

ABSTRACT

Sense of calling is an emerging construct finding important place in contemporary organizational behaviour and psychology related research studies. Scholars have conceptualized it in different ways. Origin of calling has religious roots but now it is gaining a secular perspective. Present study put forth a theoretical acquaintance with sense of calling which can serve as a base for future empirical studies.

Keywords: Sense of calling, work, secular, career, other-oriented

Introduction:

Sense of calling is an emerging construct important place in contemporary finding organizational behaviour and psychology related research studies. Sense of calling has an impact on various work-related outcomes like organizational engagement, organizationcommitment, work directed citizenship behavior etc. (e.g. Duffy et al., 2011; Hirschi, 2012; Xie et al., 2017). Conception of a calling is deeply rooted in Christian theology. Having originated from religious context, calling is now studied as a secular concept by many academicians. The term connotes people's urge to do something significant; an inner drive to benefit others (Schuster, 2003). Most of the studies conducted have participants from outside the Indian boundary and hence, its relevance in Indian context needs to be explored. Indian studies have yet to gain momentum in the context. The present study, therefore, makes an attempt to acquaint the researchers with the theoretical framework of sense of calling which can serve as basis for future empirical studies.

The concept:

Historically, the origin of a sense of calling lies within the religious framework but gradually the concept started taking a secular view. Academicians and researchers have given different definitions of calling. These definitions are similar yet different with respect to the components. Hence, a look at these definitions can give a wider view on the construct.

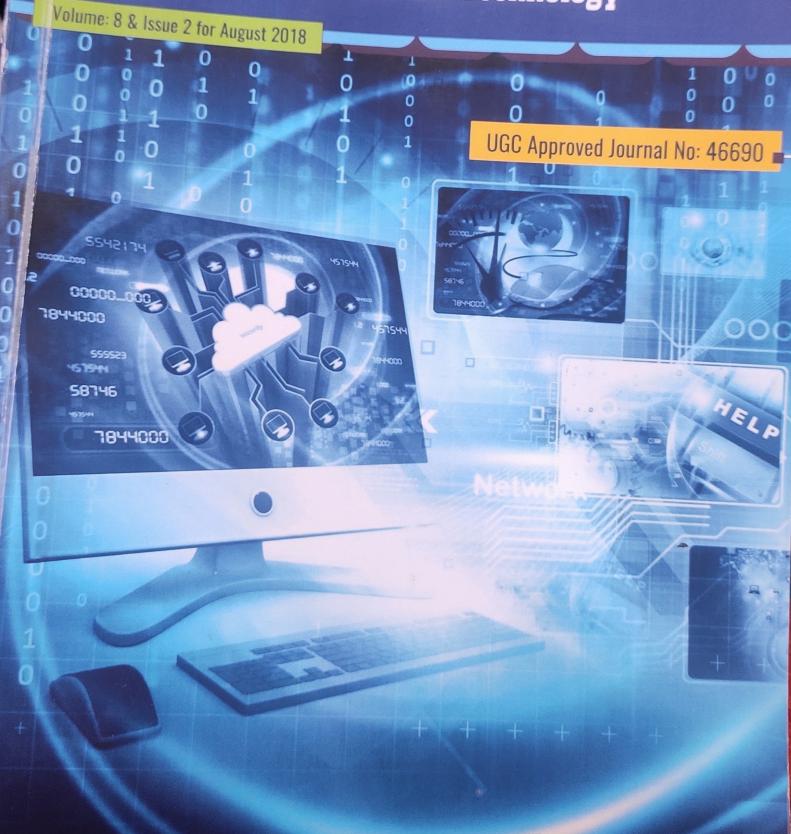
According to Dik and Duffy (2009), "a calling is a transcendent summons, experienced as originating beyond the self, to approach a particular life role in a manner oriented toward demonstrating or deriving a sense of purpose or meaningfulness and that holds other-oriented values and goals as primary sources of motivation" (p. 427). Their definition highlighted three dimensions: first related to the external source of motivation, second is being mindful of purpose and meaning of life's role and how efforts can fit into broader framework and third is contributing towards common good. Elangovan et al. (2010) defined calling as "a course of action in pursuit of pro-social intentions embodying the convergence of an individual's sense of what he or she would like to do, should do, and actually does" (p. 430). Their definition combined three features: Action orientation, Sense of clarity of purpose and personal mission and Pro-social intention(s). Hall & Chandler (2005) define a calling as "work that a person perceives as his purpose in life" (p.160). For Bullough & Hall- Kenyon (2012) to be 'called' means "responding to a summoning, the -sources of

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PART - I

EMERGING TRENDS IN MANAGEMENT

Contents

[1]	Study of Critical Success Factors (CSFs) in Green Supply Chain Management (GSCM) of Indian Manufacturing Industries	1-6
[2]	Evaluation of Green Marketing Practices in Indian FMCG Sector	7-11
	Leader's Contribution is always exemplary for an Exclusive Organizational Goal	12-14
	Study of Service Quality of Hotel Industry in Bhubaneswar	15-19
[4]	Financial Frauds in Indian Banks: A Study of Bankers' Perspective	20-24
	Role of IT in Banking Sector	25-29 30-33
[6]	Role of TT in Banking Strength Recent Trends of Telecommunication Industry in India	34-39
[7]	Evolution and Growth of Indian Textile Industry	40-44
[8]	Evolution and Growth of Indian Televelopment of MSMEs in India The Government Policies & Schemes for the Development of MSMEs in India	45-50
[9]	The Government Policies & Schemer Assessment	51-56
[10]	Micro-Finance in India: Review and Assessment	
[11]	Micro-Finance in India. Revue Credit Expansion Programmes for Urban Poor: An Empirical Study	

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Role of IT in Banking Sector

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Abstract

Liberalization has opened the turf to new players and brought greater competition among banks. To survive in this competition, the information and communication technology significantly contributed to the exponential growth and profit of financial institutions worldwide. Technology is the key to move towards providing integrated banking services to customers. Indian banks have been late starter in the adoption of technology for automation of processes and the integrated banking services. But with the global adoption of technology, Indian banking is also at the threshold of paradigm shift due to the latest changes. There are various factors which have played vital role in the Indian banking sector for adoption of technology. After liberalization RBI made several changes in the basic structure of banking sector and laid down numerous guidelines on electronic banking, fund transfer, core banking solution, payment system, clearing services, and internet banking. So, it becomes necessary for the banks to adapt sweeping changes in technology. The present paper attempts to study the role of IT in banking sector, difference between brick and mortar and e-banking and various electronic banking services. The results of the study showed that electronic banking has expanded the customer base, reduced the cost of handling payments and to free the bank from traditional constraints on time and place by introducing new products and services to the customers.

Keywords

Mobile Banking, Internet Banking, E-commerce, ATM, Debit & Credit Cards, Swift, EDI

L. Introduction

Computerization, information technology and automation of services are key issues for banks to survive in a competitive environment; and are receiving prime attention as it touches everybody's work in some way or the other. But this cannot be done in a day. Banks do need to have extensive investment on technology to meet all the requirements and to reduce the transaction costs. However, the implementation of IT in banking without undertaking appropriate business process re-engineering (BPR) exercise will not prove to be fruitful. Proper business process re-engineering ensures the IT initiatives to meet the required objectives, and ensures the financial outlay being properly utilized. There are number of benefits that can be achieved from IT through BPR. Firstly, BPR enables banks to reap up the maximum benefits from absorption of IT in business operations, be it by way of process simplification or handling the large volume of transactions. Secondly, BPR should facilitate in process simplification in banking operations so that IT initiatives can be rendered in a much simpler and effective way in manual operations. Thirdly, BPR should considerably reduce the time lag deliverables and hasten up the entire cycle of processes and procedures involved in banking operations. Fourthly, BPR process should enable the customers to undertake the banking transactions much more conveniently than earlier one. BPR process should target on improving the overall customer service levels. This can be achieved by popularizing the IT based delivery channels like tele-banking, remote customer enquiry terminals, kiosks, internet banking, ATMs, mobile banking, and phone banking so

that customers are facilitated to carry out most of the transactions without having to visit the branch premises. It is clear from the discussion that technology can be used in banking in four different

- To handle the expanded customer database.
- To reduce substantially the cost of handling payments.
- To free the bank from traditional constraints on time and place.
- To introduce new products and services to the customers.

Due to these technological changes, the term which gains the utmost importance is "Electronic Banking". E-banking is defined as the automated delivery of new and traditional banking products and services through electronic, interactive communication channels. Through e-banking individuals and corporate customers can access accounts, transact business, transfer funds or obtain information on products and services through the electronic media without any paper transactions. For many customers e-banking means 24 hours access to cash through ATM or direct deposit of pay cheques into savings account but electronic banking involves different types of transactions. E-banking also means transferring of funds electronically with the use of computer and other electronic modes. It allows customers to automate cash receipt payment.

Increased productivity and cutting of transaction costs are the most obvious benefits of e-banking. The dramatic difference in cost and speed between traditional 'brick-to-brick' banking and Internet-mediated financial 'brick-to-click' banking services and related information delivery has led to rapid growth of online payments, e-banking and online credit risk management. However, the Indian banking industry is expected to be a leading player in e-business while the banks in developed countries are working primarily via internet as non-branch banks.

II. Difference between Brick and Mortar Banking and **E-banking**

Understanding the nature of innovation is a crucial step in managing the changes associated with any innovation (Afuah, 2003). In order to investigate the changes from traditional bricks and mortar banking to e-banking in terms of technological knowledge, we analyze the key differences in the IT infrastructure, transaction and service dimension. Due to the emergence of internet, the manual record maintaining was shifted from manual to mainframe, to

personal computer, to client /server for the IT infrastructure. Traditional banking requires the interaction with physical facilities, processes and payments (Suresh, 2008). The customers are also required to carry out transactions with having a physical presence in a particular geographical location. On the other hand, e-banking is a way of on-line transaction via internet. It constructs an alternative channel by which customers can easily make a transaction anywhere-anytime and reduce the needs for financial

intermediaries (Cheung and Liao, 2003). Further, there is a wide variation between brick and mortar banking and e-banking. In brick and mortar banking, the services are more comfortable, risk is less, trust can be easily maintained because of personal contact. However, in e-banking, the services are more convenient, efficient and based on market extension. With

relation to market scope, traditional banking is related to physical transaction, customers centered and focused to the particular customers in a geographic boundary. On the other hand, e-banking is not confined to a particular area but the customers are connected with internet connection with wide customers' base and having the active participants. From the cost point of view, traditional banking is having restricted networking, high transaction and operating cost. On the other hand, e-banking is having high technological cost, management cost and high creational cost. From the profit aspect, as the risk is low so profits are also low. In c-banking profits are very high due to the variety of services offered but at the same time advertisement cost, commissions, service charges are very high. However, transaction cost and labour charges are quite low. From the value point of view, the main stakeholders are consumers and financial institutions in traditional banking, whereas internet service providers, content portals, online stores, retail outlets are all the part of e-banking.

III. Electronic Banking Products and Services

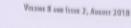
E-banking has provided immense opportunities in offering goods and services to the customers. These products are totally changing the outlook of banking sector. Now the industry is shifting towards cashless society, where physical cash, notes and coins have become a thing of the past, and digital cash and electronic purse have taken their place. There are many non-cash payment methods which are in use. These are as follows:

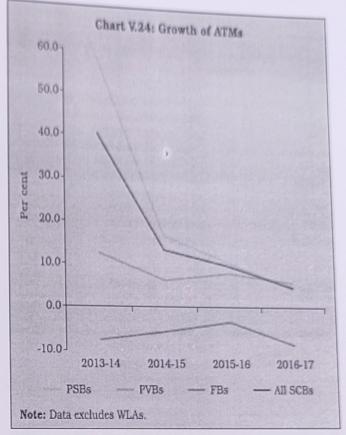
A. Automated Teller Machine

ATM is a cash rending teller machine. This is a machine which is frequently seen at banks and other locations, such as shopping centres and building societies. Customers can withdraw any sum up to a limited amount, can view the status of his account and order a new cheque book. There is a number called Personal Identification Number (PIN), which is a key for carrying the desired transactions. On the other hand, we can say that it's a machine which replaces the human aspect of providing the cash and standing in a long queue. ATMs can be installed on the bank's premises (onsite ATMs) for which no license is required from RBI. However, for ATMs to be installed at public places (offsite ATMs), banks have to obtain a license. These offsite ATMs are mainly installed at airports, railway stations, market places, petrol pumps, etc.

ATMs of Scheduled Commercial Banks

Sr. No.	Bank Group	On-site ATMs	Off-site ATMs	Total Number of ATMs
1	2	3	4	5
I	Public Sector Banks	86,545	62,010	148,555
	Private Sector Banks	23,045	35,788	58,833
	Foreign Banks	219	747	966
	All SCBs	109,809	98,545	208,354





Source:www.rbi.org.in

B. Mobile Banking

The traditional brick and mortar is done from fixed branch premises, where the customer has to go personally for carrying out business transactions. Through mobile banking the customer can conduct a host of banking transactions and inquiries through the mobile. Mobile banking can also be carried through a mobile van with or without computerized banking system. The mobile van moves from place to place on designated routes at designated hours and the customers can transact their banking business, such as deposit, withdrawal, cheque collection, draft issuance, pass book updates, etc. Mobile banking helps the customer to do his account management, electronically which was earlier possible through internet banking. Mobile banking service is divided into two categories:

1. SMS Based

This service can be availed from any mobile having SMS based service. The customer types the required keywords and PIN number and send the message to the predefined number.

