Management Consultants, Highlight of Indian retail industry, 2012

The share of organized retail trade is project to grow @ 40 pc. Some of the factors contributing towards this expected growth are:

- 1. India' total population growing @ 13 pc and this hike in population is bound to show repercussion in various sectors.
- 2. Total retail spending is expected to be double in next 5 years.
- 3. Customers mindset is shifting from low price to better convenience, high value and moreover quality oriented products.
- 4. Emergence of concepts such as quick and easy loans, EMIs, credit cards loans has made purchasing possible for Indian consumers.
- 5. Constructions of malls are contributing towards the growth of the organized retail business.
- 6. Youth of India is getting high brand conscious, 60 pc of India's population is below the age of 30 leading to popularization of brands and products.

#### TABLE 1: LANDSCAPE OF INDIAN RETAIL INDUSTRY

Factors	2001	2012	2021
GDP(USD bn)	450	1958	3310
Estimated merchandise consumption (retail market opportunity)	120	490	810
Urban consumption(% and in absolute Numbers)	40%(UDS48 bn)	48% (USD 235 bn)	60% (USd 455 bn)
Rural Consumption(% and in absolute Numbers)	60% (USD 72 bn)	52% (USD 255 bn)	44% (USD 355 bn)
Organized Retail	4%	7%	20%
Organized Retail in (USD Bn)	5	34	162
No. of Direct Employees in Organized Retail (Mn)	0.1	0.7	3.3

Source: Technopark white paper on FDI in Retail

India Has witnessed sustained growth in retail in the last decade 92002-2012). Inspite of economic uncertainty and slowdown, the retail will continue to grow, due to growth in GDP of country. Moreover, urban India's share in retail will grow 48 pc (2012) to nearly 56 pc by 2021. Moreover share of organized retail will grow 7 pc to 20 pc by 2021.

During the last 25 years, private investments both from Indian and international players has been inserted. Inspite of these efforts, Indian organized retailers have managed to have 7 pc share only, but it is expected to grow by 20 pc (2021).

#### **RESEARCH OBJECTIVE & METHODOLOGY**

In this paper an attempt has been made to analyze that whether FDI in retail should be there or not and to achieve that objective opinion of experts and researchers have been collected from various journals, magazines, books, newspapers, online journals etc. as the paper is totally opinion based.

#### **REVIEW OF LITERATURE**

Sikri and Wadhwa studied about the growth and challenges faced by Indian retail industry. In their study author projected that Indian retail industry will be very big and factor driven for this growth are totally external. Study concluded that even though Indian retail industry has lot of potential, but still it has to reach at par with international standards, it has a long way to go.

Pandey and Kumar made a critical analysis of Indian retail sector by making an analysis of top 7 companies in terms of sales and which are listed in BSE and NSE. Study concluded that organized retail is at growing stage and it will get strong position in the coming era.

Akther and Equbal, made an effort to study the one of the important and emerging part of retail sector i.e. organized retailing in India. In this study authors tried to analyze finer strategic perspective for the growth of retail sector in India and also suggest measures, so that they can incorporate these strategies quantitatively and qualitatively. At the end study concluded that many players have entered the industry, but they all have not tasted success, but they are gradually inching their way to success.

Rohilla and bansal studied one of the sensitive topic i.e. FDI in Indian Retail. Authors put some light on both positive and negative aspect of FDI in India. Being a debatable issues, author have given the references of some other countries like China, Thailand, Russia etc. which are developing counties like India. Study suggested that there are some issues which needed to be resolved before FDI can be allowed in India.

Chari and Raghavan discuss the opening up of Indian retail bazaar for FDI by studying challenges and opportunities. Authors argue the potential benefits which FDI is going to generate, but on the other hand also discussed the cast Indian retail industry have to bear. Research concludes that by checking on the benefits, it is now the turn of retail and FDI should be allowed in this sector.

As per AT Kearney's 7<sup>th</sup> Annual Globe Retail Development Index Report Indian retail industry is 5<sup>th</sup> largest retail destination and 2<sup>nd</sup> most attractive market for investment in the world after Vietnam. Some of the major reforms announced by Government of India with regard to FDI in retail sector in India are:

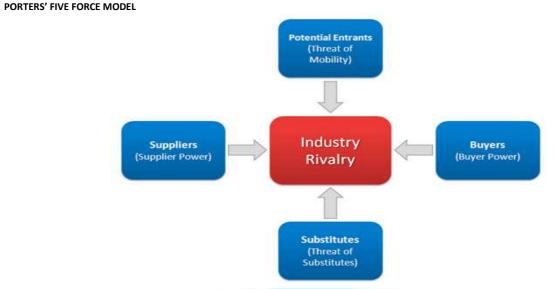
- 1. India will allow FDI up to 51 pc in Multi Brand retail.
- 2. Single Brand Retailer can own 100 pc of their Indian Stores.

3. The retailers with FDI share will have to get their 30 pc of total goods from small and medium sized suppliers from India.

So to find out whether these reforms are boom or bane for economy. Some of the qualitative tools have been used which are as under:-

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- a) Threat of New Entrants: 90 pc of Indian retail market composed of small, uncomputerized and family run store shops. Now there are some symptoms that Indian government is trying to change it and that is by opening up of its economy to FDI in Retail market. It has opened up market for foreign investors in single brand retail and multi brand retail in a phased manner will lead to more inflows of foreign investors in India. So threat of new entrants is high.
- b) **Powers of Suppliers**: At present, customers are getting quality conscious and if they are paying price, they should get quality products and if supplier provide quality products then he will be able to survive unless otherwise he will have to shut his shop. So supplier tends to have little power. E.g. Walmart which pays attention to quality so contract with big retailer like walmart can make or break a small supplier.
- c) Power of Buyers: Here customers will have more bargaining power in unorganized sector as compare to organized sector because it's very difficult to bargain in retail chain store like big bazaar as compare to kirana shop. Because in organized sector if customers demand product then his focus will be on quality
- d) Availability of Substitutes: Retail stores do not deal with single products they have to deal with number of products in a same product line therefore different stores are selling same products so threat of substitute is higher.
- e) **Competitive Rivalry**: Retailers have to face cut throat competition whether they are in organized or unorganized sector. To overcome this, latest practice adopted by these retail stores is giving membership, special gifts, bonus and moreover concentrating on customers' loyalty.

From the above analysis it is clear that there will be more threat of new entrants, power of suppliers will be less, and buyers will rule the market and more quality conscious, due to availability of substitutes. Sellers will have to provide goods as per the demands of customers, due to cut throat competition. Healthy competition benefits customers by restraining prices and encouraging companies to innovate to provide better quality for the price paid. Because it is rightly said 'Competition is not an end itself'

The recent initiatives of Government for opening up of retail sector for Foreign Direct Investment become a very sensitive issue. Arguments are there on both sides. It is a well -known fact that FDI can have some positive results on the economy not in short-term but in the long-term.

#### ARGUMENTS AGAINST THE RETAIL SECTOR REFORMS

- a) Massive job loss will be there because independent stores will get closed. With the emergence of Walmart only thousands of jobs will be created and millions will be lost.
- b) As we have seen in the case of Pepsi and Coke, they came and wipeout the entire domestic brands, same will be the case of retail outlet e.g. When Walmart will lower their price, then they will be able to create monopoly and then rises prices.
- c) India is self sufficient country it's not depend on foreign retailers it can meet its demand by its own so there is no need to have foreign retailers.
- d) There will be drainage of money from India, that will be generated here but profits will go to foreigners.
- e) They will enter like East India Company and then took over politically.

#### ARGUMENTS IN SUPPORT OF THE RETAIL SECTOR REFORMS

- 1. If a company like Walmart will come into India and spread in the same trend as of USA, then Walmart only will be able to create 5.6 Million jobs (India's' population in 1200 million, USA population is 300 million and Walmart creating 1.4 million and in the same proportion it will create 5.6 million jobs in India). Instead of job loss, retailers reforms are likely to be massive boost to Indian job availability.
- 2. Indian economy need trillions of dollars to built its infrastructure, hospitals, education and housing etc. to meet its need of surging population. As we all know, Indian economy is already operating on budget deficit so to meet their demand global investment through FDI is needed. Beyond capital, Indian retail industry needs knowledge and global integration Global integration can potentially open its export market for Indian farmers and manufactures.
- 3. Companies like Walmart Carrefour, Metro, and Target are some of the leading retail companies who are operating for over 30 years in numerous countries and they have not created monopoly. Instead they have helped in reducing inflation by having price check over it.
- 4. Some of the critics are saying if we allow foreign investors, then history will repeat itself like East India Company, but toady we are living in 21<sup>st</sup> century as a largest democratic country. Global awareness and media were not there in 18<sup>th</sup> century as we have in 21<sup>st</sup> century. So India rather than isolating itself should enjoy the benefits by having integration with the world as countries like China, Malaysia, Thailand etc are doing.
- 5. No doubt India has become self sufficient in food production, but it is of no use if that food does not reached to the consumers, this is due to in built inefficiencies in our food distribution system. If we have cost conscious organized retail stores, then we can reduce food wastage while increasing farmers' income.E.g walmart since its arrival has introduced "Direct Farm project" at Haider nagar near Malerkotla in Punjab where 110 farmers have been connected with Bharti Walmart for sourcing fresh Vegetables directly which leads to less wastage and direct income to farmers.

The supporters of FDI in retail trade argue that it brings benefits to consumers in term of price reduction, increased and improved selection base, high quality technique of the foreign players in the market. Further it can increase the domestic consumption level. Those who oppose the FDI in retail trade argue that the FDI brings the modern retailing culture and thus displace the labor up to great extent and destroy the traditional retail sector. Unless we are able to provide ample jobs in the manufacturing sector we should not think of a policy which results in elimination of jobs in the unorganized retail sector. In India the primary task of the Government is to provide livelihood to the mass and not create so called efficiency of scale by creating redundancies. As per present regulations, no FDI is permitted in retail trade in India Thus from the above contrasting views of critics and supporters; and also with reference to Industry analysis using Porter's five force model, it can be inferred that opening of the Indian retail sector will advance the welfare of nation as a whole.

# 2. SWOT ANALYSIS

- A. STRENGTHS
- Major contribution to GDP: The retail sector in India is hovering around 33-35% of GDP as compared to around 20% in USA.

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- **High Growth Rate**: The retail sector in India enjoys an extremely high growth rate of approximately 46%.
- High Potential: Since the organized portion of retail sector is only 2-3%, thereby creating lot of potential for future players.
- High Employment Generator: The retail sector employs 7% of work force in India, which is right now limited to unorganized sector only. Once the reforms get implemented this percentage is likely to increase substantially.
- B. WEAKNESSES (LIMITATION)
- Lack of Competitors: AT Kearney's study on global retailing trends found that India is least competitive as well as least saturated markets of the world.
- **Highly Unorganized**: The unorganized portion of retail sector is only 97% as compared to US, which is only 20%.
- Low Productivity: Mckinsey study claims retail productivity in India is very low as compared to its international peers.
- Shortage of Talented Professionals: The retail trade business in India is not considered as reputed profession and is mostly carried out by the family members (self-employment and captive business). Such people are not academically and professionally qualified.
- No Industry 'status, hence creating financial issues for retailers: The retail sector in India does not enjoy industry status in India, thereby making difficult for retailers to raise funds.
- C. OPPORTUNITIES (BENEFITS)
- There will be more organization in the sector: Organized retail will need more workers.
- Healthy Competition will be boosted and there will be check on the prices (inflation):Retail giants such as Walmart, Carrefour, Tesco, Target and other global retail companies already have operations in other countries for over 30 years. Until now, they have not at all become monopolies rather they have managed to keep a check on the food inflation through their healthy competitive practices.
- Create Transparency in the system: The intermediaries operating as per mandi norms do not have transparency in their pricing. According to some of the reports, an average Indian farmer realizes only one-third of the price, which the final consumer pays.
- Intermediaries and Mandi System will be Evicted, Hence Directly Benefiting the Farmers and Producers: the prices of commodities will automatically be checked. For example, according to Business Standard, Walmart has introduced —Direct Farm Project at Haider Nagar in Punjab, where 110 farmers have been connected with Bharti Walmart for sourcing fresh vegetables directly.
- Quality Control and Control over Leakage and Wastage: Due to organization of the sector, 40% of the production does not reach the ultimate consumer. According to the news in Times of India, 42% of the children below the age group of 5 are malnourished and Prime Minister Dr.Manmohan Singh has termed it as National Shame. Food often gets rot in farm, in transit and in state-run warehouses. Cost conscious and highly competitive retailers will try to avoid these wastages and losses and it will be their Endeavour to make quality products available at lowest prices, hence making food available to weakest and poorest segment of Indian society.
- Heavy Flow of Capital will Help in Building up the Infrastructure for the Growing Population: India is already operating in budgetary deficit. Neither the government of India nor domestic investors are capable of satisfying the growing needs (school, hospitals, transport etc.) of the ever growing Indian population. Hence foreign capital inflow will enable us to create a heavy capital base.
- D. THREATS
- Current Independent Stores will be Compelled to Close: This will lead to massive job loss as most of the operations in big stores like Walmart are highly automated requiring fewer work forces.
- Big Players can Knock-out Competition: They can afford to lower prices in initial stages, become monopoly and then raise price later.
- India does not Need Foreign Retailers: As they can satisfy the whole domestic demand.
- Remember East India Company it entered India as trader and then took over politically

By utilizing our strengths and taking the benefits of opportunities available with us, we can overcome our weakness and threats. Moreover the threats created are only political. For that we need to balance opportunities and prospects associated with these reforms, it will surely benefit our economy and public at large once implemented. So for the period we are delaying the implementation of these reforms, for that government will have to bear the cost. With the implementation of this policy all stakeholders will benefit whether it is consumer through quality products at low price, farmers through more transparency in trading or Indian corporate with 49% profit share remaining with Indian companies only.

#### CONCLUSION

The Retail Industry in India has come forth as one of the most dynamic and fast paced industries with several players entering the market. There is very huge potential for the growth of organized Retailing in India. By following some of the strategies it can rise tremendously and can reach each and every nock and corner In the above mention viewpoint, it will be good for Indian economy to implement these reforms whole heartedly and at large. These will definitely benefit our economy. As per my viewpoint, modern retail is the need of the hour to have proper distribution and for overcoming inefficiencies in the system. But situation will get worse when it reached a point, where duopoly emerged and everything goes against the public interest. So to overcome all these problems, there is need to have effective and properly implemented competition policies and laws to have a check on anticompetitive policies ad to evaluate that to which extent retail power is used unfairly.

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## e-COMMERCE IN PUBLIC SECTOR BANKS

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#### ABSTRACT

Today it can be observed that the financial liberalization and technology revolution have allowed the developments of new and more efficient delivery and processing channels as well as more innovative products and services in banking industry. Banking institutions are facing competition not only from each other but also from non-bank financial intermediaries as well as from alternative sources of financing. As financial institutions increasingly offer online banking services to their customers, they must face issues of consumer confidence in the Internet. Consumers are concerned about identity theft and wonder if the Internet is safe for online banking. Therefore, building the best controls to prevent fraud and protect customers is of critical importance. This paper investigates the extent of safety measures followed by customers while e-banking, analyses the awareness of the customers regarding the various online banking scams and suggests safety measures to be followed while e-banking. Primary data was collected from 50 respondents through a structured questionnaire. Secondary data was used to know about the various electronic e-banking products and services and various online scams. It is anticipated that the findings would be useful to the banking sector to frame proper policies in the area of e-banking.

#### **KEYWORDS**

E-banking, online scams, safety measures.