2. Menu Based

The customer downloads and installs the application on the mobile. Whenever the customer wants any sort of information, he selects the application, selects the request from menu and sends the request to the designated number. This request is internally sent as SMS text. The central computer at bank sends back the result to him.

Functionalities of Mobile Banking

Mobile banking functionalities have been divided into three parts. In public category, the customer can openly access the exchange rates and interest rates of the economy as well as the banks. In VOLUME 8 AND ISSUE 2, AUGUST 2018

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private category, the customer can check the account balances, can administer the credit lines and can check the transactions. While conducting the transactions, mobile banking helps in transfer of funds, and in paying invoices.

Phone Banking

Phone banking or tele-banking refers to the authorized customers to use special telephone number of the bank. This facility is available with the help of a voice response system (VRS). This system basically accepts only TONE dialled input (For callers phone instruments for dialing necessary numbers) and suitable voice response message/ information to the caller (Kaptan and Choubey, 2003). Tele-banking is of two kinds:

Public Enquiry

General information about banking services can be obtained by customers and non-customers like dialing a special enquiry number of the bank (call centre) and desired information can be obtained.

Private Enquiry

This relates to account specific information and can be accessed only by accountholder by disclosing personal identification number (PIN) and customer ID.

C. Society for World-wide Inter-banking Financial Telecommunication (SWIFT)

It is a computerized message system which links banks around the world. In 1996, it was updated from centralized system to decentralized system. SWIFT is a co-operative organization formed by international banks and financial institutions. The member banks are shareholders of this society. It provides guarantee to carry messages without any mutilation of the message. The network provides round the clock service to participating banks. It aims to improve the speed and service in order to prevent the individual bank setting up its own computerized messaging system in opposition.

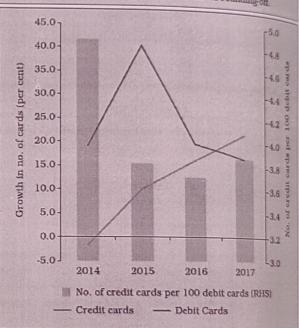
D. E-commerce

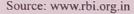
E-commerce refers as the transaction between the buyer and seller without exchanging any papers or any meeting between two persons and largely using the internet. Electronic commerce allows efficient transactions among customers, suppliers and partners for cutting the transaction time and reducing the costs of doing business. It also includes debit and credit cards issued by scheduled commercial banks. The Ministry of Commerce is supporting "Electronic Commerce (EC) / Electronic Data Interchange (EDI) for Trade" project for facilitating international trade. The community partners of this project are various trade regulatory and facilitating agencies like the Customs Department, the Directorate General of Foreign Trade (DGFT), Airports, the Reserve Bank of India (RBI), Export Promotion Organizations (EPOs), Exporters, Importers, Agents, Container Corporation of India (CONCOR) and banks. The objective of this project is to (i) facilitate electronic delivery of services; (ii) simplify procedures; (iii) provide 24 hour access to users with their partners; (iv) make procedure transparent; (v) reduce the transaction cost and time; and (vi) introduce international standards and best practices (Mathur, 2007).

Debit and Credit cards issued by scheduled commercial

Sr No.	Bank Group	Outstanding of Credit	Outstanding Numb of Debit Cards		
		2016	2017	2016	
1	2	3	4		201
I	Public Sector Banks	5.0	6.1	5	
П	Private Sector Banks	14.7	18.6	548.5 110.3	639
ш	Foreign Banks	4.7	5.1	3.0	128
IV	All SCBs	24.5	29.8	661.8	4

Note: Figures may not add up to the total due to rounding off.





E. Electronic Data Interchange (EDI)

EDI is the exchange of documents in the standardized electronic form, between organizations, in automated manners, directly from a computer application in one organization to an application in another. EDI can be compared and contrasted with electronic mail. Email enables free-format textual messages to be electronically transmitted from one person to another. EDI, on the other hand supports structured business messages (those which are expressed in hard copy, pre-printed forms or business documents) and transmits them electronically between computer applications rather than between people (Kaptan and Choubey, 2003).

F. Internet Banking

As the banking industry has been constantly innovating and with the advent of technological development particularly the area of telecommunication and information technolog one such innovation is internet banking. Internet banking defined as an internet portal through which the customers and use different kinds of banking services from bill payments a making investment (Pikkarainen et al., 2004). All the banks usit internet as an additional channel or banks using internet all as delivery channel are now on the equal footing to offer the banking services on the internet and to compete for customer

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around the world (Karjaluoto et al., 2002). Internet banking is useful for both the bankers and the customers. The rationale use of internet banking technology from the bank point of view is mainly related to cost savings (Robinson, 2000; Sathye, 1999). Internet banking sites can be segregated into four categories from level I, which offers just minimum functionalities, such as access to one's deposit account data, to level IV sites that offer sophisticated services. Generally, internet banking is offered in two ways. First, an existing branch with physical offices can establish a website and offer its customer internet banking in addition to traditional banking channels. Second way is that bank may be established as "virtual", "branchless" or "internet" with a computer server at its heart that is housed in an office that serves as bank's legal address. Virtual banks may offer customers the ability to deposit and withdraw the funds at automated teller machine or other remote channels used by the banks (Furst et al., 2002). Nevertheless, Internet banking has relatively high initial set-up

costs (both technological and marketing) with savings following later and it appears, at present, that no major banks have achieved significant cost reductions through its provision (Lin et al., 2001).

G. Electronic Fund Transfer (EFT)

In the present age of integrated technology consisting of computers and communication facility, distances need no longer be constraint in providing customer service. EFT system hosted and operated by the RBI, permits transfer of funds, from any account to any other account at any branch of any member bank in any other city (Jain, 2006). In other words, electronic fund transfer facilitates the quick movement of deposit money from one bank account of one customer to the bank account of another customer. In this system, the sender and the receiver may be located at different cities. As an important tool of customer services, EFT system addresses the needs of individual customers to transfer money from one place to another within a day or two. Following are the participants of this scheme:

- Individual customer through their banks/ branches.
- Service branches of the bank.
- Reserve Bank of India (National Clearing Centre and deposit account of RBI)

H. E-Purse

E-commerce has been marked as a steady trend towards growth of electronic mode of payments against paper based instruments. European Central Bank (ECB) defined, "E-Money as electronic store of monetary value on a technical device and used to making payments other than the issuer without the involvement of bank accounts in the transaction but acting as a prepaid bearing instrument".

1. Risks in E-banking

E-banking improves a bank's performance and competitiveness so that existing customers can benefit from greater degree of convenience in effecting transactions. However, the banks are facing with different levels of risks and expectations arising from electronic banking as compared to traditional banking services. Financial institutions have faced difficulties over the years for a multitude of reasons. The major cause of serious banking problems continues to be directly related to lax credit standards for borrowers and counterparties, poor portfolio, risk management that can lead to deterioration in the credit standing of a bank's counterparties. Banks need to manage the credit risk inherent

in the entire portfolio as well as the risk in individual credits or transactions. Banks should also consider the relationships between credit risk and other categories of risks. Various kinds of risks are involved with e-banking .Some of these

risks are discussed below:

1. Operational Risk

Due to the introduction of e-banking technology, operational risks are on the rise and should be managed in a proper way. The bank needs to manage these risks in the areas of security, data confidentiality, data system integrity, system availability and outsourcing. These risks are closely linked to reputation risks and legal risks for banks as if the security breaches than it will have damaging effects on the reputation of bank which could have the legal consequences also. Security constitutes an important part in the operational risk of e-banking. Threats can come from inside and outside the system. It includes "hijacking", "sniffing" or "spoofing" to retrieve and use confidential consumer information, add customer assets and subtract customer liabilities or interrupt operations.

Human resource management must ensure that personnel involved in maintaining and operating the websites and system are adequately trained in security practices. In order to have a proper security system, there should be segregation of duties, means accessing and control should be different. These practices should be regularly tested and reviewed by outside experts. Further, the key to control transaction risk lies in adapting effective policies, procedures and controls to meet the new risk exposures introduced by e-banking. These controls include division of duties, dual controls, information security controls, processes, tools, expertise and testing of different methods of e-banking.

2. Reputational Risk

Reputational risk is the risk related to negative opinion of the customers that result in critical loss of funding of the customers. Reputational risk may arise due to action taken by the bank itself or in response to action of the third parties. This risk mainly arises when the system is not able to perform as expected. This risk may also arise from targeted attacks on banks. For example, a hacker penetrating a bank's website may alter to intentionally spread the inaccurate information among the customers regarding bank's products and services. So, reputational risk is increased through e-banking if the bank fails to deliver secure, accurate and timely services on a consistent basis.

3. Legal Risk

Legal risks also arise in e-banking. Banks engaging in electronic banking and electronic money activities can face legal risks with respect to customer disclosures and privacy protection. Customers who have not been adequately informed about their rights and obligations may bring suit against a bank. Failure to provide adequate privacy protection may also subject a bank to regulatory sanctions in some countries. Banks choosing to enhance customer service by linking their internet sites to other sites can also face legal risks. A hacker may use the linked site to defraud a bank customer; and the bank could face litigation from the customer.

It is the constant and terrible fear of transactions errors causing a potential monetary loss suffered by customers who perform online transactions. So, it is clear that e-banking is actually lacking the assurance provided in traditional banking (Lee, 2009) and this is JCES (2018) © STM JOURNALS 2018. ALL RIGHTS RESERVED

due to the fact that online banking is considered as an innovation which is incompatible with consumers' habits (Kuisma et al., 2007).

5. Performance Risk

This is the risk caused due to malfunctioning of online banking websites. Customers are often afraid that a disconnection from the Internet will occur while performing electronic transactions that can lead to "huge" unexpected losses (Kuisma et al., 2007). This idea was confirmed by Sathye (1999) who argued that Internet access is a crucial variable on which the adoption of online banking depends and by Almogbil (2005) who succeeded to show that a significant relationship exists between the speed of internet access and the acceptance of electronic banking.

6. Privacy Risk

It refers to the potential loss due to fraud or a hacker compromising the security of an online bank user (Lee, 2009). This risk is accentuated since the emergence of phishers whose hobby consists of attempting to collect personal information, such as usernames, passwords and credit card details. They not only lead to users' monetary loss, but also violate users' privacy (Entrust, 2008).

7. Time Risk

It is the time loss; the lateness in receiving the payment or the difficulty of navigation (Lee, 2009). This can be due to a disorganised website, to slow-downloadable pages and long time needed to be a PC-literate.

8. Credit Risk

Credit risk is not increased due to loan originated through e-banking channel. But sometimes bank may not be able to evaluate the credit worthiness of the customer due to remote banking procedures. However, online loan origination and approval tend to make risk management of lending tasks more difficult and challenging. The banks should always verify the customers' identity for online credit applications and also the monitoring and controlling the growth, pricing, underwriting standards and ongoing credit quality of loans originated through e-banking channels.

9. Other Risks

The use of electronic delivery channels for banking activities also has implications for other traditional banking risks such as strategic and business risk, credit risk, liquidity risk, market risk and foreign exchange risk.

Offering e-banking service to the customers involves strategic and business risk as the sophisticated technology involved in e-banking causes uncertainties in business transactions. To build a new customer base, the banks have to set up their prices very competitively. Investment in technology involves significant start up costs. Adequate opinion of experts is needed. Supervisors must ensure that management of banks are aware of these risks involved in e-banking and carefully access their strategic options so that the added uncertainties may be compensated by additional returns.

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PAGE 29

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SELECTION OF PROGRAMMING LANGUAGE FOR SOFTWARE DEVELOPMENT – CONJOINT APPROACH

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Abstract

Purpose - Thepurpose of this research paper is to investigate the relationship between various attributes of programming languages for the development of software and selection of a best choice among them by the software developers.

Design/Methodology/Approach -For this purpose, five prominent programming languages were examined i.e. C, C++,Java, VB.NETand C#. The Conjoint Model was adopted and tested by multiple regression analysis for the formation of best choice in selected programming languages. Data was collected from students'pursuing post-graduate programs in various Colleges and Universities of Punjab State.

Findings -The main results of this empirical research suggest that VB.NET is the most acceptable programming language preferred for development of software by the participants followed by JAVA. In addition to this, participants prefer Platform Independence and Reliability factors much more than other factors.

Research limitations/implications -The paper provides comprehensive empirical evidence about the selection of a particular programming language by the participants and thus fills an important gap in Information Technology by using a statistical tool from academics, which can be used by corporate world while managing these programming languages. The major limitation is small sample size of 200 covering only one state of Punjab.

Originality/value—This paper is a modest attempt to develop and empirically test the validity and importance of computer programming languages through conjoint design.

Keywords: Computer Programs, Conjoint Analysis, Multiple Regression, Software

Development, Software, Programming Language Preference.

JEL Codes: C880, M310& M390.