#### INTRODUCTION

Indian banking is the lifeline of the nation and its people. Banking has helped in developing the vital sectors of the economy and usher in a new dawn of progress on the Indian horizon. The sector has translated the hopes and aspirations of millions of people into reality. But to do so it has to control miles and miles of difficult terrain, suffer the indignities of foreign rule and the pangs of partition. Today, Indian banks can confidently compete with modern banks of the world. As the banking institutions expand and become increasingly complex under the impact of deregulation, innovation and technological up gradation, it is crucial to maintain balance between efficiency and stability. During the last 30 years since nationalization tremendous changes have taken in the financial markets as well as in the banking industry due to financial sector reforms. The banks have shed their traditional functions and have been innovating, improving and coming out with new types of services to cater to the emerging needs of their customers. Banks have been given greater freedom to frame their own policies. Rapid advancement of technology has contributed to significant reduction in transaction costs, facilitated greater diversification of portfolio and improvements in credit delivery of banks. During the past one decade, one of the sectors which underwent visible sea-change through innovative strategies is undoubtedly the banking sector. The sector has been growing at a fast pace in India and is challenged with several aspects like new regulations from time to time, changing customer needs and perceptions, changing technology and changing operations. Technology has been playing a crucial role in the treemdous improvement of banking services and operations and data processing have spurred financial innovations that have altered bank products and services and production processes.

#### STATEMENT OF THE PROBLEM

While the e-banking offers enormous advantages and opportunities, it also presents various security risks. With this in mind, banks take extensive steps to protect the information transmitted and processing when banking online. This includes for example, ensuring that confidential data sent over the internet cannot be accessed or modified by unauthorized third parties. But the banks normally have no influence over the systems used by their customers. The choice is entirely up to them. Moreover, the system selected – a PC connected to the internet, for example – will usually be used for a number of other applications as well. The systems used by online banking customers are therefore exposed to risks beyond the banks control. For this reason, the banks cannot assume liability for them. To ensure that the bank's security measures cannot be undermined by manipulation, it is essential that customers, too, follow safety measures. Hence, as it is necessary to analyze the extent of safety measures followed by customers while e-banking, this paper focuses on the precautions to be taken by e-banking customers, their awareness about various e-banking scams and suggests measures for a secured e-banking.

#### **OBJECTIVES OF THE STUDY**

- 1. To study the various services available through online banking
- 2. To study the various types of online banking scams
- 3. To study the extent of precautions followed by customers while e-banking
- 4. To suggest safety measures while e-banking

#### SIGNIFICANCE OF THE STUDY

A high level of perceived risk is considered to be a barrier to propagation of new innovations in e-banking. Influenced by the imagination – capturing stories of hackers, customers fear that an unauthorized party will gain access to their online account and serious financial implications will follow. "Security" is the biggest single concern for customers when faced with the decision to use internet banking. Security has always been an issue, but its scope has changed from mere doubts about the privacy of personal information to worries of financial loss. Hence, this study measures the extent of safety measures followed by e-banking customers, educates the e-banking customers regarding the various online scams and suggests the safety measures to be followed while e-banking. The study will help bankers to know the safety measures followed by their customers which will enable them to take steps to educate their customers on safety measures while e-banking. The suggestions provided will help the customers to bank safely.

#### SCOPE OF THE STUDY

This study is premised on the current safety measures followed by customers in e-banking residing in Kalyan City. Therefore, responses of selected respondents are sought in providing answers to the research questions. The focus of the research in terms of study groups includes businessmen, doctors, academicians, bank officials, housewives and engineers who used e-banking facility in Kalyan City. Responses from the study groups were analyzed to measure the extent of safety measures followed by them and suggest them with the required safety measures while e-banking.

#### **RESEARCH DESIGN**

Survey research design and secondary data was used in this study. This research strategy was considered necessary because of its ability to view comprehensively and in detail the major questions raised in the study.

#### STUDY POPULATION

A population is the entire set of relevant units of analysis. Thus, businessmen, doctors, academicians, bank officials, housewives and engineers who used ebanking facility in Kalyan City represent the population of the study.

#### SAMPLING FRAME AND SAMPLING TECHNIQUE

Customers using e-banking facility in Kalyan City, 50 respondents consisting of 4 businessmen, 3 doctors, 20 academicians, 8 bank officials, 10 housewives and 5 engineers who used e-banking facility were drawn randomly where the respondents were approached for participation in the study.

#### DATA TYPE AND DATA COLLECTION INSTRUMENT

Primary data and secondary data were collected for the study. The primary data was obtained from the targeted respondents through a carefully constructed questionnaire. The questionnaire was designed to capture the demographic data of the respondents and the extent of safety measures followed by the respondents while e-banking. The questionnaire was constructed using a three- point Likert scale. Secondary data was collected to study the various e-banking products and services, facilities offered in e-banking and various e-banking online scams.

#### METHOD OF DATA ANALYSIS

The data collected were analyzed using percentages.

#### TYPES OF PRODUCTS AND SERVICES

- Total Branch Automation: It speeds up bank transactions and reduces error, more customer friendly and flexible and paperless transactions. 1.
- 2. Any Branch Banking: It is a facility for customers to operate their account from any of the same banks network branch. Facilities available are cash withdrawal and cash deposits, account statement, facility to issue multi-city cheques, fund transfer, balance enquiry, purchase of demand drafts, pay order and repayment of loan account.
- Demat services: It offers secure and convenient way to track your securities and investment over a period of time without the hassle of handling physical 3. documents. It provides facility of online trading.
- Microfinance: Microfinance refers to a movement that envisions a world in which low income households have permanent access to a range of high 4. quality financial services to finance their income producing activities, build assets, stabilize consumption and protect against risks.
- Plastic money: Plastic money are an alternative to the cash or standard money which is convenient to carry and is a generic term for all types of bank 5. cards, debit cards, credit cards, smart cards.
- Mobile Banking: In mobile banking, the account can travel with you. One can bank from anywhere, at any time and in any condition or any how using 6. mobile phones. Facilities are balance enquiry, fund transfer, cheque book request etc.

#### **TYPES OF ELECTRONIC SYSTEMS**

- ATM: ATM stands for Automated Teller Machine. In simple words, it is 'simple to use self-service solution'. It offers value added services like recharging the 1. mobile, paying the utility bills, mutual fund transactions etc.
- 2. RTGS: RTGS stands for 'Real Time Gross Settlement System'. It is a fund transfer mechanism where transfer of money takes place from one bank to another on a real time or gross basis. This is the fastest possible money transfer system through the banking system. It is primarily for large volume transaction. The time taken for effecting funds transfer from one account to another is normally 2 hours.
- FINACLE: This system provides the holistic and integrated transformation approach, complete with solutions and services. Finacle solution addresses the 3. requirements of retail, corporate and universal banking worldwide like core banking solution, E-banking solution, mobile banking solution, wealth management, CRM requirements etc.

#### VARIOUS TYPES OF ONLINE BANKING SCAMS

With the range of payments becoming ever greater over the world, everyone needs to be aware of the coherent steps that should be taken to minimize the chances of being an online fraud victim. Being a victim of fraud can cause stress and worry, so taking measures to protect yourself is essential. Some common online banking scams are:

1. PHISHING: This is the name given to e-mails that claim to be from your bank or other organizations but are actually sent to you by fraudsters. These e-mails typically urge you to click on a link that takes you to a fake website identical to the one you would expect to see. You are then asked to verify or update your personal information but, by doing so, you are actually giving your information to the fraudster who has created the fake

Website. The fraudster then uses the details to access your online bank account and take your money. One easy way to spot phishing e- mails is that they are usually addressed to "Dear valued customer" instead of your name. This is because phishing e-mails are usually sent out at random as the fraudsters only have limited information such as e-mail address. In a similar scheme, called 'Vishing', a person calls you and pretends to be a bank representative seeking to verify account information.

2. PHARMING: Pharming is the installation of malicious code on your computer without any acknowledgement on your part. In one type of pharming attack, you open an e-mail, or an e-mail attachment that installs malicious code on your computer. Later, you go to a fake web site that closely resembles your bank or financial institution. Any information you provide during a visit to the fake site is made available to malicious users. Both phishing and pharming share the one characteristic, they are created using technology, but in order to be successful, they require your information. In phishing attacks you have to provide the information or visit links whereas with pharming, you have to open an e-mail, or e-mail attachment, to become a victim. You then visit a fake website and, without your knowledge, provide information that comprises your financial identity.

3. MALWARE: Malware (malicious software) is a computer virus that can be installed on your computer without your knowledge. It is capable of monitoring your PC activity, enabling fraudsters to capture your passwords and other personal information. To be a malware victim, you must be tricked into performing actions you would not normally do. You have to install the malware on your computer either by running a program or by visiting a website through e-mail or instant message link. Then, you are requested to send your bank login information. Your financial information will then be at risk only after you perform all these steps. To make sure you do not become a victim of malware, make sure you have up-to-date anti-virus and anti-spyware software installed.

4. MONEY MULES: Money mules are people who accept fraudulently obtained money into their account, and then withdraw the money and transfer it overseas to a fraudster. Money mules are often innocent people who have been deceived into helping criminals transfer funds abroad. Criminals offer prospective mules the chance to earn some easy money - concealing the fact that the work is illegal by advertising the job as a "shipping manager" or "sales manager" for an overseas company. However, money mules are liable for presentation and anyone who thinks they may have been deceived by such a scam should contact the police immediately.

5. IDENTITY FRAUD: This fraud involves criminals obtaining key pieces of personal information that they use to pretend to be you. Criminals use these personal details to obtain financial services products in your name such as credit cards, loans, state benefits and documents such as driving licenses and passports. Alternatively criminals can use your personal information to gain access to your existing accounts.

#### **RESULTS OF THE EXTENT OF SAFETY MEASURES FOLLOWED BY RESPONDENTS WHILE E-BANKING**

Although internet banking is a very common way of accessing your bank account, it is vital to be aware of the ways in which criminals can try to gain access to your account and to learn how to protect yourself and your money. Financial institutions that employ any form of internet banking should have effective and reliable methods of authenticating customers. An effective authentication system is necessary in order to comply with requirements to preserve customer information to prevent money laundering, reduce fraud, restrain identity theft and promote the legal enforceability of their electronic agreements and transactions.

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The risks of doing business with unauthorized or incorrectly identified persons in an internet banking environment can result in financial loss and reputation damage through fraud, disclosure of customer information, corruption of data.

AGE	Number of respondents	Percentage
Less than 20 years	3	6%
20-30 years	7	14%
30-40 years	20	40%
40-50 years	17	34%
Above 50 years	3	6%
Total	50	100%

#### TABLE 1: AGE OF THE RESPONDENTS

#### TABLE 2: GENDER OF THE RESPONDENTS

Gender	Number of respondents	Percentage
Male	32	64%
Female	18	36%
Total	50	100%

#### TABLE 3: EDUCATIONAL QUALIFICATION OF THE RESPONDENTS

Qualification	Number of respondents	Percentage
HSC	3	6%
Graduate	26	52%
Post-Graduate	7	14%
Doctorate Degree	2	4%
Professional Degree	12	24%
Total	50	100%

4 businessmen, 3 doctors, 20 academicians, 12 bank officials, 8 housewives and 5 engineers

#### **TABLE 4: JOB PROFILES OF THE RESPONDENTS**

Job Profile	Number of respondents	Percentage						
Businessmen	4	8%						
Doctors	3	6%						
Academicians	12	24%						
Bank Officials	18	36%						
Home makers	8	16%						
Engineers	5	10%						
Total	50	100%						

#### TABLE 5: FACILITIES USED BY RESPONDENTS IN E-BANKING

Facilities in E-banking	YES		NO	
	No. of Respondents	%age	No. of Respondents	%age
a.)Financial transaction such as account to account transfer, bill payment etc	27	54%	23	46%
b.)Electronic bill display and payments	15	30%	35	70%
c.) Funds transfer between customers	8	16%	42	84%
d.) Financial transactions for	43	86%	7	14%
sales and purchases				
e.) Loan repayment	2	4%	48	96%
f.)Update of savings account	50	100%	0	0%
g.)Online bank statement status	50	100%	0	0%



TABLE 6: EXTENT OF SAFETY MEASURES FOLLOWED WHILE E-BANKING						
Safety measures in E-banking	Some	etimes	Always		Ne	ever
	No.	%	No.	%	No.	%
a.)Disabling file & printer sharing in your computer	10	20%	5	10	35	70%
b.)Avoiding installation or running software application from unknown sources	7	14%	6	12%	37	74%
c.)Avoid disclosing or entering of personal data like Date of Boirth, CVV number of the credit card, to unfamiliar websites, e-mails	9	18%	35	70%	6	12%
d.)Avoid accessing online banking or performing financial transactions from public terminals or computers or devices which cannot be trusted	13	26%	4	8%	33	66%
e.)Avoid keeping the computer on without logging out while E-banking	16	32%	25	50%	9	18%
f.)Ensuring that the website you are transacting on starts with 'https://' and not 'http://' where 's' means secure	2	4%	4	8%	44	88%
g.)Looking out for an icon of a padlock at the bottom of the browser	1	2%	3	6%	46	92%
h.)Changing your PIN frequently in 2 months	5	10%	2	4%	43	86%
i.)Not to send credit card or account details via e-mail and phone to anybody	4	8%	1	2%	45	90%
j.) Regularly check the monthly credit card billing statements	2	4%	48	96%	0	0%
k.)Checking the website's private policy and install the latest anti-virus software and firewalls	27	54%	13	26%	10	20%
I.)Signing on the backside of a new credit card and keeping an eye on it during the transaction	2	4%	48	98%	0	0%
m.)Destroy the carbons of the credit card receipts	24	48%	7	14%	19	38%
n.)Taking immediate action in case of loss and theft	0	0%	50	100%	0	0%
o.)Ensuring that the credit card is swiped in your presence and the billed amount has been double checked before signing the payment slip	6	12%	43	86%	1	2%
p.)Accessing the internet banking site directly by entering the official bank URL and not through any site or links in e-mail	5	10%	13	26%	32	64%
q.)Checking the last log-in-date in your net banking account	7	14%	3	6%	40	80%
r.)Using the virtual keyboard provided on bank's website for logging in	7	14%	5	10%	38	76%
s.)Checking your credit rating system from time to time to make sure that nobody has tried to take out a loan in your name	1	2%	2	4%	48	96%
t.)Using a secured broadband connection to prevent others from accessing your broadband connection	11	22%	30	60%	9	18%
u.)To activate a pop-up window blocker	1	2%	3	6%	46	92%
v.)Ensuring that the ATM card, credit card & PIN are not kept together	1	2%	48	96%	1	2%

#### TABLE 7: FRAUDS AWARE OF BY THE CUSTOMERS IN E-BANKING

Various frauds in E-banking	Yes		No	
	No. of Respondents	%age	No. of Respondents	%age
a.)Phishing	12	24%	38	76%
b.)Pharming	7	14%	43	86%
c.)Money mules	4	8%	46	92%
d.)Malware	8	16%	42	84%
e.)Identity Fraud	6	12%	44	88%
f.)Brand Spoofing	5	10%	45	90%
g.)Cyber-Mugging	3	6%	47	94%
h.)Trojan horses	3	6%	47	94%
i.)Keystroke sniffer	2	4%	48	96%
j.)Salami Slicing	1	2%	49	98%
k.)Skimming	2	4%	48	96%

#### **FINDINGS OF THE STUDY**

- 1. Majority of the respondents who used e-banking facility was in the age group of 30-40 years
- 2. Majority of the respondents used e-banking facility for account transfer, bill payment, sales and purchases, update of savings account and online bank statement status.
- 3. Respondents followed basic safety measures while e-banking
- 4. Online safety measures are not followed by majority of the respondents as they are not aware of them.
- 5. Offline safety measures are followed by the respondents to some extent
- 6. Overall safety measures followed by the respondents while e-banking is very low
- 7. Majority of the respondents are not aware of the frauds in e-banking and the security available to control internet threats and challenges.

#### SUGGESTIONS FOR RESPONDENTS WHILE E-BANKING

To improve the security online, one must follow the following precautions:

#### GENERAL SAFETY PRECAUTIONS

I.

П.