Introduction

Historically, the selection of the programming language for the development of software has been a process consisting of faculty evaluation, discussion and consensus. As the number of faculty, students and language option grows, this process is likely to become increasingly unwieldy (Parker and Chao, 2006). It has been argued that studying the history of the programming languages is essential as it helps developers avoid previously-committed mistakes in the development of the new languages (Wilson and Clark, 2000). It was also pointed out that an unfortunate trend in computer science is creating new language features without carefully studying previous work in this field (Grongo, 1999). Most of the books and article on the history of the programming languages tend to discuss languages in terms of generations where languages were classified by age (Cook, 1999). However the language adoption process has not been studied based upon the end user requirements, which are useful for the programming language developers. Understanding this process is a foundational step towards enabling language developers and advocates influencing its outcome and overall language use. Similarly, understanding will help developers in determining when and whether to bet on a new or experimental language or not (Meyerovich and Rabkin, 2013). Studies indicate that maintenance costs are at least 50% and sometimes more than 90% of the total cost associated with the software product (Koskinen, 2003, Seacord et al, 2003). If the Software developer wants to develop excellent software then he has to concentrate on user requirement, programming language, database management system, which places a pivotal role in the software development process (Joshi et al, 2012). The present paper introduces some guidelines for comparison and selection of appropriate programming language. It enables developers to base their decision in choosing the language on solid criteria that determines the suitability of the language to the application (Ghamdi and Urban, 1993). With the continuing increase in the variety, functionality and complexity in the engineering software along with its widespread use and increasing importance, more attention must be paid to programming language suitability, so that rational decisions regarding language selection may be made (Garcia et al, 2003). Thus, the plan of this study is to consider various preferences of end users and enable the programming language developers as to what current acceptance level of a language is and what best is required in order to remove the shortcomings at the language development stage. The selection criteria takes into account the programming feature of each language, the appropriateness of each of these features, the present and future industry acceptance of each language, the cost, reliability factors and the impact on the decision on the tactical and strategic direction of programming language developments by programmeror developers.

Review of Literature

Extensive work and research have been done in the field of comparative studies of the programming languages. Halang and Stoyenko (1990) conducted a comparative evaluation of seven high level real time programming languages and found that none of the languages actually used in industry is genuinely real-time. The study suggested some proposals to advance the inadequate state of affairs and ignited the discussion of this topic in real-time community. Garcia et al., (2003) reviewed C++, Java, LISP and Perl under the parameters of reusability, portability, reliability, readability, efficiency, availability of compilers and tools, familiarity and expressiveness. Aldrawiesh et al., (2009) presented review of the capabilities of the programming languages like Java, C++ and C# for developing web services and distributed systems based upon the criteria of simplicity and usage, concurrency, platform, maintainability, high integrity and reliability. Sleiman et al., (2010) reviewed ten programming languages with the aim of determining as to which programming language is more suitable for a particular language domain: Web Application Development and Object Oriented Based Abstraction. The Work provides evidence and analysis on why some languages are better than others or have greater advantages than others. However, Fajuyigbe et al., (2009) proposed an appropriate language for introducing Object Oriented Programming in tertiary institutions which helped the students to adopt a skill for using the most appropriate language. The study defined a set of criteria critical to the selection of most suitable programming language for introducing students to Object Oriented concepts and programming. The programming languages selected in this study were Java, C#, C++, C and Visual Basic. Joshi et al., (2012) discussed important factors for developers to select the programming languages as well as database management system. The study expressed that there is no thumb rule at all while selecting a particular programming language or DBMS. Jindal et al., (2013) studied about programming languages like C and C+++ and C Objective and explained that one language effects and influences other language in one way or the other. Parker and Ottaway (2006) developed and documented an exhaustive set of selection criteria to the process of programming languages. The present study suggests comprehensive set of criteria while selecting a programming language like cost, life cycle of language, academic and industry dependence, ease of use, support for target application, object oriented support and others, which is helpful for teaching environment and proposes several approaches for the application of these criteria. Obi and Akwukuma (2013) made an assessment of programming language reliability utilizing soft-computing with reference to structured languages like C and C++ or Object oriented languages like Java, C# and Ruby. The paper determines reliability in terms of 'reliable', 'moderate reliable' and 'not reliable'. Based upon

these existing studies,this study conducted on major parameters of selectingprogramming languages. For this five prominent programming languages C, C++, Java, VB.NET and C# were examined. The major factors used for comparison are platform independence, security, development cost, reliability and ease of use.

Objectives of the Study

For studying the superiority of a particular social networking site, following objectives are considered in this study:

- 1. To analyze the impact of various factors affecting the choice of a particular programming language for software development by the IT companies.
- To identify the best choice of a particular programming language among IT professionals (with reference to C, C++, Java, VB.NET and C#).

Hypothesis of the study

Ho1: There is no association between the dependent variable and the different explanatory variables.

Ho2: There is no absolute selection of a particular programming language by the IT professionals over other languages.

Research Methodology

For the purpose of estimating the research models for hypotheses test, firstly a sample of 200 students from Colleges and Universities offering advanced computer programming courses were selected, which covered the state of Punjab. To analyze and find out the best choice of a social networking site, Conjoint Analysis technique was used. Conjoint Analysis was first introduced into the marketing literature by Green and Rao (1971) and Johnson (1974). Green and Srinivasan (1978) indicated that conjoint analysis is an analytic method with decompositional approach for evaluating the preference structure of the known assesses and overall assessment. Louviere and Islam (2008) described three methodologies of Conjoint Analysis:

- Traditional Conjoint Analysis, based on giving preference,
- Choice based or Discrete Choice Conjoint Analysis, based on choice,
- Best/Worst (BW) Conjoint.

Out of these, Conjoint Analysis was used, where respondents were asked to rate or rank the product scenarios and the analysis reveals the relative importance, called utilities of each of the different levels of each attribute. Further, in the study the preference functions are measured by

ordinary least squares (OLS) regression method with dummy variables, since researches have shown that the efficiency of this technique is often similar to more complex techniques like Logit, Monanova, Linmap and others, but the results are easier to interpret (Oppewal, Vriens, 2000). The orthogonal arrays (Orthoplan) were generated by SPSS – 18.0. A total of 25 design cards were generated for the respondents to give preferences using 10 – point Likert Scale (1 = Least Preferred, 10 = Most Preferred). In our study, the number of stimuli was 25 which were higher than the minimum number of stimuli (total number of levels across all attribute – number of attributes + 1 = 20) that was evaluated by the respondents to ensure the reliability of the estimated parameters.

Research Design

The research study adopted content analysis in order to find the impact of various attributes like platform independence, security, development cost, reliability and ease of use to assess various programming languages like C, C++, JAVA, VB.NET and C# among the target audience. Table number 1 represents the orthogonal matrix in 25 cards as designed by SPSS 18.0 software. The non-probability sampling technique is used to collect the opinions from the respondents falling in the age group of 17 years to 25 years. The sample size is 200. The Conjoint Design framed on the above mentioned attributes are mentioned in Table number 1.

Table 1. Conjoint Design: Explanation of Attributes and Levels

ATTRIBUTES

Programming Languages	Platform Independence			Reliability	Ease of Use
		ALTER	NATIVES		
С	Full Support	Fully Secured	Very High Cost	Highly Reliable	Highly Difficult to Use
C++	Partial Support	Partially Secured	High Cost	Moderately Reliable	Difficult to Use
JAVA	No Support	Moderately Secured	Low Cost	Low Reliable	Easy to Use
VB.NET	Additional Component Support	Unsecured	Nominal Cost	Unreliable	Very Easy to Use
C#					

Total Number of Attributes=6

Total Number of alternatives across all attributes=25 Minimum Required Stimuli=25-6+1=20 Source: Authors' findings

CU- Global Management Review - July-Dec. 2016

Analysis of Conjoint Results and Hypothesis Testing

Table number 3 represents the results of regression analysis, where the Adjusted R – Square value shows 89.7% variation in the model which is highly significant at 1 % level of significance, thus Null HypothesisHo1is rejected which signifies that there is association between the dependent variable and different explanatory variables. The value of Durbin – Watson statistic is 2.338, which lies in the range (1.25 – 2.75) showing that auto – correlation is not present.

Table 2: Model Summary

Table 3: ANOVA

*Model Significant at 1% Level of Significance

	Model Summary													
R	R ²	Adjusted R ²	Std. Error of		Change	Statis	tics		Durbin- Watson					
		K	the Estimate	R ² Change	F Change	df 1	df 2	Sig. F Change	w atsoli					
.989 ^a	.979	.897	.50990	.979	11.996	19	5	.006	2.338					
a.	a. Predictors: (Constant), VeryEasyto Use, Unreliable, Nominal Cost, Unsecured,													

Additional ComponentSupportRequired, C SHARP, Moderately Secured, C++, Easy to Use, Low Reliability, Low Cost, NoSupport, PartiallySecured, VB.NET, DifficulttoUse, Moderately Reliable, High Cost, PartialSupport, JAVA

b. Dependent Variable: OverallRating

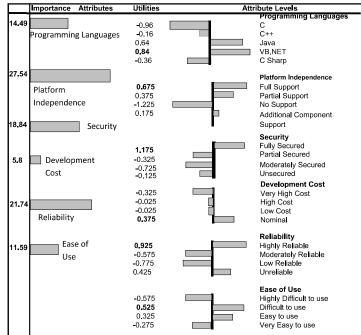
			ANOVA			
	Model	Sum of Squares	Degree of Freedom	Mean Square	F	Sig.
1	Regression	59.260	19	3.119	11.996	.006ª
	Residual	1.300	5	.260		
	Total	60.560	24			
	endent Variable: l significant at	Overall Rating	mificance			

Source: Authors' findings

Source: Authors' findings

92

Figure 1: Relative Importance and Utility Scores of Considered Attributes in the selection of a Programming Language



Source: Authors' findings

Figure 1 represents the mean preference structure of programming languages in terms of importance and utilities of various arttribute levels. All these help us to understand the rankings of attributes when it comes to the choice of a programming language for the development a particular software. In Figure 1, six salient attributes and their levels were identified for programming language choice process. Full Profile Conjoint Anlaysis was used for construction of preference structure. Analysing the preference structure or the importance accorded by the students to the six salient attributes, the students accorded the maximum utility/importance to

CU- Global Management Review - July-Dec. 2016

the attribute 'Platform Independence' i.e Full Support with 27.54 percent importance. Here, the study concludes that the software developers highly require full support while developing any sort of software, thereby rejecting all other options of partial, no support and additional component required. However, software developers can agree to partial support with 0.375 utility in case full support option is not available. The second attribute adjudged best by software developers was 'Reliability Factors' with an importance value of 21.74 percent in

aspect is so important for the developers that for the other options they have given negative utilities. Thereafter, at the third place in the worth hierarchy is the attribute of 'Securiy Aspects' with importance of 18.84 percent. Here, it was observed that only highly reliabile software are generated and selected by the software developers with a utility values of 1.175. The mandate of repsondents was clear enough that in security no compromise could be made when they are put to use by the end users in the market. Then, at fourth place of the hierarchical framework, is the attribute 'Programming Languages' with 14.49 percent importance. This is an important finding, as it shows that, our respondetns are more keen towards platform independence, secutiry and reliablity factors than type of language since there are many other languages which can be tested and used to produce a software for end users but the type is not the real important thing which is used while developing a software. VB.NET is the most preferred language by the respondents with 0.84 utilty followed by JAVA with 0.64 utility, while all other languages are not commonly preferred since they have been rated in negative utilities in the study. The next preference is given to the 'Ease of Use'attribute with an importance of 11.59% where the repsondents prefer that the final usage should not be highly difficlut but still it must require some training and experience to use the software so developed by the software professionls. The last attribute was the presence of 'Development Costs' in the Conjoint Design with an importance of 5.8 percent only. The respondents have very less interest in the development cost since the software is designed after taking into consideration the demand, paying capacities and facilities required by the consumers. The software is customised according to the above mentioned parameters, therefore the cost factors are always considered last by the IT professionals

which the requirement is for highly reliable software with a utility value of 0.925. The reliability

In Table 4, the Best Choice of a Programming Language for the development of software (Final Result) is projected where the respondents have expressed their best choice using "Fully Support Platform Independence – High Reliability – Fully Secured – VB.NET Language – Difficult to Use – Development Cost viabilities".

CU- Global Management Review - July-Dec. 2016

94

Table 4: Best Choice of Programming Language for Software Development (Final Result)

Best Choice	Full Support	Highly Reliable	Fully Secured	VB.NET	Difficult to Use	Nominal Cost
Utilities	0.675	0.925	1.175	0.84	0.525	0.375
Code	B1	E1	C1	A4	F2	D4

Source: Authors' findings

This best choice selection by the respondents by Conjoint Analysis clearly rejects the second Null Hypothesis Ho2 and leads to acceptance to alternative Hypothesis that there is one absolute selection of a particular programming language by the respondents over other languages based on various attributes and attribute levels.

Limitations of the Study

Our study is subject to some limitations too. First, a large part of our respondents were students and the sample size is 200. Taking into account the fact that the demographics of respondents and their requirements are constantly changing, further research should validate our findings with other population groups. In addition, the respondents in our sample were from a particular State i.e. Punjab, which limits the scope of our study. More studies covering zones like North India could further validate the findings of the present study. Finally, the results of every conjoint analysis are highly dependent on the choice of the attributes and their respective levels. Addressing this argument, the present study lays stress on decisions which were based on the extensive literature review combined with pre-study interviews and careful pretesting of the conjoint design.

Discussion and Concluding Remarks

Our study is an attempt to empirically investigate the factors behind the choice of a Programming Language for the development of software using a conjoint approach. The major findings of the study are that Platform Independence, Reliability and Security factors should be considered as the most important parameters for the development of software. The type of a programming language comes afterward with VB.NET and JAVA as preferred options followed by usage and development costs factors considered by the respondents. This research paper provides comprehensive empirical evidence about the selection of a particular programming language by the participants and thus fills an important gap in Information Technology research by using a statistical tool from Academics. The findings of the research study can be used by corporate world while managing these programming languages.

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CU- Global Management Review - July-Dec. 2016

97

Author Guidelines

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3. A brief **profile of the author (s)** should be supplied on separate sheets (and not be shown anywhere else in the manuscript) including :

- 3a. Full name
- 3b. Designation and institution
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Evolution and Growth of Indian Textile Industry

Meenu Goyal

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Abstract

The manufacture of textiles and apparels were centered in USA and EU till 1980s but over the period of time production of these commodities shifted majorly to Asian countries. This shift was a result of an attractive low cost manufacturing advantage in countries like Japan, India, Hong Kong and China, the availability of abundant and cheap manpower, vast natural resources and favorable economic policies. In 2000s, China appeared as the largest manufacturing market for textiles and apparels in the world market and continued to be the world's biggest exporter with a market share of approximately 40 percent. The similar upsurge was followed by economies from Asia like India, Pakistan, Indonesia, Bangladesh, Thailand, Vietnam and Cambodia. Increasing population and the increasing per capita apparel spending are the primary factors that contribute in the market growth in these countries. It is further projected that the international apparel marketplace will be around US \$ 2.6 Trillion by the year 2025. By 2023 India's textile market size is likely to touch USD 226 billion, showing a CAGRof 8.7 per cent in the course of period 2009-2023. The significant growth drivers of Textile industry in domestic market of India are the existence of large and rising population, consumer class, increase in earning power, spending of people, foreign investments and increasing manpower. The future prospects for the textile industry in India are bright and will continue to grow as the biggest beneficiary after China. India has an advantage in creativity and innovation whereas bulk supplies favour China. The timely measures to avail the opportunity could result into the Big Wave for Indian Economy.

Keywords

Textiles and Apparels, Cost Advantage, Consumer Class, Earning Power

L Introduction

The history of the world textile industry started with the invention of spinning machines and weaving machines in Britain. Till 1980s, manufacture of textiles and apparels were centered in USA and EU but over the period of time production of these commodities shifted majorly to Asian countries. This shift was a result of an attractive low cost manufacturing advantage in countries like Japan, India, Hong Kong and China. The availability of abundant and cheap manpower, vast natural resources and favorable economic policies were the most attractive factors for the manufacture of textile products. In 2000s, China appeared as the largest manufacturing market for textiles and apparels in the world market. It continued to be the world's biggest exporter of textiles and apparels maintaining a market share of approximately 40 percent. Other economies from Asia like India, Pakistan, Indonesia, Bangladesh, Thailand, Vietnam and Cambodia also experienced an upsurge in the textile and apparel manufacturing during this period. Presently, USA and Europe have become the biggest consumption centers in the world while manufacturing is focused in Asian countries such as India and China (large consumption bases as well), Bangladesh, Sti Lanka, Vietnam, Pakistan etc.

Increasing population and the increasing per capita apparel spending are the primary factors that contribute in the market growth in these countries. It is further projected that the international apparel marketplace will be around US \$2.6 Trillion by the year 2025. The key drivers of growth of the global apparel market will he the developing economies, mainly China & India, together developing in double numbers. China is expected to become the largest apparel market with more than US \$ 378 billion in market size by 2025 while India is expected to follow to be second adding around US \$ 121 billion by the year 2025.

II. Objectives and Sample of the Study

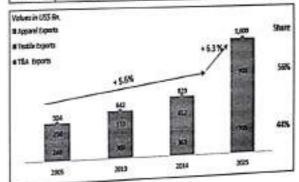
The present paper is based on secondary data. The data has been collected from various reports of Textile Ministry and the data has been collected from 2009-10 to availability. The objectives of the paper are to study the evolution and growth of along with the SWOT analysis of the textile Industry in India.

III. Growing Textile and Apparel Trade

International textile and apparel trade stood at US \$ 820 billion in 2014 growing at a CAGR of 5.6 per cent over the past decade. Apparel categories had a larger share of 56 per cent while textiles categories had the remaining share of 44 per cent in the overall trade

Table 1: Global Textile and Apparel Trade

	Value in USS Billion								
Year	Apparel Exports	Textile Exports	T&A Exports						
2005	256	248	504						
2010	333	309	642						
2014	457	363	820						
2025	900	700	1600						



Source: UN Comtrade

Fig. 1: Global Textile and Apparel Trade

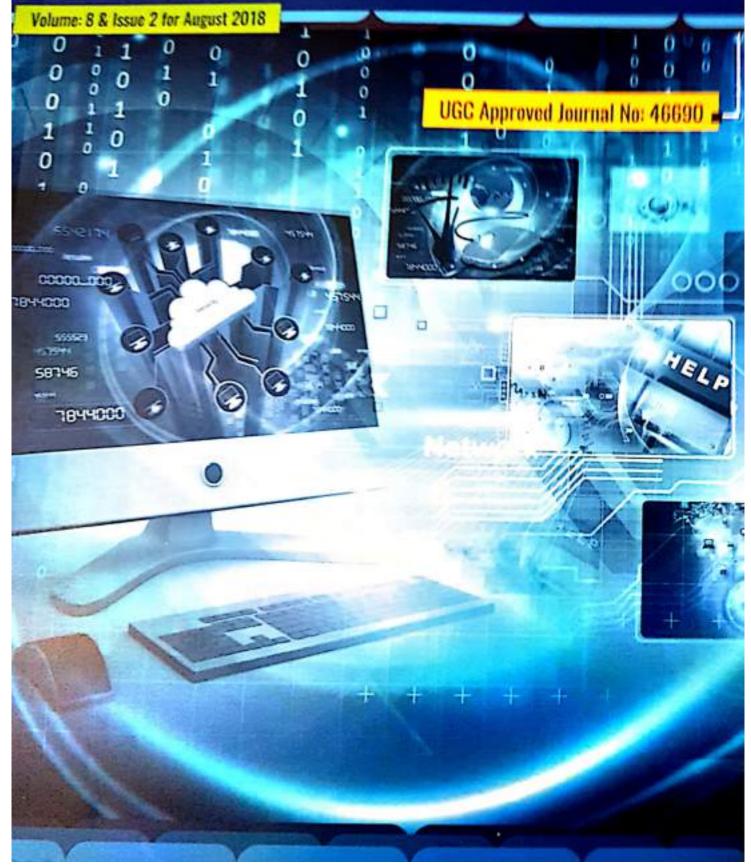
The worldwide textile and apparel trade is expected to reach at a level of USD 1,600 billion in 2025 growing by a CAGR of 6.3 per cent over the succeeding decade (Table 1). This progress in international trade is expected to bring about investments in the countries having robust supply base for apparel and textile produces. India is expected to be one of the major gainers from investment point of view.

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PART - I

EMERGING TRENDS IN MANAGEMENT

Contents

[1]	Study of Critical Success Factors (CSFs) in Green Supply Chain Management (GSCM) of Indian Manufacturing Industries			1-6
[2]	Evaluation of Green Marketing Practices in Indian FMCG Sector			7-11
[3]	Leader's Contribution is always exemplary for an Exclusive Organizational Goal			12-14
[4]	Study of Service Quality of Hotel Industry in Bhubaneswar			15-19
	Financial Frauds in Indian Banks: A Study of Bankers' Perspective			20-24
[6]	Role of IT in Banking Sector			25-29
171	Recent Trends of Telecommunication Industry in India			30-33 34-39
[8]	Evolution and Growth of Indian Textile Industry		(a)	40-44
- [9]	and a second patients & Schemes for the Development of MSMEs in India	0	a.	45-50
110	Micro-Finance in India: Review and Assessment			51-56
111	Credit Expansion Programmes for Urban Poor: An Empirical Study			

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Does Literacy Rate and Locale of Residence Impact the Consumers' Awareness for Consumer Awareness Campaigns?

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Article Info Volume 83 Page Number: 797 - 805 Publication Issue: March - April 2020

Abstract:

Recognizing the unveiling of technological gyration in the present emulous and rivalrous business world, which is coupled with ascending consumer expectations, cosmopolitan emphasis has been laid down by the Government of India on protection of consumers' interest and to make a consumer an aware and informed consumer. For this, various initiatives have been taken by the Ministry of Consumer Affairs, of which 'JagoGrahakJago' - a consumer awareness campaign - is a primary initiative via which endeavor has been made to make consumer aware about consumer rights and responsibilities, and Consumer Dispute Redressal Mechanism. To assess the efficacy of such campaigns, and for assessing and valuating the impact of literacy rate and locale of residence on consumers' knowingness with respect to consumer determinants such as consumer campaigns, consumer pre and post purchase responsibilities, and consumer dispute redressal mechanism, the present study has been conducted for which data was gathered from 600 respondents - equal number from the state of Punjab and Haryana - using a well-structured questionairre. For perusal of data so gathered, the statistical tests such as chi-square, t-test and F-test have been employed. Analysis reflected significant difference in respondent's perception with respect to purpose of creating CACs. While measuring the impact of locale of residence on various consumer awareness determinants, significant difference between rural and urban respondents from Punjab was found as far as post purchase awareness of consumer responsibilities is concerned, whereas significant difference between rural and urban respondents from Haryana was found for the consumer determinant pre purchase awareness of consumer responsibilities. Significant difference between the extent of consumers' awareness of the respondents hailing from selected districts of Punjab and Haryana with varied literacy rate with regard to consumer determinants consumer dispute redressal mechanism has been observed.

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Keywords: Consumer awareness, consumer awareness campaigns, consumer awareness detreminants etc.

INTRODUCTION

In the present consumerist era, obsession for materialistic, avaricious and acquisitive possessions has resulted into change in the mindset and objective of the business i.e. from maximization of satisfaction of all the stakeholders to maximization of profits. As a consequence, business has indulged itself in various unethical, unscrupulous, immoral and deceptive practices such as selling adulterated,

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defective and poor quality products, misleading advertisements, inadequate labelling, charging exorbitant price for substandard products, illusory services and under-weighing of products etc. Though carrying out the business with the prime motive of profit maximization isn't immoral, yet it is imperative for a business to remain ethical by giving due consideration to social and consumers' interest. But consumer is at the mercy and clemency end due illiteracy availability of inadequate to and



information about the products / services in the public domain. Therefore, it becomes essential on part of Government of India to make the society aware of their consumer rights and responsibilities. To this, the maiden endeavour was made in the year 1986 when 'Consumer Protection Act' was enacted with the sole objective of empowering consumers with well-defined consumer rights; providing a set of responsibilities which human beings have to discharge as a consumer and specifying a comprehensive multi-tier dispute redressal mechanism. To achieve the underlying purpose of enacting law, efforts need to be made for making consumer aware of the set consumer rights and responsibilities, and consumer grievance redressal mechanism.

Review of Literature

For measuring the extent of consumer awareness with regard to consumer rights and responsibilities, **Bhashyam** (2000) congregated data from approximately 600 respondents – equal number from rural and urban area – investigation of which revealed that extent of consumer awareness is higher for respondents from urban background than the rural ones. As far as the impact of income level of respondents on sources of consumer awareness is concerned, television emerged as a key source of information for respondents with low income, newspaper and magazine for respondents with middle and high income, and social circle for illiterate respondents.

Perusal of statistical analysis of data collected from 120 respondents from Himachal Pradesh divulged that television is an imperative source of consumer information duly followed by radio, whereas journals emerged as least effective mode of informing consumers about consumer dispute redressal mechanism. Talking in terms of specific consumer awareness. gender higher numbers of male respondents were found to be aware about existence of consumer organizations and keenness to join organizations working for consumers' cause. (JatinderKishtwaria, Shikha Sharma, Avinash Sharma and ArunaRana (2006)).

Realizing the need to protect consumer folk against unethical and unscrupulous practices of business, **Nkamnebe**, **Idok and Kalu (2009)** attempted to analyze whether nigerian consumer

their fraternity was aware of rights and and whether consumers were responsibilities. vigilant enough to locate that they are being exploited by the business. Analysis exposed that majority of respondents didn't bother verifying the product labeling and approaching the dispute redressal agencies such as NAFDAC in case goods delivered by the business are adulterated, tainted and defective.

KhanoojaReena (2010)attempted to determine extent of consumer awareness about remedies available to consumers in the event of some grievance. Three phases carried out for the study included survey of students followed by development educational of package on consumerism and imparting training to the students further followed by Assessment of change in knowledge through exposure to developed educational package. It was found that only 38% respondents were found to be aware of various consumer legislations. Only 4% of respondents were aware of CGSI, consumer helpline etc. who work for consumer. 34% respondents were of the view that they did not approach Dispute Redressal Agencies (DRAs) because of family reasons whereas 30% respondents reasoned out red tapism and 20% of respondents feel that approaching CDRFs is sheer wastage of time.

To assess the degree of consumer awareness amongst consumers from rural as well as urban areas and to classify available sources of information which help in transition of 'consumer' into 'aware consumer, various studies have been carried out' Uppal and Rani (2010). Krishnakumar and Sakthiventhan(2012), Gowd T. Narayana, Dhairya S. and Kumar M. Ramana (2014). Algebraic analysis revealed that rural respondents came to be more aware of enacted legislations via newspaper and Radio whereas television, newspaper and outdoor advertisements emerged as main source of information for urban respondents. Significant difference was found as far as consumer protection awareness with regard to journal / magazine as source of consumer awareness is concerned whereas insignificant difference was found with regard to radio, news paper and outdoor advertisements.