- BEFORE BANKING ONLINE
  - 1. Make sure your computer has up-to-date anti-virus software and a firewall installed.
  - 2. Install anti-spyware software on your machine.
  - 3. Download the latest security updates, known as patches for your browser and your operating system. Set your computer to automatically download these updates if possible.
  - 4. Ensure your browser is set at its highest level of security notification and monitoring. The safety options are no always activated by default.
  - 5. Keep your passwords and PINs secret- do not write them down or tell anyone what they are.

#### WHILST BANKING ONLINE

- 1. Be aware of unsolicited e-mails or phone calls asking you to disclose any personal details or passwords. Your bank or the police would never contact you o ask you to disclose your PIN or your online banking password
- 2. Always access your internet banking site by typing the bank's address into web browser
- 3. Never go to a website from a link in an e-mail and then enter personal details
- 4. The login pages of bank websites are secured through an encryption process, so ensure that there is a locked padlock or unbroken key symbol in your browser window when accessing your bank site. The beginning of the bank's internet address will change from 'http' to 'https' when a secure connection is established.

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- 5. Never leave your computer unattended when logged in to your online account
- 6. When making a payment, always double check that you have entered the correct account number and sort code if you enter incorrect details the payment will go to a different recipient and it may prove difficult to get the money back.

#### III. WHEN YOU HAVE FINISHED BANKING ONLINE

- 1. Ensure you log off from your online bank account before you shut down, especially if you are accessing your online bank account from a public computer or at an internet café
- 2. Check your bank statements regularly and thoroughly. If you notice anything irregular on your account, contact your bank as soon as possible. SHOPPING ONLINE SECURELY

#### To minimize the chances of becoming a victim of fraud while shopping online, one should:

- 1. Be aware that your card details are as valuable as cash in the wrong hands so store your cards securely at all times and try not to let them out of your site
- 2. Sign up to "Verified by visa" or "MasterCard Secure Code" whenever you are given the option whilst shopping online. This involves you registering a password with your card company. By signing up, your card will have an additional level of security that will help prevent you from being a victim of online fraud.
- 3. Only shop through secure sites. Before submitting card details, ensure that the locked padlock or unbroken key symbol is showing in your browser. (The locked padlock symbol is usually found at the top of the screen if you use Internet Explorer 7 or Firefox 2). The beginning of the online retailer's internet address will change from 'http' or 'https' when a connection is secure. In some new browser's such as Internet Explorer 7 and Firefox 2, the address bar may also turn green to indicate that a site has an additional level of security.
- 4. Never disclose your PIN to anyone and never send it over the Internet.
- 5. Print out your order and keep copies of the retailer's terms and conditions, returns policy, delivery conditions, postal address (not a post office box) and phone number (not a mobile number). There may be additional charges such as local taxes and postage, particularly if you are purchasing from abroad. When buying from overseas remember that it may be difficult to roll back if problems arise, but having all the aforementioned information will help your card company take up your case if you subsequently have any difficulties.
- 6. Ensure you are fully aware of any payment commitments you are entering into, including whether you are authorizing a single payment or a series of payments.
- 7. Consider using a separate credit card specifically for online transactions.

#### CONCLUSION

IV.

E-banking has become a must for people's daily life due to its ease of access and transaction processing in a timely manner. However, many individuals or organizations are not vigilant enough and do not take appropriate safety precautions whilst online. Consequently, this leads to fraudsters capturing their personal information and performing all sorts of fraudulent transactions on the internet. For this reason, users of e-banking should ensure that they follow secure principles when giving away or accessing sensitive information.

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# CREATING COMPETITIVE ADVANTAGE THROUGH SUPPLY CHAIN MANAGEMENT (ROLE OF INFORMATION & COMMUNICATION TECHNOLOGY IN SUPPLY CHAIN MANAGEMENT TO CREATE COMPETITIVE ADVANTAGE: A LITERATURE BASE STUDY)

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#### ABSTRACT

A supply chain is an interconnected network of many suppliers, producers, wholesalers, distributors, transporters and retailers through which materials are obtained, transformed, produced to finish goods and delivered to the end customer. Supply chain is consisting of activities concerned with the flow and conversion of goods from raw material to finish goods and to the delivery of finish goods to final customer, as well as the associated information flow back in the chain. ICT (Information and communication Technology) including hardware and software has lead to massive opportunities to supply chain and fostering it to grow at even more speed. In SCM, information plays an important role as it drives the whole supply chain system. It has become evident that a supply chain that transfer materials and information smoothly can become a market differentiator and the ultimate winner in competition. IT based supply chain management systems improves supply chain integration and make efficient flow of market information and goods throughout the chain. This study reviews the modern technology and use of emerging supply chain software solutions provided by software manufacturing vendors. In this article, traditional approaches to supply chain operations, current development of information technology and examples of world's famous organization's supply chains are discussed. A theoretical model for supply chain management is also recommended which make use of information and communication technology as competitive advantage.

#### **KEYWORDS**

Supply Chain Management (SCM), Information & Communication Technology (ICT), Supply Chain (SC), Competitive Advantage, Resource-based view (RBV).

#### **1. INTRODUCTION**

The impact of information and communication technology in supply chain is unarguable in order to gain competitive advantage. Moreover the main benefits which organizations can plan to acquire are; rapid responsive supply chain, efficient customers services, less process cost, short cycle time, and new means to expand goods (KPMG, 1998; McGuffog, 2002). In today's competitive and fast growing market; customer's needs vary widely and manufacturers tend to produce variety of different products in smaller lots to satisfy each customer's needs and decision making across the supply chain management which includes purchasing, production, distribution, scheduling, and inventory control, becomes more complicated. This manufacturing trend of large production and mass-customization has created big challenges for those companies who are attempting to utilize their supply chain not only domestically but also internationally to deliver products/services to customers faster and in an efficient manner. To develop an efficient supply chain, firms are adopting: (a) information & communication technology and (b) availing all opportunities of global economy to build strategic association and to strongly integrate processes within their supply chains. In today's competitive market, effective supply chain management is the focal point of every organization's top management.

Approaches to supply chain management and deployment of Information & Communication Technology (ICT) have three components. The first one is strategic component, which focuses on acquisitions of resource including strategic partnerships, associations, investments and mergers and acquisitions (M&A). Second component is a tactical which uses resources allotment plans to utmost utilization of the firm's supply chain resources. The third and last component is operational which focuses on activities to make supply chain well-organized and efficient to decrease total operational cost. All of them are tightly connected to each other. But in this article, more focus is places on the tactical and operational components of the supply chain management and associates information technologies as competitive advantage.

In this article, we examine and contrast supply chain management of two companies, their former and future development and their competitive advantage. Then we suggest opportunities for supply chain innovation from the viewpoint of operations management, supplier manufacturer relationships, and the role of ICT. The main research questions will be investigated within the theories of RBV (Resource Based View) and SCM (Supply Chain Management) with focus on the

benefits obtained from information, communication technology. In this study, the author will analyze the question to find out the impacts of ICT in supply chain management. The purpose of this study is to create a foundation for future improvement regarding efficiency and effectiveness in use of ICT for the flow of goods, information and the way of work within the procurement process.

For the academic world, this article gives a theoretical basis in SCM, logistics and competitive advantage related matters. For the general public, mainly the companies in need of developing their logistical strategies and equipment, this article provides a basic frame of reference to study and develop the logistical functions to gain competitive advantage.

For better understanding this research is outlines as; next chapter describes the literature part of study. Section three provides the deeper insight of eminent studies in order to get benefit out of their findings and last section of this study describes the recommendations, conclusion and future implications.

#### 2. CONCEPTUAL REVIEW ON SUPPLY CHAIN MANAGEMENT (SCM) AND INFORMATION TECHNOLOGY (IT)

The supply chain is expressed as a set of activities that cover enterprise functions from the ordering and receipt of raw materials, raw material handling, manufacturing of products, to the distribution and delivery of final product to the customer. All these activities are associated with the material flow and information flow (Li 2006). Supply chain management (SCM) is a set of synchronized activities for joining together all suppliers, manufacturers, transporters, and customers efficiently so that the right product or service is delivered at the right cost, at the right quantities, at the right time, to the right places. The crucial objective of SCM is to achieve sustainable competitive advantage (Li 2006). SCM's purpose is to integrate information and material flows seamlessly across the supply chain as an effective competitive weapon (Childhouse, 2003).

As per available literature, one common definition of SCM does not exist. Some researchers describe that it is not a chain of businesses with one-to-one and business-to-business relationship, but a network of businesses and relationships. There is a crucial need for development of theory, tools and methods for successful SCM practice. The Global Supply Chain Forum is a group of non-competing firms and a team of academic researchers, who has been meeting regularly since 1993 with the objective to improve the theory and practice of Supply Chain Management. The definition of SCM developed and used by the members of The Global Supply Chain Forum (2009) as follows:

"Supply Chain Management (SCM) is the combination of key business processes from end user through original suppliers that provides products, services, and information that add value for customers and other stakeholders".

Supply chain is a network of actors that transform raw materials into distributed products. But as the name states; the supply chain has traditionally considered being a chain of actors. Furthermore, the supply chains were considered to be a form of long term upstream co-operations. In the early 1990's, supply chains were still perceived as linear chains of companies (Kemppainen & Vepsäläinen, 2003).

	TABLE 1: DEFINITIONS OF SUPPLY CHAIN MANAGEMENT (SCM)						
Authors	Proposed Definitions of Supply Chain Management						
Jones and Riley (1985)	"An integrative approach to dealing with the planning and control of the materials flow from suppliers to end-users."						
Ellram (1991)	"A network of firms interacting to deliver product or service to the end customer, linking flows from raw material supply to final delivery."						
Christopher (1992)							
Berry et al. (1994)	"Supply chain management aims at building trust, exchanging information on market needs, developing new products, and reducing the supplier base to a particular OEM (original equipment manufacturer) so as to release management resources for developing meaningful, long term relationship."						
Saunders (1995)	"External Chain is the total chain of exchange from original source of raw material, through the various firms involved in extracting and processing raw materials, manufacturing, assembling, distributing and retailing to ultimate end customers."						
Kopezak (1997)	"The set of entities, including suppliers, logistics services providers, manufacturers, distributors and resellers, through which materials, products and information flow."						
Lee and Ng (1997)	"A network of entities that starts with the suppliers' supplier and ends with the customers' custom the production and delivery of goods and services."						
Cooper, Lambert, and Pagh (1997)	"SCM as the management and integration of the entire set of business processes that provides products, services and information that add value for customers."						
Tan et al. (1998)	"Supply chain management encompasses materials/supply management from the supply of basic raw materials to final product (and possible recycling and re-use). Supply chain management focuses on how firms utilize their suppliers' processes, technology and capability to enhance competitive advantage. It is a management philosophy that extends traditional intra-enterprise activities by bringing trading partners together with the common goal of optimization and efficiency."						
Simchi-Levi and Kaminsky 2000)	"The integration of key business processes among a network of interdependent suppliers, manufacturers, distribution centers, and retailers in order to improve the flow of goods, services, and information from original suppliers to final customers, with the objectives of reducing system-wide costs while maintaining required service levels."						
Stock & Lambert (2001: 709)	"SCM involves three closely related elements namely the SCM infrastructure, the supply chain business processes and the management components."						
Bowersox, <i>et al.</i> (2002: 4)	"Supply chain management consists of firms collaborating to leverage strategic positioning and to improve operating efficiency."						
Patterson, Grimm, Corsi, (2003: 96)	"The integration of key business processes from end user through original suppliers that provides products, services and information that adds value for customers and other stakeholders."						
Turban & King (2003: 48)	"A supply chain is the flow of materials, information, money and services from raw material suppliers through factories and warehouses to the end customers. A supply chain also includes the organization and processes that create and deliver these products, information and services to the end customers."						
Kemppainen <i>et</i> <i>al.</i> (2003, p. 701)	"SCM is a strategic view of materials and distribution management that shows the benefits to the individual companies from the boost of performance of the supply chain as a whole through the lens of the business processes across functional and corporate borders."						
Global Supply Chain Forum, 2009	"Supply Chain Management is the integration of key business processes from end user through original suppliers that provides products, services, and information that add value for customers and other stakeholders."						

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As already discussed, ICT is referred as Information and communication Technology. ICT is a more broader expression that comprises of any communication device or application, including: radio, television, cellular phones, computers, PDA's, I pad's, networking software and hardware, satellite systems as well as the various services and applications coupled with them, like video conferencing and distance learning through online lectures and mails. ICTs are often considered in a particular framework, such as ICTs in education, in libraries, or in health care (Christiaanse and Kumar, 2000). As defined earlier that, ICT has become a key enabler in the management of supply chains. Just back in few year, we have seen the development of a plethora of Supply Chain ICT applications Fasanghari et al., (2008).

Consequently this will lead to enhanced performance and more efficient and effective SCM (Rungtusanatham *et al.*, 2003). Martin *et al.* (2003) state that internal integration is requirement for companies before being able to share information with external partners. In accordance with RBV literature (Barney, 1995; Lambert *et al.*, 1993; Olavarrieta *et al.*, 1997; Peteraf, 1993; Rumelt, 1984), information systems may add value and optimal integrated within the organization.

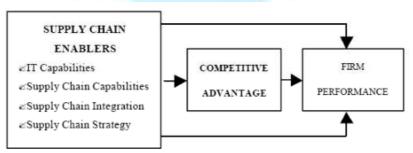
As per literature; Supply Chain Management system aims to integrate all key business processes throughout the entire supply chain (Helms *et al.*, 2000; & Knolmayer *et al.*, 2002). As the installation of supply chain management system costs a lot at initial level (Gouldson, 2001, p. 19; VanScoy, 2001/02, p. 87), the utilization of such software solutions depends on the nature and growth of the organization. A large amount of researches conducted in the field of e-business just paid attention on the technological characteristics or business cases to deal with (e.g., Dai and Kauffman, 2002; Amor, 2000).

The RBV argues that a firm's source of competitive advantage lies with the resources and capabilities it owns and controls and the unique way in which a firm bundles them together (Barney, 1991; Penrose, 1959; Wernerfelt, 1984). The RBV holds that firm resources that are valuable, rare, and hard to substitute are a basis for competitive advantage (Barney, 1991; Melville et al., 2004). The literature presents a wide breadth of definitions about how to characterize firm resources. Barney (1991, p. 101) reserves the term for anything *"that enable the firm to conceive of and implement strategies that improve its efficiency and effectiveness"*. Further, Barney (1991) refers to other research and divides firm resources into three categories: human capital resources, organizational capital resources and physical capital resources. Teece, Pisano & Shuen (2000), introduction talk about resources as dynamic capabilities. According to Barney (1995), when a firm has identified their resources and capabilities as valuable, rare and difficult to imitate, they must also be well organized to fully realize their competitive potential. Prahalad & Hamel (1990) explain that the real sources of advantage can be found in the management.

#### **3. PREVIOUS STUDIES RECOMMENDATIONS**

The study of Salam, A. P. D. M. A. (2007) measures the relationship of supply chain and firm performance. This study finds out the link between supply chain enablers (IT Capabilities, Supply Chain Capabilities, Supply Chain Integration, and Supply Chain Strategy) and organizational performance of Thai garments industry which is mediated by competitive advantage.

#### PROPOSED THEORETICAL FRAMEWORK



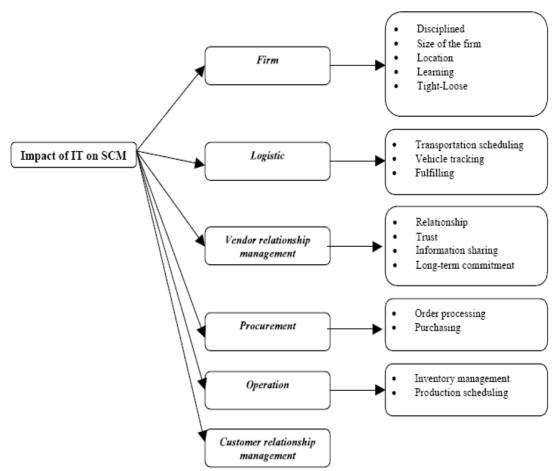
The mediating variable (competitive advantage) proposes that it's important to find a source of competitive advantage for efficient firm performance. The results of the study also provide evidence that, the firm will get superior performance as per availability or extent of resources. If the firm is totally integrated in all of its process of upstream and downstream then it will definitely get competitive advantage over its rivals.