Natarajan, Porkodi, Auxilian and Murugan (2018) made an attempt to determine the extent of consumer awareness of sampled respondents of Dindigul district – with equal number



of respondents from urban, rural and semi urban areas – using multi-stage random sampling technique for selection of district, followed by selection of blocks, and then villages. Statistical analysis revealed that social circle plays significant role in making consumers' from all the three areas aware about consumer rights, which was duly followed by print media. Of the 600 sampled respondents, 14% respondent consumers had high level awareness, 69% had medium level and 17% low level of awareness towards various consumer rights.

`New-sprung initiatives'

With the 'Consumer advocacy' being the thrust area, the Department of Consumer Affairs (DCA) has laid emphasis on augmenting consumers' awareness with regard to consumer awareness campaigns initiated by the Government of India, consumer rights and responsibilities as per enacted consumer protection legislations, and empowering the consumers with well defined consumer grievance redressal mechanism. For this purpose, variety of initiatives such as 'Consumer Helpline' at national and state level, JagoGrahakJago campaign, financial assistance in setting up 'Consumer Club' in academic institutions, collaboration with industrial concerns and Chambers of Commerce so as to formulate result-oriented policies have already been undertaken. Other initiatives carried out by the DCA include: Integrated Grievance Redress Mechanism (INGRAM) portal which brings together all the stakeholders at a single platform where online registration of the grievances can be made by aggrieved consumers; a mobile application to provide an access to NCH (National Consumer Helpline) and to scan product's bar code and other desired details such as manufacturer's details, time of manufacture, quantity, quality, potency and precautionary measures to be taken while consuming the product, details of 'Consumer care' whom consumer can approach in case of any deficiency (in association with GS1 India); Online Consumer Mediation Centre (OCMC) for physical and online resolution of complaints which is set up by the GOI for making consumer justice quick and cost effective; usage of multi-media publicity campaigns to address the consumer's concern in respect of product labeling and weights and measures, misleading advertisement, mis-selling of goods etc.;

and regular telecast of video spots (with 30 second duration) via satellite channels on Lok Sabha TV and Doordarshan for managing issues pertaining to rural and remote areas.

Recognizing the need of involvement of state government and union territories in taking consumer campaigns a step ahead, Grant-in-Aid has been given for promoting consumer awareness activities in vernacular language and for involving local self governments working at grass root level. In addition to the pre-specified initiatives, for disseminating consumer awareness information to the people residing in far-flung rural areas including NE states of India, Meghdoot Post cards carrying the consumer rights message have been displayed in the 1,55,000 rural post offices throughout the country, and for display of consumer specific information in journals such as Kurukshetra, Aajkal, Bal Bharti the DCA and the Publication Divison of Ministry of Information & Broadcasting have collaborated.

The Consumer Protection Act, a trail breaking legislation, which was enacted in the year 1986 for promoting and protecting consumers' interest and providing multi-tier quasi judicial machinery for resolving consumer grievances has been recently amended in August 2019 for bringing product liability clause and e-commerce transactions under the ambit the consumer legislations, defining unfair contracts, thereby enhancing the scope of the Act.

Objectives of the Study

- i. To examine the extent of consumer awareness with regard to consumer awareness campaigns (CACs) launched by Government of India
- To assess the impact of literacy rate and locale of residence (rural and urban areas) consumers' awareness with respect to consumer awareness determinants such as Consumer Awareness Campaigns, Pre and Post Purchase Awareness of Consumer Responsibilities and Consumer Dispute Redressal Mechanism

Materials and Methods

Data was collected using a structured questionnaire – which was further segregated into numerous fragments such as demographic profile, consumer awareness campaigns, pre and post purchase consumer responsibilities, and Consumer



Dispute Redressal Mechanism. An experimental survey of approximately 120 respondents preceded the core investigation, where responses were gathered from a total of 600 respondents – 300 each from the state of Punjab and Harvana – with equal representation from rural and urban areas. For gathering data, stratified random sampling method was deployed. To this, selection of district

constituted primary stage, where literacy rate as per 2011 census was used to finalize the selection of districts. It was duly followed by selection of blocks and villages. Equal number of districts i.e. six was shortlisted from both the states. For perusal of data so gathered, the statistical tests such as chi-square, ttest and F-test have been employed.

Analysis and Interpretation

Awai	Awareness of respondents concerning consumer awareness campaigns												
Particulars	Punjab		Haryana		Т	otal	Chi-						
	Ν	%	Ν	%	Ν	%	square	p-value					
Yes	266	88.70%	267	89%	533	88.80%	0.017	0.897					
No	34	11 30%	33	11%	67	11 20%	0.017	0.897					

Table 1

Analysis: 88.7% of the respondents from Punjab and 89% of the respondents from Haryana opined that though they have heard about advertisements or news endorsing various consumer awareness campaigns, yet they could not recollect the message conveyed by such campaigns. Table also exhibits that there is a insignificant difference in their awareness with respect to CACs as p value > 0.05

			1 a	ble 2									
So	Source of Knowledge about Consumer Awareness Campaigns												
	Punjab		Haryana		Total		Chi-	р-					
Particulars	Ν	%	Ν	%	Ν	%	square	value					
Print Media	62	20.70%	43	14.30%	105	17.50%							
Electronic Media	145	48.30%	147	49%	292	48.70%	5.529	0.137					
Social Media	54	18%	70	23.30%	124	20.70%	5.529	0.157					
Public Campaigns	39	13%	40	13.30%	79	13.20%							

T-11- 3

Analysis: From the perusal of statistical results, it became evident that 48.3% of the respondents from the state of Punjab and 49% of the respondents from Haryana get to know about various CACs via electronic media. Further, in Punjab 20.7% respondents considered 'Print Media' as another source of knowledge about CACs in comparison to 14.3% in Harvana, while at the same time 23.3%

respondents from Haryana got information through social media contrasting to 18% in Punjab. Almost same number of respondents i.e. 13% from Punjab and 13.3% from Haryana had the awareness via public campaigns. Table also exhibits that among the respondents of Punjab and Haryana, there is a nonsignificant difference in their source of knowledge about consumer awareness campaigns as p value > 0.05

Table 3
Sector specific Consumer Awareness Campaigns

						1 0		
Doutioulous	Punjab		Har	yana	Total		Chi-	n volue
Particulars	Ν	%	Ν	%	Ν	%	square	p-value
Telecom	38	12.70%	38	12.70%	76	12.70%		
Airlines	10	3.30%	5	1.70%	15	2.50%	23.58	.035*
Health	37	12.30%	39	13%	76	12.70%	25.38	.055*
Insurance	13	4.30%	32	10.70%	45	7.50%		



Education	25	8.30%	17	5.70%	42	7%	
Courier Services	8	2.70%	12	4%	20	3.30%	
Cable Operator Services	7	2.30%	7	2.30%	14	2.30%	
Mixing Water & LPG Gas	28	9.30%	29	9.70%	57	9.50%	
Real Estate	21	7%	24	8%	45	7.50%	
Banking	31	10.30%	22	7.30%	53	8.80%	
Electricity	26	8.70%	22	7.30%	48	8%	
Consumer durables	23	7.70%	37	12.30%	60	10%	
Coaching Centre	20	6.70%	11	3.70%	31	5.20%	
Water Supply	13	4.30%	5	1.70%	18	3%	

Analysis: Responses for sector specific consumer awareness campaigns - demonstrated above - 13% respondents from Punjab and 12.3% respondents from Haryana revealed that most of CACs are

related to health sector. 12.7% respondents from both the states informed that CACs are concerning

telecom wrongdoings followed by mixing water with gas in LPG cylinder (9.3% respondents from Punjab and 9.7% respondents from Haryana) and banking sector (10.3% respondents from Punjab and 7.3% respondents from Haryana). Table also exhibits that among the respondents of Punjab and Haryana, there is a significant difference in their perception regarding the sectors at which CACs aim at as p value < 0.05

	Table 4		
Purpose behind va	rious Consumer Awa	areness Campaigns	

Deutionlong	Pu	unjab Haryana Total		otal	Chi-			
Particulars	Ν	%	Ν	%	Ν	%	square	p-value
Misleading Advertisement	24	8%	39	13%	63	10.50%		
Comparative Test	6	2%	18	6%	24	4%		
Right to Information	66	22%	49	16.30%	115	19.20%		
Jewellery	13	4.30%	9	3%	22	3.70%		
Hall Mark	15	5%	27	9%	42	7%		
Beware Retailer	33	11%	30	10%	63	10.50%		
Packers & Movers	6	2%	17	5.70%	23	3.80%		
Public Distribution System	23	7.70%	8	2.70%	31	5.20%	66.933	.0001*
Educational Institution	23	7.70%	12	4%	35	5.80%		
Mobile Booking	45	15%	13	4.30%	58	9.70%		
Responsible Consumer	0	0%	2	0.70%	2	0.30%		
Maximum Retail Price	0	0%	11	3.70%	11	1.80%		
Consumer Care	9	3%	16	5.30%	25	4.20%		

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World Consumer Day	17	5.70%	23	7.70%	40	6.70%
Air Lines	6	2%	6	2%	12	2%
Food Adulteration	14	4.70%	20	6.70%	34	5.70%

Analysis: Statistical analysis of the responses gathered revealed that highest number of respondents - 22% respondents from Punjab and 16.3% respondents from Haryana – thought that CACs aim at providing 'Right to Information'. Further, In Punjab, 15% respondents are of the view that campaigns are related to 'Mobile booking', comparing to only 4.3% in Haryana. On the other hand, 13% respondents in Haryana stated the campaigns are associated with 'Misleading Advertisements' in comparison to 8% in Punjab. 11% and 10% respondents from both the states respectively acknowledged that it was concerning 'Beware Retailer'. Table also exhibits that among

the respondents of Punjab and Haryana, there is a significant difference in their perception regarding the aim of creating CACs as p value < 0.05

Hypothesis 1:

H10: There is no significant difference between the extent of consumers' awareness of the rural and urban respondents from the state of Punjab with regard to numerous consumer determinants.

H1a: There is significant difference between the extent of consumers' awareness of the rural and urban respondents from the state of Punjab with regard to numerous consumer determinants.

Table 5
Habitat's Impact on Consumer Awareness Determinants: Respondents from Punjab

Locale of Residence		Ν	Mean	Std. Deviation	Std. Error Mean	t- value	p- value
Consumer Awareness Compaigns	Rural	150	95.5133	9.40708	.76808	1.514	.131
Consumer Awareness Campaigns	Urban	150	97.4000	12.02403	.98176		
Pre Purchase Awareness of Consumer	Rural	150	147.6933	22.87607	1.86782	.614	.539
Responsibilities	Urban	150	149.4000	25.17403	2.05545		
Post Purchase Awareness of Consumer	Rural	150	81.3267	10.81107	.88272	3.131	.002**
Responsibilities	Urban	150	85.1800	10.50348	.85761		
Knowledge about Consumer Dispute	Rural	150	99.4000	13.13891	1.07279	1.614	.108
Redressal Mechanism	Urban	150	102.3400	18.03197	1.47230		

Analysis: To test whether locale of residence affects the extent of consumers' awareness with respect to consumer awareness campaigns, pre and purchase post awareness of consumer responsibilities, and knowledge about consumer dispute redressal mechanism, t-test was applied. Perusal of the statistical analysis revealed that locale of residence has non-significantly affected the perceptions of respondents on consumer awareness campaigns, pre purchase awareness of consumer responsibilities and knowledge about consumer dispute redressal mechanism as p-value has been found non-significant at 5% level of significance.

Thus, inference that can be drawn is that the locale of residence of the respondents does not play any significant role in determining awareness and

knowledge with consumer awareness campaigns, pre purchase awareness of consumer responsibilities and knowledge about consumer dispute redressal mechanism. But, states have significant effect on the perspectives of the respondents regarding post purchase awareness of consume responsibilities as the p-value is less than 0.05.



Hypothesis 2:

H20: There is no significant difference between the extent of consumers' awareness of the rural and urban respondents from the state of Haryana with regard to numerous consumer determinants.

H2a: There is significant difference between the extent of consumers' awareness of the rural and urban respondents from the state of Haryana with regard to numerous consumer determinants.

Table 6	
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Locale of Residence		Ν	Mean	Std. Deviation	Std. Error Mean	t- value	p- value
Consumer Awareness Campaigns	Rural	150	93.8200	11.46929	.93646	1.911	.057
Consumer Awareness Campaigns	Urban	150	96.7667	15.00444	1.22511		
Pre Purchase Awareness of Consumer	Rural	150	146.8600	23.67255	1.93286	2.338	.020*
Responsibilities	Urban	150	152.4600	17.32036	1.41420		
Post Purchase Awareness of Consumer	Rural	150	82.7467	12.84977	1.04918	.928	.354
Responsibilities	Urban	150	84.0133	10.68712	.87260		
Knowledge about Consumer Dispute	Rural	150	102.2667	14.95033	1.22069	1.411	.159
Redressal Mechanism	Urban	150	104.8133	16.28743	1.32986		

Analysis: Perusal of the statistical analysis revealed that locale of residence has non-significantly affected the perceptions of respondents on consumer awareness campaigns, post purchase

awareness of consumer responsibilities and knowledge about consumer dispute redressal mechanism as p-value has been found nonsignificant at 5% level of significance. Thus, inference that can be drawn is that the locale of residence of the respondents does not play any significant role in determining awareness and knowledge with consumer awareness campaigns, purchase post awareness of consumer responsibilities and knowledge about consumer dispute redressal mechanism. But, states have

significant effect on the perspectives of the respondents regarding pre purchase awareness of consume responsibilities as the p-value is less than 0.05.