The results show that this model has a major mediating effect of competitive advantage for organizations. It also proposes that IT resources and supply chain integration are the crucial factors in contributing to the firm performance. The results put more emphasis on importance of supply chain integration as only this single element can contribute to get competitive advantage. The more explanation of results reveal that the combination of two factors, supply chain integration and IT capabilities jointly can play an enormous result to achieve competitive organization. So the overall results of study suggest that Supply chain management strategy should be the part of the overall business strategy to gain competitive advantage in long run.

Fasanghari, M., Roudsari, F.H. and Chaharsooghi, K. (2008) express that in this rapidly changing and competitive business environment; every organization is trying to make flexible and quick responsive supply chain to gain competitive advantage through information technology. The following framework depicts their contribution in order to measure impact of information technology (IT) and supply chain management (SCM)



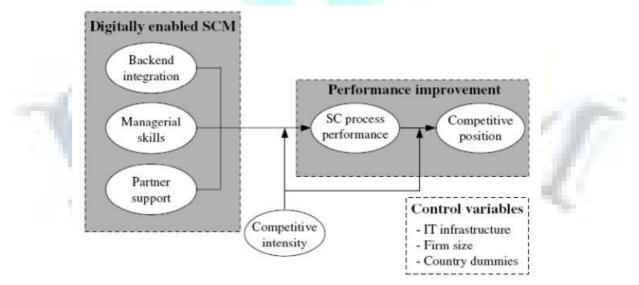
# World Appl. Sci. J., 4 (1): 87-93, 2008



For evaluation, eight experts have tested these results in Iranian automobile industry's supply chain and 90% were satisfied with the results. The IT based Supply Chain Management can be used to evaluate SCM performance.

Another study presented by Dong, S., Xu, S. X., & Zhu, K. X. (2009) understands the importance of Information Technology in context of Supply chain. By focusing on "Resource Based Theory" Wernerfelt, B. (1984) and "Transaction Cost Economics" Williamson, O. E. (1995), the author developed a conceptual framework that links three IT resources such as, backend Integration, partner support and managerial skills. A moderating variable competitive intensity proposed to check the effect on resource and performance relationship. The manufacturing firm's sample size for this study is 743 firms. The results of the study represents the key drivers of IT enabled supply chain and approach toward the value of IT in tough competition.

PROPOSED CONCEPTUAL FRAMEWORK



#### MAJOR FINDINGS OF THIS STUDY

1<sup>st</sup>: Information Technology creates value in supply chain through digitally integrated operations and having a complete visibility at all processes.

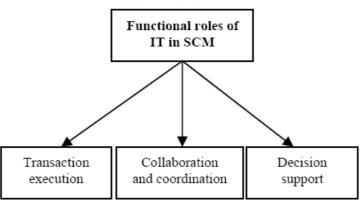
The variable backend integration in theoretical framework represents the level of performance at different stages of the supply chain. The findings shows that IT creates value, however the effective use of technology to strengthen the relationships between supply chain partners and processes gives more advantage. This result is supported by RBV concept which defines that ordinary technology can be turned into priceless resources through proper utilization in a specific process.  $2^{nd}$ , the major value contributors in supply chains are IT related managerial skills and partner support.

In this research, author has found that managerial skills and relational resources are also very much important for creation of value in supply chain management. So the successful supply chain not only requires technological resources as well as managerial skills and external resources are also required.

 $3^{rd}$ , in the context of supply chain, the importance of managerial skills and backend integration have more value when there is a highly competitive environment. Based on this research; author explains that resources have different effects in different contexts. This study defines that managerial skills and backend integration have extremely positive effects on supply chain if it is in a competitive environment.

Shavazi, A. R., Abzari, M., & Mohammadzadeh, A. (2009) purposed the relationship between Information and communication technology (ICT) and SCM from viewpoint of information and communication technology utilization. The author consider all available digital supply chain management resources and reveal that those organizations will get competitive advantage in future that will take advantage of these resources.

#### PROPOSED THEORETICAL FRAMEWORK



The study of Shavazi, A. R., Abzari, M., & Mohammadzadeh, A. (2009) does not consider traditional supply chain resources. Furthermore they consider new electronic tools, including e-business, e-procurement, extranet and intranet, internet marketplace and use of internet in supply chain management. They studied different parts and aspects of ICT and made it simpler to evaluate how these ICT components effect supply chain management. The components of ICT which are discussed in this research topic are:

- A. Internet (www)
- 1. e-commerce
- 2. Information sharing
- 3. Knowledge sharing
- 4. Design an efficient supply chain B. e-business
- C. e-procurement
- D. Extranet and Intranet
- E. e-Internet Marketplaces

This study suggests that ICT can be utilized to for the development of supply chain management system. Furthermore; the World Academy of Science, Engineering and Technology has suggested that Internet can provide significant advantages in supply chain management such as cost reduction, demand estimation, channel coordination & service efficiency. In conclusion, Internet provides excess to useful information quickly and cheaply but having a responsive supply chain is not enough; supply chain should have an efficient flow of goods as well.

In general, the author proposed that, the competitive advantage in future will hold only those organizations who will utilize digital supply chain facilities.

#### 4. CONCLUSION, RECOMMENDATION AND FUTURE IMPLICATIONS

#### 4.1. Conclusion

Nowadays, world is a global village and every organization in the world can have access to any customer segment without doing any investment in other country through internet technology and e-business concept. In this tough competition, the only organization can survive which meet up the ever changing demands of the customers and deliver the right product, at right place, in the right quantity, at the right time and in right price. This cycle could not be completed without inter and intra organizational coordination, customer and supplier relationship management, transportation & distribution management and rapid flow of information, which means a strong integration among all functions of the supply chain is required. The modern information and communication technology provides software solutions (ERP, SCMS), web based internet facilities (e-business, e-procurement, e-commerce, etc.) and centralized databases which help out in efficient communication and coordination within as well as outside the organization. Supply Chain management software solution provide analysis of demand forecasting, production planning, inventory management and distribution which reduces uncertainty with less process and inventory holding costs. In this competitive market, the organizations have very limited margins and ICT investments are the best way to get efficient return on investment in shape of competitive advantage.

#### 4.2 Recommendations

As already discussed the importance of ICT in SCM, we highly recommend SME's and multinational organizations to use modern technology to create value for their customers and suppliers. All organizations should spend a certain percentage of total profit for developing their technological infrastructure every year as it is the only way to get sustainable competitive advantage over its rival.

#### 4.3 Future Implications

It is evident that ICT improves organizational supply chain efficiency but still there isn't much valuable research available regarding e-business and virtual organization. Nowadays, there are many virtual organizations successfully operating e-business setups around the world like amazon.com, ebay.com and expansys.com. An empirical research creating competitive advantage through Supply Chain Management should be conducted to study their supply chain system as well as to determine the attributes that improve their supply chain efficiency. This research can be much valuable for those organizations which still not have used e-business related technology to expand their business working in developing countries specially in Pakistan.

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ISSN 2231-5756

# ADOPTION OF INFORMATION TECHNOLOGY AND BANKS PERFORMANCE: A SURVEY OF SELECTED BANKS IN NIGERIA

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#### ABSTRACT

The use of Information Technology (IT) systems has changed the way banking operations are carried out all over the world, the volume and the speed of banking transaction has improved tremendously as a result of quantum growth in IT which has created business opportunities for the banks that have tapped into IT. This research aimed at finding out the extent to which Nigerian banks have implemented IT Systems and its effects on cost effectiveness, competitive advantage, service delivery and staff efficiency which were used as sub-dependent variables, individually and jointly. Questionnaire was used to elicit information for the research. The data gathered through the questionnaire was analyzed on Statistical Package for Social Sciences (SPSS) version 17. Linear Regression analysis was carried out to determine the effect of the independent variable on the dependent variables. The t, F and Durbin Watson statistic tests were also carried out to determine the individual significance, overall joint significance and goodness of fit of the model respectively. It was found from the research that IT adoption indeed has a positive significant effect on banks performance with a coefficient of 0.533, which simply means that 53.3% of the changes in performance are explained by IT use. The regression analysis of IT adoption of cost effectiveness, competitive advantage, service delivery and staff efficiency showed positive coefficients of 0.389, 0.397, 0.527 and 0.818 respectively. It was discovered during the course of the research that customers are either ignorant of IT services being offered by the banks or are too afraid to use them due to the associated risks. It was recommended that banks should create awareness of the availability of these services to their customers, mitigate risks of cyber frauds, increase their bandwidth to prevent network failures and that bank staff should engage in self development to be able to cope with ever changing technology.

#### **KEYWORDS**

Cost Effectiveness, Competitive Advantage, Service Delivery, Staff Efficiency.

#### INTRODUCTION

anking business is heavily dependent on information related to the fund market, which includes fund suppliers, fund users, brokers, information related to the central bank, and Ministry of Finance directives that they have to follow; and information related to their competitors. Besides, their business also includes providing financial information to their customers. Commercial banks are highly information intensive, hence, the need for use of Information Technology (IT) for collection, storage, retrieval, processing, transmission, and distribution of information in carrying out their various operations.

Banks have come to the realization that future banking requires more of electronic manipulations and shuffling of bits-based money and other banking transactions, instead of paper work and also that the efficiency of their operations depends largely on the extent to IT systems are adopted and implemented in an innovative manner. Hence, paper based transactions are now being replaced by electronic-based transactions and this area has been considered to be a major competitive ground for banks that are operating in the post-consolidation era.

As the range of banking businesses became wider and more complex, it became very imperative for all sectors to be connected with a modern means that would be simpler, faster and more convenient (Accad, 2009). The banking industries are now getting connected with the information technology facilities which make banking operation, service and business activities easier, faster, more efficient, and more effective for individuals and organizations alike to transact their various businesses. The impact has become far reaching to the extent that organizations jostling for relevance in a competitive environment cannot help but embrace the potentials of the e-revolutions (Idiaro, 2010).

Information technology has radically changed how banking is done all over the world, the volume and speed of banking transaction has improved tremendously as a result of quantum growth in information technology which has created business opportunities for banks (Cohen, 2001). The positive impact of Information Communication Technology (ICT) on the global criteria, especially improved revenue corroborates with the findings of Laudon and Laudon (1991), who studied the entire cash flow of 500 large companies and linked their success to Information System. They concluded that IT directly affects how managers decide, how they plan and what products and services are produced.

The banking industry in Nigeria has witnessed tremendous changes linked with the developments in ICT over the years. In Nigeria, Information technology gave birth to electronic banking; this presents benefits such as anywhere banking, anytime banking and elongated banking hours to customers. These benefits provide comfort, convenience and ease of bank transactions. Before the advent of electronic banking, customers could only make transactions from a bank's "brick and mortar" branch offices (Goodhart, 2000). Electronic banking has facilitated the integration of the functions of some large banks that have several branches around the country on a centralized network so that transactions can be carried out at any branch on the network without the customer being physically present in the branch (Harold & Jeff, 1995).

In addition, the inception of electronic banking in Nigerian banks enables customers to access their accounts and perform online transactions anytime of the day, as they would on the physical floors of the bank at their own comfort, pace, and convenience without any human intervention. The omission of middlemen

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in the electronic banking operation is also beneficial to the bank in terms of reduced labor costs and increased efficiencies in the banking operations which may enable the bank to provide value-added services such as free online banking to its customers (Lee & Longe-Akindemowo, 1999). Although a lot of studies have been carried out on the prospects and challenges of Information Technology Adoption, these studies are broad based and only

Although a lot of studies have been carried out on the prospects and challenges of information Technology Adoption, these studies are broad based and only few are actually carried out on the role of IT in modern banking operations and its resulting effect on banks' overall performance. It is as a result of this that, that this, that this research work is based on Information Technology Adoption into banking operations of selected banks and the resulting effect on the banks' overall performance.

#### THE PROBLEM

In line with the current developments in the Adoption of Information Technology systems in banking operations, it is observed that although, previous studies have concluded that Information Technology adoption has appreciable positive effects on Banks' profitability, productivity, banking services, customer perceptions, and employee perceptions individually, only few have actually considered an aggregate of these areas of performance and examined the effect of IT adoption on overall performance. Most studies are focused solely on the resulting profitability effect without considering what contributes to the profitability. Also, the profile end customer is ever changing; they are becoming mobile and not relying on a single banking transaction line. It is in line with these issues that this study aims to establish the extent to which IT systems have then implemented in Banking operations and the resulting effect on Banks' overall performance in Nigeria.

#### **RESEARCH QUESTIONS**

This research work is guided by the following research questions:

- 1. To what extent has Information Technology systems been adopted in Nigerian banks in terms of;
  - a. Office automation
  - b. Internet banking
  - c. Automated teller system
  - d. Electronic funds transfer
- 2. How has the adoption of IT systems impacted on the performance of Nigerian banks in terms of:
  - a. Cost effectiveness of their operations
  - b. Competition
  - c. Service delivery
  - d. Efficiency of staff
- 3. Is there any significant relationship between IT adoption and Banks' performance?
- 4. Does IT adoption have any significant effect on Banks' performance?

#### **RESEARCH HYPOTHESES**

The in order to achieve the objectives of this study, the following null hypotheses will be tested;

- 1. There is no significant relationship between Information Technology adoption and Banks' performance.
- 2. Information Technology adoption has no significant impact on Banks' performance.

#### **OBJECTIVES OF THE STUDY**

The broad objective of this study is to examine the prospect of Information Technology in modern banking operations in Nigeria. Specifically, the study aims to:

- 1. Determine the extent to which the banks' have adopted IT systems;
- 2. Determine the impact of IT adoption on areas of performance such as cost effectiveness, sectoral competition, service delivery, and staff efficiency;
- 3. Examine the impact of IT adoption on overall Bank performance.

#### **REVIEW OF RELATED LITERATURE**

Opara, Olotu and Maclayton (2010) investigated the impact of technology on Relationship Marketing Orientation (RMO) and Business Performance (BP) of the Nigerian banks and found that electronic internet, telephone banking and computerization of services as components of technology have greatly influenced RMO to yield an increased Business Performance. They therefore concluded that, to enhance desired value from both quality products and quality services of the Nigerian banks, technology is needed to offer improved quality services to customers in order to meet their needs and put smiles on their faces.

Osho (2008) examines the use of technology in the banking industry and how it has helped banks evolve into a profitable market and found that banks and other financial institutions rely on technology to capture total and accurate customer view as well as assist in the areas of product marketing, decision making, improving customer service and retention by adding or upgrading customer relationship type solutions. Zarehan, Nahariah and Ong (2009) notes that IT is a means to enjoy economies of scale in production, development of new product and services, creation of knowledge, as well as to instill product quality and service efficiency and as such, observed that investment in IT has recently surged considerably worldwide.

The vast majority of the recent literature on the role of IT in modern banking operations as regard electronic money and banking suffers from a narrow focus. It generally ignores electronic banking entirely and equates electronic money with the substitution of currency through electronic gadgets such as smart cards and virtual currency. For example, Freedman (2000) proposed that electronic banking and electronic money consist of three devices: access devices, stored value cards, and network money. Electronic banking is simply the use of new access devices and is therefore ignored. Electronic money, then, is the sum of stored value (smart) cards and network money (value stored on computer hard drives). What is most fascinating, and revealing, about this apparently popular view is that electronic banking and electronic money are no longer functions or processes, but devices (Alter, 2002).