Hypothesis 3

H30: There is no significant difference between the extent of consumers' awareness of the respondents hailing from selected districts of Punjab with varied literacy rate with regard to numerous consumer determinants.

H3a: There is significant difference between the extent of consumers' awareness of the respondents hailing from selected districts of Punjab with varied literacy rate with regard to numerous consumer determinants.

Table 7
Inter Group Differences amongst Respondents from Punjab

Descriptives											
Particulars			Mean	Std. Deviation	Std. Error	F- value	p- value				
Consumer Awareness Campaigns	Low	100	96.8200	10.70672	1.07067						
	Moderate	100	96.9500	10.90767	1.09077	.472	.624				
	High	100	95.6000	10.89713	1.08971						
Due Developer Arrestore of	Low	100	149.8000	25.88904	2.58890						
Pre Purchase Awareness of Consumer Pasponsibilities	Moderate	100	145.7800	25.41398	2.54140	.997	.370				
Consumer Responsibilities	High	100	150.0600	20.39302	2.03930						
Post Purchase Awareness of	Low	100	82.8600	7.86119	.78612	.505	.604				
Consumer Responsibilities	Moderate	100	84.1400	12.62275	1.26227	.303	.004				



	High	100	82.7600	11.43989	1.14399		
Knowledge about Consumer Dispute Redressal Mechanism	Low	100	96.2200	15.62475	1.56248		
	Moderate	100	103.8300	13.78995	1.37900	6.904	.001**
Dispute Redressar Mechanism	High	100	102.5600	16.96659	1.69666		

Analysis: For discovering inter group differences amongst various groups of respondents from Punjab - with respect to consumer awareness campaigns, pre post purchase awareness of consumer and responsibilities, and knowledge about consumer dispute redressal mechanism - one way ANOVA test was applied. Analysis of the responses revealed that no significant difference has been found for the first three constructs - Consumer Awareness Campaigns, pre and post purchase consumer responsibilities – as p-value is more than 0.05, which connotes that respondents belonging to less / moderately / highly literate districts don't differ much in terms of extent of consumer awareness concerning pre-defined domains. The p-value being <0.05 reflects significant difference in respect of only one

consumer determinant namely knowledge about consumer dispute redressal mechanism. Thus, it

became crystal clear that as far as awareness relating to consumer dispute redressal mechanism is concerned, education emerged as a key indicator for respondents from the state of Punjab.

Hypothesis 4

H40: There is no significant difference between the extent of consumers' awareness of the respondents hailing from selected districts of Haryana with varied literacy rate with regard to numerous consumer determinants.

H4a: There is significant difference between the extent of consumers' awareness of the respondents hailing from selected districts of Haryana with varied literacy rate with regard to numerous consumer determinants.

	I	Descri	ptives				
Particulars		Ν	Mean	Std. Deviation	Std. Error	F- value	p-value
	Low	100	93.9500	14.47141	1.44714		
Consumer Awareness Campaigns	Moderate	100	94.7100	13.05953	1.30595	1.635	.197
	High	100	97.2200	12.55017	1.25502		
	Low	100	150.2200	20.25722	2.02572		
Pre Purchase Awareness of Consumer Responsibilities	Moderate	100	147.9400	25.38743	2.53874	.527	.591
Responsionnies	High	100	150.8200	16.09779	1.60978		
	Low	100	82.7000	12.59349	1.25935		
Post Purchase Awareness of Consumer Responsibilities	Moderate	100	85.5800	11.15654	1.11565	2.759	.065
Responsionnes	High	100	81.8600	11.43980	1.14398		
	Low	100	98.8000	16.68847	1.66885		
Knowledge about Consumer Dispute Redressal Mechanism	Moderate	100	110.2700	9.65240	.96524	16.102	.0001**
Redressar Meenanism	High	100	101.5500	17.21778	1.72178		

 Table 8

 Inter Group Differences amongst Respondents from Haryana

Analysis: For discovering inter group differences amongst various groups of respondents from Haryana - with respect to consumer awareness campaigns, pre and post purchase awareness of consumer responsibilities, and knowledge about consumer dispute redressal mechanism - one way

ANOVA test was applied. Analysis of the responses revealed that no significant difference has been found for the first three constructs - Consumer Awareness Campaigns, pre and post purchase consumer responsibilities – as p-value is more than 0.05, which connotes that respondents belonging to less / moderately / highly literate districts don't



differ much in terms of extent of consumer awareness concerning pre-defined domains. The pvalue being <0.05 reflects significant difference in respect of only one consumer determinant namely knowledge about consumer dispute redressal mechanism. Thus, it became crystal clear that as far as awareness relating to consumer dispute redressal mechanism is concerned, education emerged as a key indicator for respondents from the state of Haryana.

Conclusion

Insignificant difference has been observed as far as awareness with respect to CACs is concerned. Maximum number of respondents from the state of Punjab and Haryana get to know about consumer

campaigns via electronic media, duly followed by social media. Highest number of respondents contemplated that basic purpose behind initiating campaigns is 'Right to Information', followed by 'Misleading Advertisements' and 'Beware Retailer'. reflected significant difference Analysis in respondent's perception with respect to purpose of creating CACs. While measuring the impact of locale of residence on various consumer awareness determinants, significant difference between rural and urban respondents from Punjab was found as far purchase awareness of as post consumer responsibilities is concerned, whereas significant difference between rural and urban respondents from Haryana was found for the consumer determinant pre purchase awareness of consumer responsibilities. Significant difference between the extent of consumers' awareness of the respondents hailing from selected districts of Punjab and Harvana with varied literacy rate with regard to consumer determinants consumer dispute redressal mechanism has been observed.

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PERFORMANCE APPRAISAL OF DISPUTE REDRESSAL FORUMS (DRFS)

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Abstract

Recognizing the unveiling of technological gyration in the present emulous and rivalrous business world coupled with ascending consumer expectations, and for assaying illusory, erroneous and deceptive business practices, cosmopolitan emphasis has been laid down by the Government of India on protection of consumers' interest and to make consumer an aware and informed consumer - for which the Ministry of Consumer Affairs and Public Distribution has embarked on enactment of consumer protection legislations, launch of novel consumer awareness campaigns, and ensuring the presence of three-tier consumer dispute redressal mechanism for public at large. The extant study has been carried out for assessing and measuring the performance of consumer dispute redressal forums. For this, the state of Punjab and Haryana constituted sample population and data was congregated from Punjab State Consumer Disputes Redressal Commission, Haryana State Consumer Disputes Redressal Commission and District Forums of districts selected for the study for a time period of 14 years. Statistical inferences reveal that dispute redressal forums should seek a new vision which embodies three cultures i.e. the culture of balance and harmony, the culture of trusteeship and stewardship, and culture of accountability to the future by fixing up time specific norms for adjournment of cases, setting up regional online help desks and additional district benches for speedy clearance of complaints, implementing 'Citizen Charters' in enforcing accountability of corporate sector, and ensuring a provision of 'Legal-Aid' for poor and illiterate litigants and reinstating faith in judicial system.

Keywords: Consumer dispute, dispute redressal mechanism, dispute redressal forums, performance appraisal of third party agencies.

Principle of Caveat emptor

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Article History

The caveat emptor principle, which means let the buyer beware, was in practice for many years by the Courts of England. The term 'Emptor' in Latin language means buyer whereas the verb 'Cavere' means caution. This way the term caveat emptor indicates that the buyer should be cautious while buying any commodity or availing any service. Thus, buyer was relying more on his own skill or judgement. Once a buyer satisfies himself as to the suitability of the product for own usage, he would not have any right to reject the product at a later stage as he has already made use of his knowledge and wisdom. That was a time when buyer was not having any recourse against the seller even in case of latent defect (a defect which can't be detected by reasonable examination). This acted as a deterrent for commercial activities because buyers were always apprehensive about the quality and utility of the product, though purpose of usage used to be prespecified by the buyer. As per Sale of Goods Act 1893, disclosures expected from seller were



minimal, and buyer's intelligence to examine goods was given utmost importance. Buyer wasn't having any recourse for any unscrupulous activities of the seller. It's not the duty of a seller to provide goods to the buyer which is suitable for his/her usage. Rather it was the buyer who was supposed to exercise reasonable care while buying goods, as he can't hold the seller responsible if goods do not serve the purpose. Reason responsible predefined for transition from the principle of 'caveat emptor' to 'caveat venditor' was to provide adequate protection to the buyer who buys the goods in good faith. In order to strengthen the relationship between the buyer and seller, and to create a scenario wherein commercial transactions are encouraged, need was felt to dilute the principle of 'caveat emptor'.

The Dilution Process and Origin of Caveat Venditor

The case of 'Priest v Last 2 KB 148 (1903)' propelled the transition from the principle of caveat emptor to caveat venditor, where the petitioner (Priest) purchased a hot water bottle from the defendant to be used by his wife. On its fifth use, hot water bottle burst, blistering her. It was defended that Priest did not state the purpose of buying hot water bottle. But the Hon'ble court decided that hot water bottle was not fit for "it's obvious and usual purpose" and was therefore unmerchantable. This was just a beginning of what could certainly be termed as the diminishing process of the rule of caveat emptor.

Another historic verdict was given by the House of Lords in the case **'Donoghue v Stevenson** (1932) AC 562', thereby placing more responsibility on the seller. In this case, May Donoghue had a meeting with her friend at a café in Paisley on August 26, 1928, where her friend placed an order for a bottle of ginger beer for Donoghue. After drinking a portion of the beer, Donoghue felt the presence of partially decomposed snail. As ginger beer was packaged in an opaque bottle, and therefore presence of snail wasn't evident to anyone. Donoghue suffered severe gastro-enteritis as a result of consuming the ginger beer. She sued the manufacturer of the ginger beer, David Stevenson, for £500 in damages. The question which arises here is, 'Did Stephenson owe a duty of care to Donoghue even though there was no contract between them, and there was no fraud?' May 26, 1932 is an historic day because on this day only it was held by the House of Lords that when an article of food or medicine is sold by a manufacturer to distributor in a situation which prevents such distributor or the ultimate purchaser or consumer from discovering the defect just by inspection, it's manufacturer's responsibility to exercise reasonable care to ensure that delivered product is free from any such defect. This duty is owed even in the absence of any legal contract between the manufacturer and the consumer (Lords Atkin, Thankerton and MacMillan). This historic verdict created a newfangled category of duty of care. As the rule of 'Caveat Venditor' has been subsequently upheld in many judgments, this proposition of law is a settled principle today and it seems that consumers' interests are far more protected.

Transition from the principle of caveat emptor, which is dying a slow death, to the principle of caveat venditor can be attributed to a more consumer oriented market. This transition will help in creating an appropriate balance between the rights and obligations of the seller and the buyer. Though it is the moral and ethical duty of the peddler to be true to his/her duty, yet several vendors / suppliers don't leave any stone unturned to exploit the consumer fraternity by following deceptive and fraudulent practices. They exploit and take undue advantage of the consumer folk by coddling themselves in disingenuous and devious advertisements, deceptive and defective packaging, and inadequate labeling; charging exorbitant prices; making misleading, false or exaggerated claims; offering adulterated, expired, and defective products; being deficient in services; offering poor after sale services; usage of false weight and measures; not delivering the product / service as per pre-decided terms of agreement; untimely delivery of products and services and so on. For safeguarding consumers' interest, plentiful



legislations have been enacted from time to time since aegis.

Though during the British period, Indian legal system was totally revolutionized and the English legal system was introduced to administer justice. Despite the challenges of combining the British and Indian legal systems, the fabric of modern Indian Law is unmistakably Indian in its outlook and operation; and consumer protection is not an exception to this perception. The Indian legal system experienced a revolution with the enactment of the Consumer Protection Act 1986 which was specifically designed to protect consumer interests. It is intended to provide justice which is less formal, involves less paper work, less delay and not expensive. The CPA has received wide recognition in India as poor man's legislation, ensuring easy access to justice. It won't be inappropriate to say that the CPA has instilled confidence among the "teeming millions" of impoverished litigants. The way in which the consumer forums are flooded with cases and the mode in which these cases are being disposed off creates an impression of "judicial populism" in the arena of consumer justice. Liberalizing the unbending and rigid procedural requirements, the CPA had introduced hassle-free methods of access to justice. A simple letter addressed to the consumer dispute redressal forums i.e. the National Commission, the State Commission and the District Forum, accompanied by nominal fee is sufficient enough to initiate legal action. It is suffice to mention that CPA is unique since it provides for setting up of quasi-judicial bodies vested with jurisdiction concurrently with the established courts for redressal of consumer disputes at the district, state and national levels. While reviewing various studies related to functioning and performance of consumer dispute redressal forums, it emerged that consumer folk, even when multi-tier dispute redressal machinery exists, feels devastated and distraught because of stretched time taken for resolution of complaint and piling of cases with National Commission. State Commission and

District Forums. Keeping in consideration the gaps identified, the present study focused at assessing and comparing the performance of CDRFs functional in the state of Punjab and Haryana.

Review of literature

It's a universal phenomenon that no effective research can be carried out without critically studying the literature that already exists in relation to it in the form of general literature and specific studies, as helps to eliminate the duplication of what has already been done, thereby giving a fair chance to identify the gaps that exists in the area of research. For assessing the performance of Dispute Redressal Forums (DRFs) various studies have been conducted globally, to identify the gap areas.

Studies conducted to assess and gauge the performance of dispute redressal forums – which are engaged in shielding consumers' from the business malpractices - revealed that foremost reason behind dismissal of majority cases was improper representation by the consumers, non-awareness about proceedings of the forum, delay in judgement delivery, frequent hiring of advocates, and insufficient personnel to handle consumer grievances. Inference drawn was that the government along with regulatory bodies should take obligatory steps to inculcate awareness among consumers about the functioning of disputes redressal forums (Hannigan 1977; Lizzy 1993; Ramakrishnaiah and Siva Rami Reddy 2000).

Critical review of performance of the Divisional Forum of Jammu exposed and publicized that inability to deliver results by dispute redressal forums was because of slow growth of the number of registered complaints, sluggishness in the disposal of complaints, limited financial jurisdiction of forums and low compensation for sub-standard products. It was suggested to make consumerism as a campaign more effective by establishing regulated markets. mobile voluntary consumer courts, regulation and establishment of a consumer affairs department. Another observation made was about governance aspect, which says though consumer legislations have been enacted, yet such laws could



not be implemented effectively. Thereby there arises a need to bring consumerism to the grass root level legally and administratively focusing on effective execution of legislations (**Sudan 2002**).

The study titled "Resolving Business Disputes Speedily" threw light on the breathing judicial system which has been marked with corruption, malpractices and abuse of power, and bludgeon workload on personnel working in forums. Analysis revealed that clubbing ad striking pressure resulted into poor quality judgement, absence of real justice and moderate delay in administration of consumer complaints. For resolution, speedy and efficacious statement of business disputes and alternative dispute resolution (ADR) mechanism can provides solution via tools of negotiation, mediation, conciliation along with arbitration, thereby making it possible for both of the parties to assemble and ponder upon issues concerning consumer and business. Major limitation of these tools i.e. need of physical presence of both the parties and mediates at a particular place on number of occasions is prompting business community to think of another dispute resolution mechanism i.e. Online Dispute Resolution (Aggarwal 2006; Januja 2007).

Aniban for his study on examining the performance of consumer forums in West Bengal and its interface with major stakeholders chose four specific dispute redressal forums i.e. Kolkata Unit I, North 24 parganas, Bankuyra and Darjeeling. Data on statement of filing, disposal and pendency of complaints lodged with selected DRFs was collected from office of Directorate of Consumer Affairs government of West Bengal and presiding officers of individual forums for the period 2002-04. Perusal of data indicated that percentage of disposal of cases increased remarkably as a result of which number of cases lying pending also got reduced considerably. But the disappointing fact was that time taken for redressal of a complaint was more than 90-150 days i.e. prescribed time frame. Analysis revealed that lack of proper infrastructure, inordinate delay in disposal of cases, procedural hick ups, need for appointing inadequate manpower, lawyer,

inadequate financial support by the government are few glaring lacunas that need to be dealt with. Number of consumers seeking redressal in urban DRFs comes at a higher proportion than rural DRFs. A significant chunk of complaints lodged with opted DRFs pertained to defective goods, medical negligence, unfair trade practices, provident fund, insurance, electricity, banks etc (**Chakvaborty Aniban 2010; Chadah 2010**).

For identifying the nature of problems being faced by the Presidents and Members of the District Forums, examine implementation of the Consumer Protection Act in the state of Jharkhand and also to assess the effectiveness of the District Forums in disposal of the cases, a sample of 35 was selected of which 7 respondents were president and rest 28 respondents were members of different district forums. 72% of sampled respondents were of the opinion that due to lack of trained manpower, functioning of district forums is unsatisfactory. Just 20% of the sampled respondents were found to be aware about consumer rights declared under COPRA 1986. Due to procedural difficulties and time consuming process, 68.6% of the respondents do not approach District Forums. Since inception, 30,455 cases were filed in the District Forums of Jharkhand, of which 28,105 cases have been disposed of, which clearly shows 92.28% disposal of cases. Though the scheme of computerization and computer networking of consumer forums has been launched, but the working of the District Forums has not improved to a large extent. Training needs to be imparted to members and other staff of the district forums (Mishra 2010).

For evaluating and assessing the working of quasijudicial machinery, stratified random sampling technique was used to select five states from six regions of India with a sample of 2,000 consumers and 175 complainants, wherein responses were collected using interview Schedule method, focus group discussion and formal meetings. Among those who had filed a complaint in the District Forums, 77.6% were of the view that complaint was handled to their level of satisfaction whereas 65.9% reported



unfriendly forums. 33.3% respondents opined that redressal procedure was time consuming and for 8% respondents, distance between place of residence and district forum acted as deterrence. Involvement of the lawyers, non-cooperative attitude of personnel, undue adjournments, lack of product testing facilities, delay in disposal, poor management of records, inadequate bandwidth leading to poor internet connectivity and also irregular power supply, shortage of manpower and desired skill and knowledge of the members the District Forums. manning inadequate compensation and infrastructure served as а hindrance to make consumer dispute redressal machinery more effective (Misra, Chadah and Pathania 2013; Gurusamy P, Manochithra P and Princy J 2014)

A study was conducted to identify issues having direct or indirect bearing on the filing of cases. For this, complaints lodged with the forums for 10 year time frame i.e. 1998 to 2007 were analyzed, which were sorted out according to case filing distribution, departmental distribution, year wise distribution, respondent distribution, individual distribution, status of the cases, period limitation distribution, causative factor for litigation, role and responsibility analysis and other salient findings. Analysis depicted more cases were from surgery department. Role and responsibility analysis showed that 3 cases were direct responsibility, 12 cases were joint responsibility and 6 cases were shared responsibility. (Sahoo, Satpathy, Arva and Lathwal 2014).

Sampling Design and Hypothesis Testing

Keeping in consideration the gaps identified, the present study focused at assessing and comparing the performance of CDRFs – which have been established as per the provisions of the Consumer Protection Act 1986 and are functional as well in the state of Punjab and Haryana - for which data for a period of 12 years - starting from 2005 – was gathered relating to following dimensions:

• Number of cases filed with / disposed of / lying pending with the State Commission of Punjab and Haryana since inception

• Number of cases filed with / disposed of / lying pending with the District Forums of Punjab and Haryana since inception

• Number of cases disposed of within the prescribed time frame by the State Commission and the District Forums of Punjab and Haryana

• Number of cases lying pending with the State Commission and District forums of Punjab and Haryana for more than 5 years

After gathering desired information from State Consumer Disputes Redressal Commission of Punjab and Haryana, data was statistically analyzed and compared using various statistical techniques such as t-test and growth rate. The following hypothesis were subjected to analysis and comparison:

> H01 There exist no significant difference with regard to the performance of CDRFs with reference to the period under study

> H01(a) No significant difference exists in the performance of 'National Commission' with reference to period under study

H01(b) No significant difference exists in the performance of 'State Commission' with reference to period under study

H01(c) No significant difference exists in the performance of 'District Forums' with reference to period under study

Analysis and Interpretation

After comprehensive perusal of data and statistical analysis, observations were made, which have been categorized under four categories mentioned below:

- Sectoral distribution of cases
- Growth rate with respect to number of cases filed / disposed of / pending cases
- Progress of disposal of cases
- Time-based pendency of cases

Detailed observations have been mentioned here-inunder:



Others

Total

I. See	I. Sectoral Distribution of Cases											
	Table 1											
Sector w	ise Filing of Cases wi	th NCDRC										
Sector	Number of Cases	Percentage										
Sector	Filed	Tercentage										
Housing	17,629	23.17										
Insurance	13,837	18.19										
Banking	4,441	5.84										
Medical	1,954	2.57										
Electricity	1,841	2.42										
Finance	881	1.16										
Service												
Deficiency	538	0.71										
Defective												
Goods	499	0.66										
Transport	484	0.64										
Telecom	402	0.53										

33,584

76,090

44.14

100.00

• • •1 ...

Interpretation: Sector-wise filing of the cases with NCDRC for the period 2007 to 2017 is depicted in the table. Analysis of the data reveals that out of the total 76,090 cases filed with NCDRC, maximum number of the cases filed i.e. 23.17% are relating to housing sector. 18.19% of the total filed cases are related to insurance, 5.84% cases are associated with banking sector, whereas cases coupled with medical, electricity and finance sector are 2.57%, 2.42% and 1.16% respectively. Less than 1% cases are linked with defective goods, transport and telecom sector.



Table	2
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Number of Cases Filed / Disposed of / Pending with the State Commission of Punjab and Haryana (since inception)

Cotogowy / State	Sector-wise Filing of Cases				Secto	or-wise Di	sposal of	Cases	Sector-wise Pendency of Cases			
Category / State	Pu	Punjab		Haryana		Punjab		Haryana		njab	Haryana	
Banking	1,843	5.60%	1,479	3.30%	1,403	4.70%	1,432	3.20%	440	13.20%	47	5.50%
Medical	881	2.70%	1,131	2.50%	742	2.50%	1,115	2.50%	139	4.20%	16	1.90%
Telephone	1,206	3.60%	1,097	2.40%	1,205	4.00%	1,097	2.50%	1	0.03%	0	0%
Insurance	6,831	20.60%	7,765	17.20%	5,153	17.30%	7,463	16.80%	1,678	50.30%	302	35.50%
Housing	1,715	5.20%	8,418	18.60%	1,414	4.70%	8,227	18.50%	301	9%	191	22.40%
Electricity	7,197	21.70%	14,350	31.70%	7,155	24%	14,275	32.20%	42	1.30%	75	8.80%
Airlines	20	0.10%	36	0.10%	19	0.10%	35	0.10%	1	0.03%	1	0.10%
Railways	98	0.30%	42	0.10%	96	0.30%	41	0.10%	2	0.06%	1	0.10%
Others	13,364	40.20%	10,895	24.10%	12,632	42.40%	10,677	24.10%	732	21.88%	218	25.70%
Total	33,155	100%	45,213	100%	29,819	100%	44,362	100%	3,336	100%	851	100%



Interpretation: Table 2 outlines the number of cases filed with / disposed of / lying pending with the State Commission of Punjab and Haryana. As far as the State Commission of Punjab is concerned, maximum number of complaints (21.7%) are related to the electricity department, followed by insurance and banking sector wherein the number is 20.6% and 5.6% respectively. For the state of Haryana, majority of the cases (31.7%) are related to electricity department and lower number of cases (0.1%) are for airlines. Number of filed cases relating to banking sector, medical services, telephone sector, insurance and railways is higher in Punjab as compared to their counterpart, Haryana. Whereas for housing sector, more number of cases was filed in Haryana than Punjab. Maximum number of cases i.e. 32.2%, 18.5% and 16.8% has been disposed of in the State Commission of Haryana concerning electricity, housing and insurance sector respectively, whereas lower number of cases disposed of are linked to airlines and railways (0.1% each). Similarly, in the State Commission of Punjab, higher disposal is related to the sector of electricity (24%) and insurance (17.3%). Number of disposed of cases relating to banking, telephone sector and insurance were higher in Punjab as compared to their counterpart, Haryana. Whereas, in case of housing and electricity sectors, more number of cases was disposed of in Haryana than in Punjab. Maximum number of pending cases in the State Commission of Punjab are concerning insurance (50.3%) and banking (13.2%) sector, whereas lowest number of pending cases are related to airlines (0.03%) and railways (0.06%). Similarly, in the State Commission of Haryana, maximum pendency is related to the sector of insurance (35.5%) and housing (22.4%). Except housing and electricity sector, number of pending cases appears to be on higher side for the state of Punjab than its counterpart namely Haryana.



Table 3	
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Number of Cases Filed / Disposed of / Pending with the District Forums of Punjab and Haryana (since inception)

Cotogowy / State	Sec	tor-wise F	iling of Ca	ses	Sector-wise Disposal of Cases				Sector-wise Pendency of Cases				
Category / State	Pun	Punjab		Haryana		Punjab		Haryana		Punjab		Haryana	
Banking	9,338	5.50%	13,376	5.70%	9,125	5.50%	12,174	5.50%	213	6.40%	1,202	9.30%	
Medical	2,524	1.50%	4,185	1.80%	2,411	1.40%	3,722	1.70%	113	3.40%	463	3.60%	
Telephone	10,116	5.90%	16,735	7.10%	10,077	6%	16,501	7.40%	39	1.20%	234	1.80%	
Insurance	22,195	13%	34,137	14.50%	21,329	12.80%	30,182	13.60%	866	26.10%	3955	30.70%	
Housing	6,653	3.90%	24,916	10.60%	6,448	3.90%	24,061	10.80%	205	6.20%	855	6.60%	
Electricity	50,506	29.60%	64,524	27.50%	50,239	30%	63,577	28.60%	267	8%	947	7.30%	
Airlines	2,046	1.20%	132	0.06%	2,023	1.20%	101	0.05%	23	0.70%	31	0.20%	
Railways	1,060	0.60%	615	0.26%	1,037	0.60%	584	0.26%	23	0.70%	31	0.20%	
Others	66,026	38.80%	76,352	32.48%	64,457	38.60%	71,182	32.09%	1,569	47.30%	5170	40.30%	
Total	170,464	100%	234,972	100%	167,146	100%	222,084	100%	3,318	100%	12888	100%	



Interpretation: Table 3 shows data sector-wise number of cases filed / disposed of / lying pending with various District Forums of Punjab and Haryana. As far as the district forums of Punjab is concerned, maximum number of complaints (29.6%) have been related to the electricity department, followed by insurance and telecom sector wherein the number is 13% and 5.9% respectively. For the district forums from the state of Haryana, majority of the cases (27.5%) are related to electricity department, followed by 14.5% cases from insurance sector, which is further followed by housing sector (10.6% cases) and lowest number of cases (0.06%) are for airlines. Number of filed cases relating to banking sector, medical services, telecom sector, insurance and housing sector are higher in Harvana as compared to their counterpart, Punjab. On the other hand, for electricity, airlines and railways sector, more number of cases are filed in Punjab than Haryana. Maximum number of cases disposed of in the district forums of Haryana are concerning electricity (28.6%), insurance (13.6%) and housing (10.8%) sector, whereas lower number of cases disposed of can be related to airlines (0.05%) and railways (0.26%). Similarly, in the district forums of Punjab, higher disposal is related to the sector of electricity (30%), insurance (12.8%) and telecom sector (6%). Number of disposed of cases relating to banking, electricity, airlines and railways sector is higher in Punjab as compared to their counterpart, Haryana. Whereas in case of medical, insurance, housing and telecom sector, number of cases disposed of in Haryana is higher than in Punjab. On the other hand, maximum number of pending cases in district forums of Punjab are concerning insurance (26.1%) and electricity (8%) sector, whereas lowest number of pending cases is related to airlines (0.7%) and railways (0.7%). Similarly, for district forums from the state of Haryana, maximum pendency is related to the sector of insurance (30.7%) and banking (9.3%). Except electricity, airlines and railways sector number of pending cases appears to be on higher side for the state of Haryana than its counterpart namely Punjab. Pending cases concerning Airlines and railways is really low in both the states.