Irechukwu (2000) lists some banking services that have been revolutionized through the use of ICT as including account opening, customer account mandate, and transaction processing and recording. ICT has provided self-service facilities (automated customer service machines) from where prospective customers can complete their account opening documents directly online. It assists customers to validate their account numbers and receive instruction on when and how to receive their cheque books, credit and debit cards. Communication Technology deals with the Physical devices and software that link various computer hardware components and transfer data from one physical location to another.

ICT products in use in the banking industry include Automated Teller Machine, Smart Cards, Telephone Banking, Magnetic Ink Character Reader (MICR), Electronic Funds Transfer, Electronic Data Interchange, Electronic Home and Office Banking. The use of Information technology in banking operations is called electronic banking. Electronic banking is a product of e-commerce in the field of banking and financial services. In what can be describe as Business – to – Consumer (B2C) domain for banking industry, electronic banking offers different online services like balance enquiry, request for cheque books, recording stop payment instruction, balance transfer instruction, account opening and other forms of traditional banking services. Banks are also offering payment services on behalf of their customer who shop in different e-shops (Irechukwu, 2000).

For many bank customers, electronic banking means being able to operate current and savings accounts from any point of their bank's branch network or 24hour access to cash through an automated teller machine (ATM). However, e-banking now involves much more. Today, e-banking also known as electronic funds transfer (EFT) uses computer and electronic technology as a substitute for cheque and other paper transactions. EFT's are initiated through devices like cards or codes that allow authorized persons access to the linked accounts (Nwaze, 2008; Connel & Saleh, 2004).

E-banking offers several services as follows (Irechukwu, 2000; Connel & Saleh, 2004):

- 1. Funds Transfer Messaging Systems: these allow the use of secure financial messages to effect transfers between banks, e.g. SWIFT.
- 2. **Prepaid value Card:** this acts as an electronic purse to the cardholder. Money that is pre-loaded on chip based cards is spent at merchant and point-of-sale (POS) locations. These cards are reloaded with cash by the cardholder when necessary.
- 3. Debit and Credit chip based cards: These are used for operation of accounts through the credit card scheme.
- 4. **Direct Deposit:** this enables the authorization of specific online deposits such as paying cheques to an account on a regular basis. It also allows for preauthorization of direct withdrawals so that recurring bills such as insurance premiums, mortgages, and utility bills are paid automatically.
- 5. Automated Teller Machine (ATM): These are electronic terminals that at almost all times allows customers to make cash withdrawals, make deposits and transfer funds between accounts with the use of an ATM card and an ass code; the Personal Identification Number popularly known as PIN code.
- 6. **Pay-by-Phone Systems:** this system enables a customer call his/her financial institution with instruction to pay certain bills or to transfer funds between specified accounts.
- 7. **Personal Computer Banking:** This allows for handling many banking transactions via the personal computer. These transactions include; viewing account balance, requesting for funds transfer between accounts, and payment of bills electronically.
- 8. Point-of-Sale Transfers: This lets customers pay for their purchases with a debit card. This process is very fast and easy as it transfers money quickly from the customer's account to the store's account.
- 9. Internet Banking: This enables the transfer of funds between accounts and banks through internet-based networks
- 10. Automated Cheque Clearing System (ACCS): This system allows for automated internet-based banking networks.
- 11. **Telephone Banking System:** Allows bank customers to make banking transactions via the telephone (including mobile phones); check account balance, get transaction details, order a cheque book, get account statement by e-mail, check current interest and exchange rates, transfer funds, get information on banks' products and services, and change PINs.

#### CONCEPTUAL FRAMEWORK OF THE STUDY

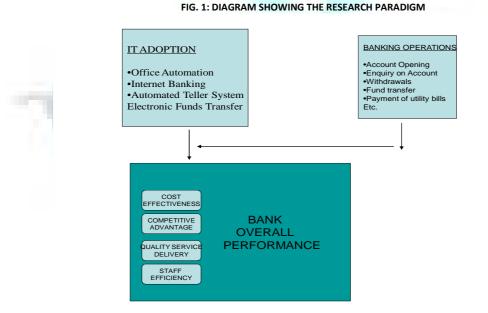
The framework of this study is rooted on the review of conceptual issues bordering on the incorporation of IT tools and skills into banking operations and how they have impacted on the overall performance of Nigerian banks in terms of quality of service, cost effectiveness, staff efficiency and financial performance. The application of information and communication technology concepts, techniques, policies and implementation strategies to banking services has become a subject of fundamental importance and concerns to all banks and indeed a prerequisite for local and global competitiveness. ICT directly affects how managers decide, how they plan and what products and services are offered in the banking industry (Mejabi, 2008). It has continued to change the way banks and their corporate relationships are organized worldwide and the variety of innovative devices available to enhance the speed and quality of service delivery.

(a. Harold and Jeff (1995) contend that financial service providers should modify their traditional operating practices to remain viable in the 1990s and the decades that follow. They claim that the most significant shortcoming in the banking industry today is a wide spread failure on the part of senior management in banks to grasp the importance of technology and incorporate it into their strategic plans accordingly. Woherem and Adeogri (2000) claimed that only banks that overhaul the whole of their payment and delivery systems and apply ICT to their operations are likely to survive and prosper in the new millennium. He advices banks to re-examine their service and delivery systems in order to properly position them within the framework of the dictates of the dynamism of information and communication technology.

(b. Ovia (2005): The banking business is becoming highly ICT based due to its inter-sectoral link; it appears to be reaping most of the benefits of revolution in technology, as can be seen by its application to almost all areas of its activities It has broadened the scope of banking practices and changed the nature of banking as well as the competitive environment in which they operate. A broad opening has been experienced around the world for banks and they are currently taking due advantage of these innovations to provide improved customer services in the face of competition and faster services that enhance productivity

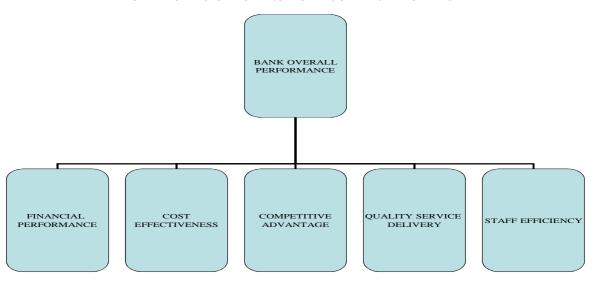
(c. Afolabi (2009): Technological advancement facilitates payments and creates convenient alternatives to cash and cheque for making transactions. Such new practices have led to the development of a truly global, seamless and Internet enabled 24-hour business of banking. Technological advance in payments are important due to the fact that it will be feasible to outsource quite a number of the banks" role in the payments system. Also banks" regulation can be more technologically dependent and better focused rather than focusing on conceptual guidelines. ICT revolution both in terms of innovation rate, speedy operation, and cost per unit (portraying reduction in average total and marginal costs) has made a good number of banks embrace the use of ICT infrastructure in their operations. However there may be little interruptions at times due to network failures, which may make customers unable to carry out transactions at a particular point in time. This little shortcoming is not in any way comparable to the days when banking halls were characterized by long queues mainly as a result of delays in the traditional banking operations (Shittu, 2010).

#### THE RESEARCH PARADIGM



T

FIG. 2 - DIAGRAM SHOWING THE COMPONENTS OF BANKS' PERFORMANCE



#### **RESEARCH METHODOLOGY**

This research is analytical in nature and is designed to critically evaluate the resulting impact of incorporating Information Technology into modern banking operations on overall performance of banks in Nigeria. A survey research was carried out with a well structured questionnaire to gather information about the impact of IT on banks' performance in terms of cost effectiveness, competitive advantage, quality of service delivery and staff efficiency.

The target population of this study comprises of banks in Nigeria. However since the researcher could not adequately carry out an in depth study on all banks in Nigeria given the time limit and the volume of work involved, a sample size that was adequate enough for the generalization of the findings was selected from the 23 existing banks. Convenience sampling method was used for the purpose of this analysis and a sample of five (5) Banks was selected as a representative of the Nigerian Banking Industry.

The questionnaires, which were administered to elicit information from the respondents in line with earlier stated research questions questionnaire contains both open and close-ended questions and free from ambiguity to enable the respondents supply the appropriate answer to each question and they were carefully administered to the respondents by the researcher. Validity being the appropriateness, meaningfulness and usefulness of specific inference made from test scores. This validity of this instrument was established by subjecting it to serious scrutiny of the supervisors and academic staff in the department and also carrying out a pre-test to ascertain the understability of the instrument.

Reliability of an instrument is the internal consistency of an instrument in measuring what it is intended to measure. The reliability of this instrument was tested using Cronbach's alpha coefficient. The following is the result of the test:

#### TABLE 1 - RELIABILITY OF INSTRUMENT (Reliability Statistics)

Cronbach's Alpha	N of Items	
.747	8	
 athead The success.	a na ina alaa	·

The primary data for this research was sourced via the survey method. The questionnaire designed by the researcher was distributed to the respondents. The researcher then collected the filled questionnaires from the respondents to analyze the data collected with the appropriate statistical instrument(s).

Data will on financial performance was also extracted from the Banks' published annual financial reports. For easy comprehension and analysis, demographic data will be described using bar charts to show the profile of the respondents. Data extracted from questionnaires was analyzed using the regression analysis model on the Statistical Package for Social Sciences (SPSS). Descriptive statistics was used to measure changes in the performance parameters as a result of IT adoption. Also, correlation analysis was used to show the relationship between the IT adoption parameters and the performance parameters both individually and as an aggregate.

It is generally expected, regardless whether the bank adopts Information Technology system or not, that every bank should maintain a sustainable level of cost effectiveness, competitive advantage, quality service delivery, and staff efficiency. However, the Adoption of Information Technology Systems is to enhance these already sustained values.

#### FINDINGS AND DISCUSSIONS

This section deals with the analysis of data, presentation, interpretation and discussions. Bar charts were used to describe the demographic data of respondents. Correlation analysis was carried out to analyze the linear relationship between Information Technology adoption and Banks' performance. Also, regression analysis was carried out to know the effect of Information Technology and Banks' performance.

The correlation analysis was first carried out on the pointer variables for performance to analyze their individual with IT and eventually as an aggregate. The regression analysis was also carried out to know the effect of IT on the individual variable and also as an aggregate. The standard error estimate, T-test, F-statistic, Durbin Watson test and P values were also to test the stated hypotheses. The responses of respondents gathered from open ended questions were also discussed.

TABLE 2 - TABLE SHOWING THE LEVEL OF IT ADOPTION FOR ALL BANKS									
VARIABLES	STATISTICS								
	Mean	Minimum	Maximum	Std. Deviation					
Office Automation	4.0111	3.40	5.00	.34214					
Internet Banking	4.6250	3.60	5.00	.36454					
Automated Teller System	4.0111	3.40	5.00	.39984					
Electronic Funds Transfer	4.6444	3.80	5.00	.38010					

The above table shows that the banks being studied have adopted IT systems in their operations at a mean of 4.0 for office automation, 4.6 for internet banking, 4.0 for automated teller system and 4.6 for electronic funds transfer all on a scale of 5.0.

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#### Data Analysis

To test the existence of a significant linear relationship between two variables X and Y, a hypothesis test is carried out to determine whether  $\beta_1$  which is the population slope is equal to 0. The null and alternative hypotheses are thus stated;

 $H_0: \beta_{1=}0$  (There is no linear relationship)

 $H_1: \beta_{1\neq} 0$  (There is a linear relationship)

If the null hypothesis is rejected, we conclude that there is evidence of a linear relationship.

#### **Decision Rule**

1.

2.

The null hypothesis must be rejected if the calculated statistic is equal to or less than the critical value at 5% level of significance using the following rules:

Standard error test of the least square estimates

- a.
- $$\begin{split} \hat{S}(\beta_i) &< {}^{\beta_i}_{/2} \text{ reject } H_0 \text{ and accept } H_1 \\ \hat{S}(\beta_i) &> {}^{\beta_i}_{/2}, \text{ reject } H_1 \text{ and accept } H_0 \end{split}$$
  b.
- t-Test

If t cal > t tab, reject  $H_0$  and accept  $H_1$ a.

b. If t cal < t tab, reject  $H_1$  and accept  $H_0$ 

3. F-test

- If F cal > F tab, reject H<sub>0</sub> and accept H<sub>1</sub> a.
- b. If F cal < F tab, reject H<sub>1</sub> and accept H<sub>0</sub>

4. Durbin Watson Statistic (d<sup>t</sup>)

For positive d<sup>t</sup>:

- d cal > d<sup>L</sup>, accept H<sub>0</sub> a.
- d cal < d  $^{L}$ , accept H<sub>1</sub> b.
- $d^{L} < d cal < d^{"}$ , test is inconclusive c.

#### **RELATIONSHIP BETWEEN INFORMATION TECHNOLOGY AND BANKS' PERFORMANCE**

In line with the work of Maldeni & Jayasena (2009) on Information and Communication Technology Usage and Bank Branch Performance, the individual relationship between Information Technology adoption and each of the performance variable parameters will first be tested, after which the relationship between Information technology adoption and an aggregate of the performance variable will then be tested.

#### TABLE 3: RELATIONSHIP BETWEEN INFORMATION TECHNOLOGY ADOPTION AND BANKS' PERFORMANCE

	t-Test	F-test	R <sup>2</sup>	R	Standard error	D-Wat	tson
Calculated values	3.641	13.255	0.159	0.399	0.146	1.339	
Table Values	1.658	3.92			0.267	1.57	1.68

βo = 1.789β1 = 0.533

The table above shows that there is positive relationship between the performance bank and the IT adoption.

The t-test shows a calculated value 3.641 which is greater than the table value of 1.658. This means that the IT adoption is statistically significant to bank performance which indicates that IT adoption has a significant impact on the increase or decrease in bank performance. The R2 of 0.159 shows that 16% of the total variation in bank performance is explained the IT adoption while the rest 84% is explained by other variables exogenous to the model. The overall model is statistically significant as shown by the F-statistic since the calculated value of 13.255 is greater than the table value of 3.92. The DW statistic indicates that there is positive autocorrelation of the first order since the calculated DW statistic is less than the lower table value.

TABLE 4 - SUMMARY OF RESULTS								
	t-Test	F-test	R <sup>2</sup>	R	Standard error	D-Watson		
IT and CTE	1.377	1.896	0.026	0.162	0.283	1.554		
IT and CPA	1.819	3.930	0.045	0.212	0.218	1.667		
IT and QSD	2.653	7.038	0.091	0.302	0.199	1.649		
IT and STE	4.880	23.811	0.254	0.504	0.168	1.784		
IT and overall Performance	3.641	13.255	0.159	0.399	0.146	1.339		

t-table = 1.658F-table = 3.92  $D_1 = 1.57$  $D^{u} = 1.68$ 

#### HYPOTHESIS TESTING

Hypothesis 1: Pearson's correlation analysis was carried out to determine the relationship between Information Technology Adoption and Banks Performance, the result of the analysis was

r = 0.399\*\*

The result shows that although there is a positively significant relationship between Information Technology adoption and Banks' performance, the relationship is not strong, that is, a weakly significant relationship as it is not up to 50%, hence, we accept the null hypothesis (H<sub>0</sub>) and reject the alternative hypothesis (H<sub>1</sub>). Hypothesis 2: Regression analysis and various statistical tests were carried out to analyze the impact Information Technology Adoption on Banks' performance. The results are as follows:

- t-Test: t cal (3.641) > t tab (1.658).... Hence, we reject the null hypothesis,  $H_0$  and accept the alternative hypothesis  $H_1$ a.
- b. F-test: F cal (13.255) > F tab (3.92).... Hence, we reject the null hypothesis,  $H_0$  and accept the alternative hypothesis  $H_2$
- Dubin Watson test: D cal (1.339) <  $D_L$  (1.57).... Hence, we reject the null hypothesis,  $H_0$  and accept the alternative hypothesis  $H_2$ . c.
- Se test:  $\hat{S}(\beta_i)$  (0.146) <  $\beta_{i/2}^{\mu}$  (0.267).... Hence, we reject the null hypothesis,  $H_0$  and accept the alternative hypothesis  $H_2$ . d.

#### INTERPRETATIONS AND DISCUSSIONS

According to the result of Pearson's correlation result of IT and Banks' performance, the correlation coefficient r of 0.399\*\* (40%) at 99% level of significance shows that the relationship between information technology and Banks' Performance is a positive but weakly significant relationship as it is not up to 50%. Although when Information Technology Adoption was correlated with the individual performance dimensions it showed the following results:

- IT adoption and Cost Effectiveness:  $r = 0.162^{\circ}$  (16%) which shows that there is a positive but not significant relationship between Information Technology 1. and Cost effectiveness. This is evident in the responses of the respondents to the question of the cost of acquisition and maintenance of IT systems. Most of them responded that a maintenance and acquisition cost of IT systems is on the high side.
- IT adoption and Competitive Advantage: r = 0.212<sup>^</sup> which also shows that there is a positive but not significant relationship between IT adoption and 2. competitive advantage which goes against the findings of Agboola (2006) who concludes that IT improves competitive strength with a mean of 4.86 on a scale of 5.00.

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- IT adoption and Quality of Service Delivery: r = 0.302\*\* which shows although the relationship is significant at 99% level of significance, it is a weak relationship as it is not up to 50%.
- 4. IT adoption and Staff Efficiency: r = 0.504\*\* which means that the relationship between IT and staff efficiency is significant. It also reveals a good degree of dependency of Staff efficiency on IT adoption which aligns with the result of Obasan (2011).

It can be deduced from the various results above that there are variations in individual relationships between IT adoption and the various performance dimensions and IT adoption and performance as a whole; hence it does not suffice to generalize that because there is a positive significant relationship between IT adoption and Performance, then there is a positive significant relationship between IT adoption and all that constitutes performance, therefore the Bank has adopted and implemented IT systems to a large extent that it is reaping the benefits.

The variations in the result can thus be explained by the responses of some of the respondents whose bank have implemented IT systems to a large extent, that customers are very much ignorant about the IT services being offered by their banks. Also, it can be explained by the epileptic power supply in the country coupled with massive network failure and customer's fear of cyber-crimes thereby preventing them from availing themselves with the available services.

The regression analysis result shows  $R^2 = 0.159$  indicating that 16% of the variation in Banks' performance can be explained by 1% variation in the level of IT adoption b a bank. The intercept  $\beta_0 = 1.789$  and the slope  $\beta_1 = 0.533$ . The regression model is thus as follows:

Perf = 1.789 + 0.533 Information Technology adoption

This means that if IT adoption is increased 1%, the average value of Banks' overall performance will increase by 5.3%. Based on the t, F, standard error and Dubin Watson tests carried out, we reject the null hypothesis  $H_0$  and accept the alternative hypothesis  $H_2$  and then conclude that Information Technology Adoption has a significant impact on Banks' Performance.

This result is in consonance with the work of Maldeni and Jayasena (2009) who carried out a research on Information and Communication technology and Bank Branch Performance and concludes that Higher the ICT usage level, higher the impact on Quality Performance improvement at the bank branch. The result also agrees with Agboola (2006) who investigated the electronic payment systems and tele-banking services in Nigeria. His findings reveal that there has been a very modest move away from cash. Payments are now being automated and absolute volumes of cash transactions have declined. The result of the study revealed that tele-banking is capable of broadening the customer relationship, retain customer's loyalty and enable banks to gain commanding height of market share if their attendant problems such as, ineffectiveness of telecommunications services, epileptic supply of power, high cost, fear of fraudulent practices and lack of facilities necessary for their operation were taken care of.

#### SUMMARY OF FINDINGS

The findings reveal that some of the individual components of performance show a significant positive linear relationship with Information Technology adoption and some showed only a positive but not significant linear relationship as a result, the aggregate of performance showed a weakly significant relationship with Information Technology adoption.

The result of cost effectiveness deviates from the expectation of the researcher and from results from previous studies. This was observed to be as a result of customers not making sufficient use of the IT services being rendered by their banks partly because of the fear of being defrauded by cyber-crime perpetrators and largely because of ignorance of the availability of these services. From the responses of the respondents, it was discovered that only the Automated Teller Machine (ATM) has received large number of users and that is because the banks' management has specified and enforced the policy of the minimum amount of money that can be paid over the counter, hence, customers have no choice but to use the ATM machines but leaving the other IT services such as Electronic Funds Transfer (EFT) and Internet Banking to suffer.

It was also observed that all the banks studied have fully implemented the office automation aspect of IT adoption. This is evident in the responses of the respondents to questions on how IT adoption has affected their work. It is also evident in the regression analysis of Staff efficiency on Information Technology which has the best result so far closely followed by the result of Quality of Service delivery.

The final results of Banks Performance and Information Technology show that Information Technology has improved performance but there is still room for more to be done. From the responses supplied by the respondents to the open ended questions, the following are deduced to be the barriers to the efficient implementation of IT systems:

1. Cost of acquiring equipments

- 2. Epileptic power supply
- 3. Ignorance of banks' staff on the technology know-how of the adopted systems
- 4. Customer ignorance on the availability of IT services and in most cases illiteracy of customers
- 5. Lack of intensive training of banks' staff on Information Technology usage
- 6. Inability of the banks' management to keep up with current innovations in Information Technology.
- 7. Consistent network failure in the country.

#### CONCLUSIONS

Adoption of IT has influenced the content and quality of banking operations. From all indications, IT presents great potential for business process reengineering of Nigerian Banks. Investment in information and communication technology should form an important component in the overall strategy of banking operators to ensure effective performance. It is imperative for bank management to intensify investment in IT products to facilitate speed, convenience, and accurate services, or otherwise lose out to their competitors. The banking industry in Nigeria presents IT providers with great opportunity to market their innovations. Success in this area however depends on how they can customize their services to appeal to the ready minds of various stake holders in the industry.

#### RECOMMENDATIONS

Concerns about ICT role in attaining effectiveness, efficiency and productivity were raised in the late 1980s. Since then a large number of studies have emerged both at the industry and firm level that have substantially improved our understanding of the relationship between ICT and firm performance. In particular, the firm-level studies have argued than an explanation for the so-called "productivity paradox" can be attributed to an insufficient response of organizational changes to adapt to changing business environment, to make better use of knowledge, technology and human resources, to respond to new demands from suppliers and customers, and to use ICT effectively (Sharpe, 1999 as cited in Obasan, 2011).

Presently, Information and communication technology has received great thoughtfulness across various industries and substantial positive effect on banks' profitability, cashiers work, banking transaction, patronage, services delivery, and customer services among other. Hence, it is recommended that;

- 1. More attention has to be directed towards the use of Information and communication Technology in banking operations since the industry serve as the financial wheel of any economy while appropriate policies must be put in place to ensure proper monitoring and the determination of the optimum size required to attain organisational efficiency.
- 2. Proper training should be put in place for banks' staff to enable the be all knowing about the various technological systems being implemented in the bank and not just the one each staff is directly using.
- 3. There should be customer awareness of availability of the various IT services being offered by the banks to enable the customers avail themselves with the available resources, only then will the banks' management be able to fully recoup the funds invested in acquisition of IT systems thereby increasing cost effectiveness in the long run.
- 4. Banks' management should not just implement IT systems because it is mandatory or because others are doing it but they should accept IT adoption as part of the daily operations as it is only then will the benefits of IT adoption fully accrue to them.

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- 5. Banks' management should endeavour to increase their bandwidth to counter the problem of network failure
- 6. Proper internal and external checks should be put in place to mitigate cyber-crimes and assure customers of the safety of their transactions
- 7. Banks' management should ensure that their website is not only an information seeking site as is the case in most banks. The sure upgrade their websites to enable their customers gain access to internet banking and not have to come to the banking hall for everything.
- 8. Customers should be encouraged to make use of and familiarize themselves with the available IT services being offered by their banks to be able to survive in the proposed cashless economy era.

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# A STUDY OF UNDERGRADUATE COLLEGE STUDENT'S STUDY HABITS IN RELATION TO THEIR ACADEMIC ACHIEVEMENT

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#### ABSTRACT

The present study titled "A Study of Undergraduate College Student's Study Habits in relation to their Academic Achievement" aims to study undergraduate college students of NOIDA city study habits in relation to their academic achievement. Study Habit Inventory developed by M. Mukhopadhayay and and D.N.Sansanwal (1963) was administered and academic performance of the students included the percentage of marks obtained from their end term exam. The sample consisted of a total of 150 students out of which 78 were boys and 72 were girls. Convenient sampling method was adopted for the selection of the sample and purposive sampling for the selection of students. For obtaining the objectives of the study, Mean, Standard Deviation, t- test and Pearson coefficient correlation statistical techniques were applied. After the data was collected, it was tabulated and analysed. The results revealed that the study habits and academic achievement of undergraduate students have a significant relationship and the study habits and academic achievement of undergraduate students of arts stream do not differ significantly with respect to the undergraduate students of science stream. The male undergraduate students do not differ significantly from the female undergraduate students with respect to their study habits and academic achievement.

#### JEL CODE

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#### **KEYWORDS**

Academic Achievement, Study Habits, Undergraduate College Students.

#### INTRODUCTION

ollege is not as intimidating as others would like to believe. It only entails more didactic responsibilities and a more mature behavior in dealing with challenges. An effective study habit is one way of being able to cope up with college life. We should be able to manage our time well and meet the academic demands of our subjects. Effective study skills must be practiced in order for all to improve. It is not enough to simply "think +about" studying; we have to actually do it, and in the process use information from what we do to get better. There is a saying that goes like this: "Practice doesn't make perfect; perfect practice makes perfect." If we want to be an achiever, take this saying to heart. No two people study the same way, and there is little doubt that what works for one person may not work for another.

Study habits are well-planned and deliberate pattern of study which has attained a form of consistency on the part of the students toward understanding academic subjects and passing at examination. Study habits determine the academic achievement of students to a great extent. Both study habits and academic achievement are interrelated and dependent on each other. There are students who come from different environment, localities etc and have different levels of academic achievement i.e., high and low. They also differ in the pattern of study habits. Some students have better study habits while the others have poor. Better the study habits better is the academic achievement. Academic achievement means how much knowledge the individual has acquired from the school. Academic achievement of the students is determined by their study habits. Study habits and academic achievement are very essential for research worker and educationists to know that every child whether he is gifted, backward etc should be educated in their own way but if they possess good study habits they can show performance in academics and in every situations and if children's do not possess good study habits they cannot excel in life. It is the study habits which help the learner in obtaining meaningful and desirable knowledge. Good study habits act as a strong weapon for the students to excel in life.

#### **REVIEW OF RELATED LITERATURE**

Singh (2011) examined academic achievement and study habits of higher secondary students. The results indicate that girls and boys differ significantly in their study habits and academic achievement. It also clears that good co-relation in study habits and academic achievement. Bhan and Gupta (2010) examined study habits and academic achievement among the students belonging to scheduled caste and non-scheduled caste group. The results revealed that sex has no significant impact on the study habits and academic achievement of students. Cox (2002) developed and incorporated a mathematics study skills program into intermediate algebra classes taught in a community college and determined if this program improved the success, reduced the mathematics anxiety level and improved the mathematics study orientation of the students. The same instructor taught all four sections of the intermediate algebra classes and used the same style of instruction, which included the incorporation of the mathematics study skills. Study revealed that the students who received the study skills Program were more successful than those students who did not receive the study skills program. Rajani (2004) studied study habit of intermediate students in relation to certain psycho-sociological factors. On the whole the intermediate students have good study habits. Region has significant influence on study habits as students of Telangana region showed better study habits than the other two regions. All the academic achievement scores have significant influence on study habits of the students. Guravaiah (2004) studied the Study Habits of Residential and Non-Residential Pupils of X Class in relation to certain psycho-sociological factors. The findings of the study concluded that the residence and region have significant influence on the study habits of X class pupils. But gender does not have significant influence on the study habits. Oza (1995) aimed to know the learning strategies and to investigate the factors affecting learning strategies such as sex, type of school, levels of academic achievement etc. The investigator further studied the relationship between learning orientation and learning strategies and made detailed study of two students each having good learning strategies and poor learning strategies. Study revealed that effectiveness of learning strategies depend upon the innovative practices adopted in school, seminar and workshops organized for updating teacher's knowledge efforts made by the learners. Ngailiankim Caroline (1988) investigated into the attitude towards study habits related to achievement in mathematics of class IX students in Shillong. It was found that there was a significant difference in attitude towards mathematics of students with high, average and low mathematics achievement. Sharma (1984) assessed the study habits and underachievement among rural girls. The results revealed significant differences in the study habits scores of under and high achievers. The results of 't' test very clearly revealed a close relationship between the poor study habits and academic underachievement.

#### NEED AND JUSTIFICATION OF THE STUDY

After reviewing all the researches, researcher has come across that study habit as a research variable in Indian researches has been investigated in two ways. One group of studies treated this as the dependent variable measured it and also studied several other variables as its correlates. Rarely, any researcher predicted study habit by another set of variables. The second and the group of researchers studied study habits as a correlate of certain other criterion variables,

INTERNATIONAL JOURNAL OF RESEARCH IN COMMERCE, IT & MANAGEMENT A Monthly Double-Blind Peer Reviewed (Refereed/Juried) Open Access International e-Journal - Included in the International Serial Directories http://ijrcm.org.in/ academic achievement is the most common among them. The researcher felt the need to study habits of undergraduate college students and its effect on their academic achievement.

#### STATEMENT OF THE PROBLEM

A study of undergraduate college students study habits in relation to their academic achievement.

#### OBJECTIVES

- 1. To find out the relationship between study habits and academic achievement of undergraduate students (17 to 20 years).
- 2. To compare the study habits of undergraduate students (17 to 20 years) of arts and science stream.
- 3. To compare the academic achievement of undergraduate students (17 to 20 years) of arts and science stream.
- 4. To compare the study habits of male and female undergraduate students (17 to 20 years).
- 5. To compare the academic achievement of male and female undergraduate students (17 to 20years).

#### **HYPOTHESES**

- 1. There is no significant relationship between the study habits and academic achievement of undergraduate students (17 to 20 years).
- 2. There is no significant difference between the study habits of undergraduate students (17 to 20 years) of arts and science stream.
- 3. There is no significant difference between the academic achievement of undergraduate students (17 to 20 years) of arts and science stream.
- 4. There is no significant difference between the study habits of male and female undergraduate students (17 to 20 years).
- 5. There is no significant difference between the academic achievement of male and female undergraduate students (17 to 20 years).

#### **RESEARCH METHODOLOGY**

The population for the study consisted of undergraduate students of two different streams i.e., Science and Arts Stream of Amity University of Noida city. Random sampling method was adopted for the selection of the sample for the present study. The sample consisted of a total of 150 students out of which 78 were boys and 72 were girls. Two departments were chosen for the purpose of the study namely: Amity Institute of Applied Science and Amity School of Fine Arts. Term end scores of the undergraduate students of both the department were taken as the academic achievement. **Convenient sampling method** was adopted for the selection of the sample for the selection of students.

For obtaining the objectives of the study the following statistical techniques were applied:

- Mean
- Standard Deviation
- t- test
- Pearson coefficient correlation

#### **RESULT AND DISCUSSION**

I. Study of relationship between the study habits and academic achievement of undergraduate students (17-20years)

In pursuance of objective no. 1, co-relational analysis was carried on to examine the extent of relationship between study habits and academic achievement. The correlation coefficients (r) between the dependent and independent variables have been shown in table 1 below.