II. GROWTH RATE WITH RESPECT TO NUMBER OF CASES FILED / DISPOSED OF / PENDING CASES

	(A) For the Filed, Disposed of and Pending Cases											
Year	Cases filed			Cas	ses dispose	ed of	Pending cases					
	СС	RP	FA / A	CC	RP	FA / A	CC	RP	FA / A			
Growth rate	25.14%	_19.36	4.71%	9.19%	-29.82%	7.89%	48.44%	35.79%	45.02%			
t-value	1.657	2.18	0.424	0.625	3.521	0.695	3.755	6.084	7.037			
p-value	0.149	0.072	0.687	0.555	.012*	0.513	.009**	.001**	.0001**			

Table 4Exhibition of Consumer Cases (CC), Revision Petitions (RP) and First Appeal (FA) Or Appeal(A) For the Filed, Disposed of and Pending Cases

Interpretation: Exhibition of consumer cases (CC), Revision Petitions (RP) and First Appeal (FA) or Appeal (A) for the filed, disposed of and pendency cases is done in the table 4. Growth rate of filed consumer cases was 25.14%. Whilst, filed revision petitions witnessed a negative growth rate of 19.36%, unlike filed first appeal or appeal cases where positive growth rate of 4.71% was observed. The t-values and p-values for the filed cases of different petitions and appeals is non-significant at 5% level of significance concluding growth rate is non-significant for Consumer Cases, Revision Petitions and First Appeal or



Appeal in filed cases. Disposed of consumer cases noted a growth rate of 9.19% with p-value 0.555, designating non-significant change, in case of disposal of revision petitions, negative 29.82% growth rate is shown with p-value .012, specifying significant change in the number of cases disposed of and at last disposal of first appeal or appeal cases, there is a growth rate of 7.89% with p-value 0.513, stipulating non-significant change. 48.44% growth rate can be discerned in pending consumer cases. Pending revision petitions also had a positive growth rate of 35.79% and pending first appeal or appeal cases had the growth rate 45.02%. The growth rates are significant for the consumer cases, Revision Petitions and First Appeal or Appeal in pending cases.

		Punjab			Haryana				
Year	Cases filed in year	Cases disposed of in year	Cases pending in year	Cases filed in year	Cases disposed of in year	Cases pending in year			
Growth									
rate	1.308%	10.29%	1.51%	-11.74%	9.96%	-60.16%			
t-value	1.007	4.865	0.658	6.05	0.839	3.753			
p-value	0.344	.001**	0.529	.0001**	0.426	.006**			

 Table 5

 Number of Cases Filed / Disposed of / Pending with the State Commission of Punjab and Haryana

Interpretation: Table 5 delineates the number of cases filed, disposed of and pending year-wise with the State Commission of Punjab and Haryana. Punjab noticed the positive growth rate of 1.308% in the number of cases filed comparing to Haryana where negative growth rate of 11.74% found in time span of 2005-2014. The value of t 1.007 and p-value 0.344 concludes that growth rate is non-significant for Punjab, although, with t-value 6.05 and p-value .0001, the growth rate of Haryana for filed cases appears to be significant. In Punjab, higher growth rate of 10.29% for disposal of cases is observed in comparison to growth rate of 9.96% in Haryana. The p-values 0.001 and 0.426 indicate that the growth rate is significant for disposed of cases in Punjab, whereas, growth rate is non-significant in Haryana. Haryana witnessed a decreasing growth rate (60.16%) of pending cases as compared to Punjab where positive growth rate (1.51%) is seen for the specified time period. Growth rate is non-significant in the pending number of cases in Punjab with p-value .529, whereas, growth rate is significant in the pending number of cases in Haryana with p-value .006.

Interpretation: Table 6 represents the number of cases filed, disposed of and pending in the District Forums of Punjab and Haryana. Punjab noticed the positive growth rate of 1.92% for cases filed with the district forums in comparison to Haryana where negative growth rate of 4.60% is found. The value of t 0.972 and p-value 0.359 concludes that growth rate is non-significant for Punjab, although, with t-value 2.598 and p-value .032, the growth rate of Haryana for filed cases is significant. In Punjab, positive growth rate of 2.63% for disposal of cases is observed in comparison to negative growth rate of 1.82% in Haryana. The p-values 0.144 and 0.325 indicate that the growth rate is non-significant for cases disposed of in Punjab and Haryana. Punjab witnessed a decreasing growth rate (4.92%) for pending cases as compared to Haryana where positive growth rate (0.02%) is seen for the time period of 2005 to 2014. Growth rate is non-significant for pending number of cases in Haryana with p-value 0.999, whereas, growth rate is significant in the pending number of cases in Punjab with p-value 0.018.



Table 6 Number of Cases Filed / Disposed of / Pending in the District Forums of Punjab & Haryana

		Punjab		Haryana				
Year	Cases filed in year	Cases disposed of in year	Cases pending in year	Cases filed in year	Cases disposed of in year	Cases pending in year		
Growth rate	1.92%	2.63%	-4.92%	-4.60%	-1.82%	0.02%		
t-value	0.972	1.617	2.957	2.598	1.049	0.002		
p-value	0.359	0.144	.018*	.032*	0.325	0.999		

III. **PROGRESS OF DISPOSAL OF CASES**

	Pun	jab	Haryana		
Particulars	No.	%age	No.	%age	
Total cases filed since inception	33,155		45,213		
Cases disposed of (Number and %age)	29,819	90%	44,362	98%	
Cases disposed of within prescribed time frame (Number and % age)	3,801	11%	10,874	24%	
Cases pending	3,336		851		

Table 7 . . 0 **n**.

Interpretation: Progress of disposal of cases in State Commission is given in the table 7 for Punjab and Haryana. Out of the total 33,155 and 45,213 cases filed since inception in Punjab and Haryana, 90% and 98% of the cases have been disposed of respectively and only 11% and 24% cases are disposed of within prescribed time frame. 3,336 cases are pending in Punjab in comparison to 851 cases in Haryana.

Progress of disposal of cases in District Forums								
		Punjab		Haryana				
Particulars	No.	%age	No.	%age				
Total cases filed since inception	1,70,464		2,34,972					
Cases disposed of (Number and %age)	1,67,136	98.0%	2,22,084	94.51%				
Cases disposed of within prescribed time frame (Number and %age)	93,336	55.0%	38,119	17.16%				

Table 8



Cases pending 3,318 12,888	Cases pending	3,318		12,888	
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Interpretation: Progress of disposal of cases in District Forums is given in the table 8 for Punjab and Haryana. Out of the total 1,70,464 and 2,34,972 cases filed since inception in the district forums of Punjab and Haryana, 98% and 94.51% of the cases have been disposed of respectively and 55% and 17.16% cases are disposed of within prescribed time frame. 3,318 cases are still pending in Punjab as comparing to 12,888 cases in Haryana.

IV. TIME-BASED PENDENCY OF CASES								
Table 9								
Time wise Pendency of Cases								
Particulars		Case pending for > 5	Case pending for > 3	Case pending for > 2				
		years	years	years				
State	Punjab	11	452	532				
Commission	Haryana	2	0	0				
District Forums	Punjab	1	5	6				
	Haryana	220	2,258	2,892				

Interpretation: Perusal of the contents of table 9 inform the time period for which cases have been lying pending with the State Commission and District Forums of Punjab and Haryana. In State Commission of Punjab, 532 cases are pending for a period of more than 2 years, followed by 452 cases which are pending for more than 3 years and 11 cases for more than 5 years, whereas in Haryana only 2 cases are pending for more than 5 years. But different trend is observed for District Forums. 6 cases remain pending for more than 2 years in Punjab as comparing to 2,892 cases in Haryana. Only 1 and 5 cases are lying pending with the District Forums of Punjab for a period more than 3 and 5 years respectively. In contrast to this, 2,258 and 220 still remain un-disposed of with the district forums of Haryana. This reveals that though Consumer Protection Act 1986 attempts to resolve consumer dispute within 90 days in normal course of business, yet time taken by the forums in addressing the consumer grievances remains at higher level. Thus, a conscious effort needs to be made to make consumer dispute redressal machinery more efficient.

Suggestions of the study:

need Recognizing the of protecting consumers' interest, following are the suggestions to make consumer protection machinery effective:

Reinstating faith in judicial system: All • those officials, who are bestowed with the responsibility to deliver justice to aggrieved, should not shift their responsibility to future generations so as to restore public faith in the judicial system. An independent judiciary, after giving due weightage to consumers' expectations from the judiciary, through technological involvements can innovate the way justice is delivered and dispersed. Judiciary's focus

should be on 'how to deliver justice' than 'what to deliver'. All the procedures and traditions which deny or degrade justice should be dispensed away without further delay. This will encourage the aggrieved to approach consumer dispute redressal forums for resolution of their grievance.

With the advent of online markets, the digital marketing platform is gaining momentum with each passing day. The digital world is replacing the orthodox modes of market and marketing at rapid pace. Taking this into consideration, the government NGOs. engaged in creating consumer and awareness, should focus on digital platform to fulfill



their goals. It is because of the busy and hectic schedule of the individuals that they can access and go about these digital campaigns as per their convenience. Even the availability of digital material will enable the consumer to use it as a ready recknor as and when desired.

• Though Centre for Consumer Studies in collaboration with Indian Institute of Public Administration recurrently conducts training programs for the members of the forum to acquaint them about the functioning of quasi-judicial bodies and make them learn the art of writing judgment, yet a conscious effort needs to be made to organize such training programs at state and district level as well.

• Composition of the three tier adjudicatory machinery of NCDRC, SCDRC and DFs reveals that except the presiding officer, no other member need to possess any legal qualification and experience. It is suggested that a minimum legal qualification should be prescribed for all the members of consumer dispute redressal forums.

• As per the provisions of the Consumer Protection Act 1986, a complaint lodged with consumer forum should be resolved within a time span of 90 days where testing of the mentioned goods is not required and within a time span of 150 days where testing of the mentioned goods is required. Whereas, analysis of data divulges that time taken in majority of the cases is much more than the prescribed timeframe due to frequent adjournments by the judges and prolongment of cases by the lawyers (may be because of their personal interest). It is therefore recommended that time specific norms be laid down for adjournment of cases so as to check unfair and unjust practices of the judges and lawyers.

• At times, lawyers instigate aggrieved consumers to lodge frivolous complaints and make highly inflated claims, giving them false hope that such claims are maintainable, to extract more money from suffering fraternity. It is, therefore, suggested that services of advisory functionaries be provided to consumers, where they would get advice on their claim rather than directly falling prey to ill wishes of the lawyers. This, in turn, would lessen the burden on the CDRFs as they will have to handle lesser number of complaints. Along with this, every consumer should have well stocked library, where consumer may consult desired consumer literature before lodging complaint with the forum.

• Although the CPA provides a provision of additional benches for quick disposal of cases lying pending with the National Commission as well as State Commission, there is no such provision for the District Forum. Therefore, the CPA shall be amended to make a provision of additional district benches for speedy clearance of complaints lodged with the District Forums.

Conclusion

Realizing the need to promote consumerism and protect consumers' interest, the CPA provides for regulations to ensure transparency in business practices, accountability and participations of all the stakeholders. Performance of the Act, over a period of three decades, has shown its' acceptance and legal preference by aggrieved consumers to exercise their consumer rights. It has brought disinterested ones to an organized platform of consumer forums, whom they can approach for resolution of their grievances. The way in which consumer forums are flooded with cases and the manner in which such cases are being disposed off creates an impression of "judicial populism" in India. Though CPA through its' cost effective mechanism has revolutionized the Indian legal system, yet handling consumer grievances in orthodox manner has posed a great legal challenge for judiciary. Presence of sense of commitment amongst the operators of law would ensure culture of good governance, wherein the consumers would feel protected and there won't be a single reason for lodging a complaint. Consumer movement should seek a new vision which embodies 3 new cultures, i.e., the culture of balance and harmony, the culture of trusteeship and stewardship and culture of accountability to the future.



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