TABLE 1: SHOWING PRODUCT MOMENT COEFFICIENT OF CORRELATION BETWEEN THE NINE DIMENSIONS OF STUDY HABITS AND ACADEMIC ACHIEVEMENT OF UNDERGRADUATE STUDENT

S. No.	Independent Variable	Dependent Variable	Value of (r)							
1.	Comprehension	Academic Achievement	0.051							
2.	Concentration	=	0.142							
3.	Task Orientation	-	0.075							
4.	Sets	"	0.037							
5.	Interaction	"	-0.022							
6.	Drilling	"	-0.108							
7.	Supports		0.088							
8.	Recording		0.118							
9.	Language		-0.051							

\*Significance at .05 levels

\*\*Significance at .01 levels

**r** = 0.051 between 'Comprehension' dimension of study habit and academic achievement. The obtained value of r is not significant. It is deduced that there exists no correlation between the two variables i.e., study habits and academic achievement. So, the null hypothesis framed in this regard is accepted. That means, there are certain specific behavior which is geared to better comprehension, for example before reading a lesson intensively the student may try to catch on what the lesson is about.

**r** = 0.142 between 'Concentration' dimension of study habit and academic achievement. The obtained value of r is not significant. It is deduced that there exists no correlation between the two variables i.e., study habits and academic achievement. So, the null hypothesis framed in this regard is accepted. That deducts, concentration is a very important predictor of effective study habits. Some students are capable of concentrating easily and for long, some others take time to concentrate, but once they concentrate, they can continue for long, while still some others find it difficult to concentrate at all. Some may read only when they are in a mood to do so.

**r** = 0.075 between 'Task Orientation' dimension of study habit and academic achievement. The obtained value of r is not significant. It is deduced that there exists no correlation between the two variables i.e., study habits and academic achievement. So, the null hypothesis framed in this regard is accepted. It infers, if a student who has to study a series of subjects and has to develop different levels of cognition, the task orientation is an important component of the study habits. For example, some students study different subjects according to the fixed routine-daily, weekly or monthly.

**r** = 0.037 between 'Sets' dimension of study habit and academic achievement. The obtained value of r is not significant. It is deduced that there exists no correlation between the two variables i.e., study habits and academic achievement. So, the null hypothesis framed in this regard is accepted. That indicates, by study sets we mean the physical and situational characteristics which a student adopts for study. For example, some students learn more when they read lying on the bed, whereas some mothers may as well sleep if they read lying on the bed.

r = -0.022 between 'Interaction' dimension of study habit and academic achievement. The obtained value of r is not significant. It is deduced that there exists no correlation between the two variables i.e., study habits and academic achievement. So, the null hypothesis framed in this regard is accepted. It shows that although both teaching and learning in the colleges have remained monoaction and almost the private affair of the individual teachers or students respectively, there are enough evidences to conclude that interaction of a student with his teacher or parents or his friends contributes positively towards better learning.

INTERNATIONAL JOURNAL OF RESEARCH IN COMMERCE, IT & MANAGEMENT A Monthly Double-Blind Peer Reviewed (Refereed/Juried) Open Access International e-Journal - Included in the International Serial Directories http://ijrcm.org.in/ r = -0.108 between 'Drilling' dimension of study habit and academic achievement. The obtained value of r is not significant. It is deduced that there exists no correlation between the two variables i.e., study habits and academic achievement. So, the null hypothesis framed in this regard is accepted. That testifies that drilling means practicing a particular learning again and again.

**r** = 0.088 between 'Supports' dimension of study habit and academic achievement. The obtained value of r is not significant. It is deduced that there exists no correlation between the two variables i.e., study habits and academic achievement. So, the null hypothesis framed in this regard is accepted. That indicates the study in any particular discipline gets a sound back-up from a broader study base. A student's habit of studying different types of books other than textbooks, or newspapers and magazines may be helpful in the learning of his subjects.

**r** = 0.118 between 'Recording' dimension of study habit and academic achievement. The obtained value of r is not significant. It is deduced that there exists no correlation between the two variables i.e., study habits and academic achievement. So, the null hypothesis framed in this regard is accepted. That means, it focuses that at higher levels any good teacher hardly teaches on the basis of single book. For good performance of the students, it is also necessary to read a number of books; recording in the form of text, class notes or preparing one's own study notes are hence very important.

**r** = -0.051 between 'Language' dimension of study habit and academic achievement. The obtained value of r is not significant. It is deduced that there exists no correlation between the two variables i.e., study habits and academic achievement. So, the null hypothesis framed in this regard is accepted. It shows that the language capability is an important predictor of effective study habits. For example, where the medium of instruction is English, it is important to see with what facility and ease does a student read books in English.

#### II. STUDY OF DIFFERENCE BETWEEN THE STUDY HABITS OF UNDERGRADUATE STUDENTS OF ARTS AND SCIENCE STREAM

In pursuance of objective 2, Study Habit as measured by Study Habit Inventory was compared for the undergraduate students of arts and science stream on the basis of the overall score. Table 2 indicates the comparison.

#### TABLE 2: MEANS, STANDARD DEVIATIONS, T-RATIOS OF THE ARTS STREAM AND SCIENCE STREAM UNDERGRADUATE STUDENTS ON THE STUDY HABIT

	INVENTOR							
S. No.	o. Group		Mean	S. D.	t-ratio			
1.	Students of Arts Stream	75	129.4	20.37	4.40			
2.	Students of Science Stream	75	114.2	21.99	(significant at 0.01 level)			

The value of t-ratio is 4.40 which are indicative of rejection of null hypothesis. So, it can be inferred upon that study habits of undergraduate students of arts and science stream differ significantly. Like both the streams have different subjects and students of both the streams have different interests in their subjects as in science subjects' demands more concentration than arts subjects.

#### III. STUDY OF DIFFERENCE BETWEEN THE ACADEMIC ACHIEVEMENT OF UNDERGRADUATE STUDENTS OF ARTS AND SCIENCE STREAM

In pursuance of objective 3, Academic Achievement was compared for the undergraduate students of arts and science stream on the basis of their Academic result. Table 3 indicates the comparison.

#### TABLE 3: MEANS, STANDARD DEVIATIONS, T-RATIOS OF THE ARTS STREAM AND SCIENCE STREAM UNDERGRADUATE STUDENTS ON THE ACADEMIC

	ACHIEVEIVIENT								
S. No.	Group	N	Mean	S. D.	t-ratio				
1.	Students of Arts Stream	75	72.62	58.48	0.03				
2.	Students of Science Stream	75	58.55	18.78	(not significant)				

The value of t-ratio is 0.03 which indicates the acceptance of null hypothesis. So, it can be deducted upon that academic achievement of undergraduate students of arts and science stream are not different significantly. Arts and Science streams both have a variety of students so it depends on the interest and the learning skills of the individual student. That means, it is not necessary that science students always do better than the arts students, as in arts students also achieve more and good marks. Nowadays arts students are also being focused like science students according to the improvised curriculum of school and colleges.

# In pursuance of objective 4, Academic Achievement was compared for the male and female undergraduate students on the basis of the overall score. Table 4

indicates the comparison.

#### TABLE 4: MEANS, STANDARD DEVIATIONS, T-RATIOS OF THE MALE AND FEMALE UNDERGRADUATE STUDENTS ON THE STUDY HABIT INVENTORY

S. No.	Group	N	Mean	S. D.	t-ratio
1.	Female Students	72	125.40	21.87	1.92
2.	Male Students	78	118.42	22.52	(not significant)

The value of t-ratio is 1.92 which testifies the acceptance of null hypothesis. So, it can be gathered that study habits of male and female undergraduate students do not differ significantly. This statement is very much true and it is not like that male always has a good study habits than female students. The only thing is it all depends on the individual skills and preferences because there are individual differences. Nowadays females are also receiving the same kind of study environment like males and no discrimination is being made between a girl and a boy child. And in every field females are competing males so both are building good learning style in present scenario.

#### V. STUDY OF DIFFERENCE BETWEEN THE ACADEMIC ACHIEVEMENT OF MALE AND FEMALE UNDERGRADUATE STUDENTS

In pursuance of objective 5, Academic Achievement was compared for the male and female undergraduate students on the basis of their Academic result. Table 5 indicates the comparison.

#### TABLE 5: MEANS, STANDARD DEVIATIONS, T-RATIOS OF THE MALE AND FEMALE UNDERGRADUATE STUDENTS ON THE ACADEMIC ACHIEVEMENT

S. No.	Group	N	Mean	S. D.	t-ratio
1.	Female Students				
2.	Male Students	78	59.35	19.40	(not significant)

The value of t-ratio is 1.98 which shows the acceptance of null hypothesis. So, it can be concluded that academic achievement of male and female undergraduate students does not differ significantly. It can also be said, there are individual differences and my study proves that there is no difference between the academic achievement of male and female. Nowadays females are also receiving the same kind of study environment like males and no discrimination is being made between a girl and a boy child. And in every field females are competing males so both are building good learning style in present scenario. So females are also achieving good marks in their academics as well as in their co curricular activities. Now females have a strong competition with males in their academic records in any of the fields.

#### FINDINGS

- 1. The study habits and academic achievement of undergraduate students have a significant relationship.
- 2. The study habits of undergraduate students of arts stream differ significantly with respect to the undergraduate students of science stream.
- 3. The academic achievement of undergraduate students of arts stream does not differ significantly with respect to the undergraduate students of science stream.

4. The male undergraduate students do not differ significantly from the female undergraduate students with respect to their study habits.

5. The male undergraduate students do not differ significantly from the female undergraduate students with respect to their academic achievement.

#### IMPLICATIONS

Any research effort would go waste if it doesn't contribute to the existing knowledge or help the discipline in which it has been made. It must have certain implications for the practice and theory, and should facilitate the growth of the discipline. With this aim in view the investigator has made a humble attempt to delineate the implications for the practice in education. This attempt has been made to derive implications based on findings of this particular study of Study Habits of Undergraduate Students in relation to their academic achievement.

The findings of the present study clearly revealed significant relationship between study habits and academic achievement of undergraduate students. Academic achievement of the students is determined by their study habits. However, there are some general techniques that seem to produce good results.

#### **1. PREPARE A STUDY SCHEDULE**

Prepare a daily study schedule and stick to it. Assign more time to subjects we find difficult. Designate a time for working on assignments and of course some minutes for relaxation too. There should always be a time for everything.

#### 2. LISTEN INTENTLY DURING LECTURE HOURS

Much is learned when we listen attentively to the professor during actual lectures. Professors usually stress points they consider significant. Watch out for topics which are not found in the textbooks. Note this down as it is considered additional information and may be given as a part of the exam. This will also signify to the teacher those who are listening well to him.

#### 3. TAKE DOWN NOTES DURING LECTURES

Take down notes and underline topics that professor stressed during the lectures. We could re-write them later, after class hours, to learn more. Re-writing them would allow us also a better understanding of the topic. Be organized and neat in note-taking. This would help us a lot when we review them.

#### 4. STUDY DAILY

Cramming will eventually lead us to nowhere. It lessens retention and therefore true learning does not take place. Reading the notes and studying them daily will definitely benefit us. Do not just memorize. Understand the concept of what we read. Analyze it carefully for longer retention.

#### 5. DO ADDITIONAL RESEARCH

Good and responsible students do research even if not asked to. Read books. Research will help us understand the lesson more and would demonstrate to the professor our willingness to learn. Go to the library and read. Learning means also being updated with the latest information on our topic. The internet is a good source at times, but we should rely only on sites which have been validated and proven to be legitimate. There are many misinformation obtained online through spurious sites.

#### 6. ADAPT AN ORGANIZED SYSTEM OF STUDY

We can employ the following step: Read, write and summarize. Our first procedure is to read all of the topics.

#### CONCLUSION

One of the major conclusions of the present study has been that the study habits and academic achievement of undergraduate students have a significant relationship. The findings of the present study clearly revealed significant relationship between study habits and academic achievement of undergraduate students. Academic achievement of the students is determined by their study habits. Study habits determine the academic achievement of students to a great extent. Both study habits and academic achievement are interrelated and dependent on each other. It is the study habits which help the learner in obtaining meaningful and desirable knowledge. Good study habits act as a strong weapon for the students to excel in life.

#### DELIMITATIONS

To define the scope of the problem under investigation, & keeping in view limitations of available time & resources, the present investigation worked out with the following delimitations:-

- 1. The study was restricted to Noida city only.
- 2. The study was restricted to college (undergraduate) students only (17 to 20 years).
- 3. The study was restricted to the college students of arts and science stream.

#### SCOPE FOR FURTHER RESEARCH

The present study was undertaken keeping various constraints in mind such as those of time, money and man power. Hence, the findings of this study in which generalizations are applicable only to the two departments in considerations. However, the study can be made more effective if in future the following suggestions are kept in mind while conducting a similar research.

- 1. The present study is based on a sample of 150 undergraduate students. A similar study may be conducted using a large sample collected randomly, so that it may represent the population more accurately.
- 2. A comparative study similar to this may be conducted between central University, State Government University and private University.
- 3. The present study is limited to only Noida city; further studies may be conducted in other cities, states and regions of the country.
- 4. The present study is limited to undergraduate students of arts and science streams only. A similar study may be conducted on post graduates students of arts, science and commerce streams also.

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## PACKAGING DESIGN AS NEW INNOVATIVE PROMOTIONAL TOOL

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#### ABSTRACT

The purpose of the study was to examine the consumer perception on different design elements of a Dairy package and to provide essential information for the companies about the consumer attraction and importance of design attributes from the consumer point of view. The theoretical framework was based on the secondary data (articles and books) and included core concepts of packaging, packaging design, consumer behavior, consumer perception, and consumer attraction. The mixed method was selected for acquiring and analyzing the research results. Quantitative data was collected from 30 questionnaire responses and was analyzed with the computer program. The results of the study revealed the importance of packaging design in consumer buying behavior. By examining the consumer perception, it was found out that packaging design elements such as graphics, color, and product information play a key role in decision making and ensure consumer's attention. Based on the findings, it was defined that successful Dairy packaging design could be created by the cooperation between the consumer and the company.

#### **KEYWORDS**

Design, Packaging, Tatrapack

#### INTRODUCTION

onsumer market grows rapidly every year and the number of competitors among different types of products and goods increases steadily. To standout against competitors, every company tries to invent something new and to get the competitive advantage for providing the product to the end customer. One of the marketing tools that has become popular and important is **packaging** and **packaging design** which allows companies to be different from each other and to have more priorities among competitors. This has become a reason why nowadays there is a big variety of design packages on the supermarkets' shelves.

Packaging and packaging design have become significant factors in the marketing of diverse "consumer goods" and have a main role in communicating product benefits to the customer. Czinkota & Ronkainen (2007) deem that product packaging is connected to other variables in the marketing mix (Rundh 2009, p. 988). Cateora & Ghauri (2000) say that these variables are within the control of the company and they help to adapt to the changes in the business environment (Rundh 2009, p. 988). According to Packaging Federation (2004 a,b), these changes occur in different areas: new technology, materials development, logistics requirements, environmental issues, consumer preferences; all are the key factors for making decisions on marketing strategy (Rundh 2009, p. 988).

Consumer preferences and consumer buying behavior are the major issues that should be taken into account when designing a new package. In spite of factors such as new technology or material development, consumer's choices and desires are the important elements that drive the marketing process. Consumers are the key actors in planning and implementing packages. Hereby, the key issue for packaging design is to understand the consumer (Stewart 2004). There are many studies that are done in the area of packaging. Nevertheless, Holmes and Paswan in the article "Consumer reaction to new package design" (2012, pp. 109 -110) deem that a little is known about the impact of the consumer's experience with the package on the evaluation of the product itself. Concerning the previous researches, it can be seen that not a lot of studies are about the package design perception and direct customer experience with the package. Schoormans & Robben (1997); Rettie & Brewer (2000) deem that package design is one of the most significant parts of product strategy. It is estimated that approximately 70 percent of all purchase decisions of goods are made at the point of purchase. Therefore, the package itself is the only marketing communication the consumer may receive while evaluating the product. (Holmes & Paswan 2012, p.109.) Schoormans & Robben (1997); Rettie & Brewer (2000) deem that package itself is the only marketing communication the consumer may receive while evaluating the product. (Holmes & Paswan 2012, p.109.) Schoormans & Robben (1997); Rettie & Brewer (2000) deem that package and the consumer are strongly related to each other, two areas of business are described from the point of packaging in this study: marketing and consumer behavior. These two fields both affect and develop each other what helps companies to make right decision about their marketing strategies.

#### **OBJECTIVES OF THE STUDY**

- To examine the consumer perception on different design elements of a Dairy package.
- To provide essential information for the companies about the consumer attraction.
- Find the importance of design attributes from the consumer point of view.

### **REVIEW OF LITERATURE**

In marketing literature, packaging is a part of the product and the brand. A product's package represents its characteristics and communicates the product information. For consumers, the product and the package are one and the same when they see it on the supermarket shelves. During the purchasing decision, the package assists the consumer by creating the overall product perception which helps the evaluation and the making of the right choice. Furthermore, the package is the product until the actual product is consumed and the package is recycled.

The package design adds value to the package and to the product respectively. Design elements such as colors, font, text, and graphics have an important role in package appearance. Pictures on the package in form of attractive situations (mountains, beaches, luxury houses and cars) can assist in triggering lifestyle aspirations (Rundh 2009, p. 999). At the point of purchase, the primary role of the package and packaging design is to catch the consumers' attention and to stand out among the competition in the store or at the supermarket.

Successful package design and packaging itself is the result of the involvement and the work put forth by marketers, designers, and customers. Hence, packaging is a major instrument in modern marketing activities for consumer goods. Prone (1993) deems that the package can attract the customers' attention, communicate company's name and image, differentiate the brand from competitors, and enhance the product's functionality (Garber & Burke & Jones 2000, p. 5). Therefore, the package itself acts as a decisive communication tool and provides consumers with product-related information during the buying decision process.

Packaging has many functions in different departments. It has its most essential roles in logistics and marketing due to the fact that these two units are strongly connected to the end-users of the product. The task of the package is to sell the product by attracting attention and to allow the product to be contained, utilized, and protected (Silayoi & Speece 2004, p. 610).

Bill Stewart (2004, pp. 3 - 5) defines three prime functions of the package:

#### TO CONTAIN

The aim of the package here is to achieve integrity. It means that the product stays in the same condition and does not change its basic form and use, due to the influence of external factors.

The task of containment is ongoing throughout the product life cycle, from production to the end user and customer. The package function 'to contain' is convenient and beneficial to the consumer as it increases consumer confidence in the contents of the package and the product.

#### TO PROTECT

Protecting the product is a key function of packaging. The protection task is performed not only for physical factors such as transit, but also for environmental influences - moisture, gases, light, temperature, and other. Here, the package choice depends on the nature of the goods, distribution and types of hazards it will encounter. Some of the benefits this function can provide for a product are extended shelf life and freshness.

#### TO IDENTIFY

The role of identification is to provide the consumer with information about the product. Product identification has a description of the contents and consists of product use and legally required information. To some extent, this function can have a promotion role that stimulates the desire to purchase a product and can also assist product branding.

Bloch (1995) says that the importance of product design is crucial to the success of a product. It ensures consumer attention for the product, communicates information, and it provides sensory stimulation. (Holmes et al. 2012, p. 109.) According to Berkowitz (1987), an exclusive and unique package design is a way for a new product to be noticeable among familiar packages offered by competitors. (Holmes et al. 2012, p. 109.)

Murphy (1997) indicates the importance of package design and its influences on consumer decision making process. Murphy distinguishes a two-step decision process the consumer follows during shopping for convenience-packaged products. First step is to decide to examine the product carefully after finding it on the supermarket's shelf. Here, the package design has the power to initiate consumer examination of the product. The second step includes direct experience with the product where the package becomes a "salesman". Hence, the package and packaging design are involved in the consumer selection and purchasing intent. (Holmes et al. 2012, p. 110.)

Silayoi and Speece (2007, pp. 1498 - 1500) based on the review of the relevant literature, define that there are four core packaging elements which affect a consumer's buying decision. These elements are divided into two categories: visual and informational elements. The visual elements include graphics and size/shape of packaging. Informational elements consist of product information and information about the technologies used on the package.

#### **VISUAL ELEMENTS**

#### Graphics and color

When creating a package design, it is important to remember that consumers evaluate packaging in different ways. Customers' attitudes towards the package depend also on the process of interconnection between person and package. Here, the level of this involvement influences on the product continuum where the product name varies from high involvement to low involvement product. The difference between them is that the first one has a more substantial effect on the consumer's lifestyle, while the second is less significant and can be habitually purchased. The decision making for high involvement products is less influenced by image issues. Grossman & Wisenblit (1999) say that the decision making for low involvement products includes the evaluation of packaging design attributes which is less important, while the graphics and color become more valuable and noticeable (Silayoi et al. 2007, p. 1498). Kupiec et al. (2001) suggest that the consumer behavior towards the low involvement products can be influenced by the development of the marketing communications which includes image building (Silayoi et al. 2007, p.1498).

#### Graphics

Graphics include image layout, color combination, typography, and product photography. The combination of all these components communicates an image. Graphics on the package are telling detailed information about the product. It becomes a product branding or identity, followed by the information. According to Herrington & Capella (1995), when the consumers examine packages in the supermarket, the differential perception and the positioning of the graphics can be the difference between identifying and missing the product (Silayoi et al. 2007, p. 1498). However, eye-catching graphics make the product stand out on the shelf and attract the consumers. Graphics can affect through colors and printed lines on the package on which different signs and symbols are located. Holograms and combinations of various materials can encourage consumers to touch the package, thereby inspiring them to try the product (Rundh 2009, pp. 999 - 1000).

#### Color

Cheskin (1957) says that the selection of the colors and color combinations is a necessary process for creating a good design package. Color is a key element of design due to the fact that it is usually vivid and memorable. The package color can have a significant effect on consumers' ability to recognize the product, the meaning conveyed by the package, its novelty and contrast to other brands and company's names. The package color can be modified without changing the costs, product characteristics and functionality. (Garber et al. 2000, p. 3.) Packaging applications have many color-coded messages which are associated with the particular product category (Stewart 2004, p. 7). Garber & Hyatt & Starr (2000); Koch & Koch, (2003) say that in case of food package, color can influence product expectations and perceptions (e.g. taste) (Kauppinen-Räisänen & Luomala 2010, p. 288). Product packages in similar colors may attract attention by means of brand or product category. Dissimilar or novel colors may attract and be preferred by those customers who like novelty. (Kauppinen-Räisänen et al. 2010, p. 291.) The right choice of colors is an important factor in creating the impression needed to influence brand and product selection (Gofman et al. 2010, p. 167). Size and shape

Packaging size and shape are also significant factors in designing the package. A consumer interacts with these two elements in order to make volume judgments, e.g. consumers perceive more elongated packages to be larger (Silayoi et al. 2007, p. 1499). Packaging sizes depend on the different involvement levels. The low involvement food products have a low price which is generated through cost savings created by reduced packaging and promotional expenses. The effect of package size has a strong influence on the purchasing choice when the quality of the product is hard to determine. Therefore, the elongated shape and appropriate size causes the consumer to think of the package as having better product volume and cost efficiency. (Silayoi et al. 2007, p. 1499.)

#### **INFORMATIONAL ELEMENTS**

#### Product information

Communication of information is one of the core functions of the packaging. This helps customers to make the right decisions in the purchasing process. Coulson (2000) gives an example of information significance using a food labeling case: the trend to consume healthy food has emphasized the importance of labeling, which gives the consumer the opportunity to consider alternative products and to make an informed product choice. (Silayoi et al. 2007, p. 1499.) Technology image

McNeal and Ji (2003) deem that the role of packaging in marketing communications is implemented by developments in technology (Silayoi et al. 2007, p. 1500). Here, the technology creates the packages according to trends and consumers' attitudes and behaviors. The role of technology is to meet consumers' needs and requirements. As far as the technology is a communication element, it should be presented visually and, therefore, it will catch more attention and be convenient for consumers.

#### Dairv package

Dairy package design is a core element of the current report. Dairy is a dairy product which is always needed for consumption and cooking. It is a demanded product all over the world and it is an integral part of food. Hence, Dairy was chosen due to the reason of purchasing demand. In the market where the high competition exists, it is important to differentiate. In case of Dairy package, it is crucial to have an attractive design in order to gain consumers' attention and to stimulate purchase decisions.

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There are a few companies in India which are specialized in the package design creation and the Dairy package production. In case of the current report, two companies are considered: mother dairy pvt.Ltd and Amul co-operative Ltd. Amul is a company that produces dairy products such as yoghurt, Dairy, cheese, butter and etc. Amul is the biggest Dairy manufacturer in India that has 66% of Dairy market shares. The task of Amul is not only to produce dairy products but also to present them in attractive form. The company creates the design, makes images and slogans

Mother dairy is a food packaging and processing company. It offers packaging and processing solutions for dairy, beverages, ice-cream and prepared food. The company creates and tests different types of package designs, offers new ideas about packages production. Using new technologies and equipment, it produces high-quality packages for different products. Therefore, the Dairy package design is a result of the involvement and the work put forth by these two companies, Amul & mother dairy.

The package design produced by these two companies has a modern and attractive appearance, it catches consumers' attention, stimulates purchasing desire and motivates during decision making process. The stable and easy-to-use package is made from material that involves consumers to experience and investigate the package and its design. The package guarantees the freshness and taste of the Dairy products. The combination of all these benefits makes the design and package unique and also allows it to stand out among the competition.

#### ANALYSIS OF THE RESEARCH

Quantitative data has been collected through the online questionnaire and has been analyzed by the computer program Excel. This program has been chosen due to the fact that a small amount of people have participated in the survey. The target group of the questionnaire has included professional executives from the Delhi and Noida. The presented numbers and percentages are explained and described according to the results of the collected data. However, the obtained results could not be scientifically precise since the answers have been conducted by a small number of participants. The online questionnaire lasted one (1) week and the survey questions were sent to fifty (50) respondents. Thirty (30) persons took part in the questionnaire what was equal to 60% of the total amount of people. The questionnaire consisted of eleven (11) questions. The closed-ended, closed-ended likert, closed-ended rating scale, and closed-ended dichotomous questions were included into the questionnaire. These types of closed-ended questions assisted in getting straight forward and exact answers. Two pictures were used in the questionnaire. The respondents' perception was examined by using two images of Dairy packages with different design styles. The data were collected and analyzed according to the answers provided by the respondents who were working with these two images during the whole survey. The quantitative data analysis was used in the first research analysis.

According to the Dairy package (2), graphics and images were the most noticeable design elements. Twenty three (23) persons marked it as the first thing that caught their attention; it is equal to 76,7% of the participants. Product information was caught first by 13,3% of the respondents, which means four (4) persons. Shape of the package was noticed first by two (2) persons which represents 6,7% of the respondents. Only one (1) person paid attention to the color of the package, meaning 3,3%. The data shows that the two Dairy package designs have different results. Package (1) attracted with color, whereas package (2) with graphics and images. Product information was noticed more on package (1). The shape of the package was the first thing that caught the attention of the observers on package (2). Color was noticed by one (1) person on the package (2), whereas the shape of the package attracted one (1) participant to the package (1). Comparing the two packages with dissimilar design styles, it can be seen that they provided different results. Package (1) was recognized as a Dairy product by image more often, whereas package (2) by name of the product. Colors on the package helped to identify the package (2). Ten (10) respondents answered that the design of the package (2) is excellent. Good design was given for the package design (1) by twenty two (22) participants and for the package design. One (1) person answered that the package design (1) was poor, whereas ten (10) people perceived the package design (2) as a poor design. Question number ten (10) in the questionnaire was presented in a form of matrix. There were four (4) statements with which the respondent agreed or disagreed. The questions were about package design, its attributes and importance.

First statement was about "Dairy package design is telling you about product quality". Here, only one (1) respondent strongly disagreed. Six (6) people answered "disagree" and the same amount of participants had neutral opinion about the design and product quality. The number of respondents who agreed with the statement was fifteen (15) and the number of those who strongly agreed was two (2).Second statement was telling that "Size and shape of Dairy package are important for you". Here, one (1) respondent strongly disagreed with the statement. Four (4) persons answered that they disagree and twelve (12) participants had neutral opinion about the size and the shape importance. Eleven (11) people agreed with the statements and two (2) strongly agreed. Third statement presented following: "Dairy package material and ease of use are essential for you". One (1) person strongly disagreed with the statement and one (1) chose option "disagree". Five (5) respondents had neutral opinion, whereas fifteen (15) agreed that "the package material and ease of use are important". The answer "strongly agree" was provided by eight (8) persons.

Fourth statement was about "Dairy package design is valuable for you". Here, the answer "strongly disagree" was not used by respondents. Six (6) persons disagreed with the statement and eight (8) had neutral opinion about the design value. Fifteen (15) people agreed and only one (1) strongly agreed with the statement.

According to the results, all statements had positive answers. The most significant numbers can be seen in: first statement "Dairy package design is telling you about product quality" - fifteen (15) respondents agreed; second statement "Size and shape of Dairy package are important for you" – eleven (11) people agreed; third statement "Dairy package material and ease of use are essential for you" – fifteen (15) persons agreed; and fourth statement "Dairy package design is valuable for you" – fifteen (15) participants agreed. However, statement number one (1) and four (4) had rather big amount of respondents who gave their opinion as "disagree" and "neutral". Statement number three (3) had eight (8) "strongly agree" answers. Statement number two (2) had twelve (12) "neutral" answers. The Dairy package design is very important for decision making process. During the purchasing, the package helps the consumer to evaluate the product. The design of the package communicates the information about the product quality. Its material and ease of use can assist consumer in choosing the particular Dairy product. The size and shape of the Dairy package are essential elements of packaging design which drive the consumer attention and influence the purchasing decision. The overall product perception is created by the package design having the high value for the consumer. The packaging design elements have different impacts on the consumer. Some of them catch the consumer attention; some of them stay ignored. However, the findings show that different designs attract with different elements. The Dairy package designs used in the questionnaire provide the evidence that design elements such as graphics and image, color, product information, and shape of the package play different roles.

The consumer perception and attraction varies a lot. People perceive and evaluate package and its design in different ways: where one likes the image and color, another would not even pay attention to it. The results show that two Dairy package designs are perceived differently and attraction elements are evaluated according to the particular Dairy package design. The product recognition is also an element of the perception. Two Dairy packages are recognized as a Dairy product by different elements: one by image and another by the name. The research findings show that packaging elements such as graphics, color, and product information are seen important by most of the participants. Here, the graphics and color are among the most noticeable design elements. The product quality judgment is done by the packaging design. The size and shape as well as the package material and ease of use are the factors which are telling about the package convenience. In general, visual elements of the package design influence the choice of the product and have an impact on consumer attraction. The design preferences strongly depend on the target group and can vary from country to country.

The consumer perception and attraction are the key factors for creating a good design of the package. The usage of packaging design elements as market segmentation can provide useful information to marketers about maximizing the package's impact in selling the food products. The package and packaging design are the components that provide an advantage for the products in a competitive environment.

The consumer choices and design characteristics of the package are the key elements of the marketing strategies. The cooperation between consumers and companies provides package design which attracts the potential customers and obtains successful results for the company. The packaging and the consumer are two variables which should be always considered in the company's strategies.

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#### RECOMMENDATIONS

The present study has several delimitations. It focuses only on the consumer perception and the Dairy package designs. Accordingly, further research could investigate more detailed the package design elements and their influence on consumer buying behavior. For instance, how certain colors or fronts are perceived by the consumers or specific target groups. Furthermore, future studies could focus on other product packages' designs and could examine the design elements which drive the purchasing decisions. Another research could explore how different design elements vary from country and culture.

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