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EDITORIAL

The first half of 2018 has been quite eventful globally not only politically but also socially and economically. Corporate World has taken rapid strides towards growth while adapting to new developments which seems to affect the gap between them and academia for the better. Contemporary research may hold much more significance for modern organizations and the current issue wishes to strengthen this viewpoint.

This issue of Management Dynamics has a total of four papers from different areas of management. The first paper based on a study of US pharmaceutical industry focuses on developing a technique that would allow for benchmarking Web-based CRM strategies of firms. The findings can be utilized for competitive analysis and customer relationship management system in any industry as organizations can fine-tune their competitive analysis at different hierarchical levels using the model proposed in this paper. The next paper applies Peter Lynch Model on BSE 100 stocks based on six parameters. Accordingly, the investment strategy created using this model can be highly profitable for organizations.

The third paper focuses on those factors which act as a major hindrance for anyone while shopping online and are broadly divided into psychological, behavioural, demographic cultural and social factors and product category factors. It is critical for the e-tailer to understand the interplay of all these critical resistors in order to be the most successful retailer. The last paper analyses the impact an influence of Customer Relationship Management (CRM) on e-commerce.

Dr. Athar Mahmood
(Editor)

July 2018

COMPETITIVE ANALYSIS OF CRM STRATEGIES USING ANALYTIC HIERARCHY PROCESS

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Ravi Kathuria***

ABSTRACT

In the era of increasing need for customer-centric marketing, the growth of technology such as the Web-based customer relationship management (CRM) has enabled pharmaceutical firms to develop new capabilities to sustain competitive advantage with superior marketing strategies, which include formulating unique, direct relationships with customers. To compete by integrating the online technologies across all aspects of a firm's operations, translates into the need for developing new skills as traditional ways of competing become insufficient. Towards this end, pharmaceutical firms have seized the opportunity to institute relationships with customers (physicians and patients) with the use of the Web. Our research focused on developing a technique that would allow for benchmarking Web-based CRM strategies of firms in any industry. We used the US pharmaceutical industry as a setting to demonstrate how our technique can be used to avoid the typical blind spots of competitor analysis. We used a method called Analytic Hierarchy Process (AHP) to analyze seven firms, selected by executives from the pharmaceutical industry, to compare their Web-based CRM strategies. Results suggest that three of the seven firms were far ahead in the adoption of the Web related to the CRM. One had more focused efforts in patient relationship where as another had a very high focus on physician relationship. The proposed technique can be utilized for competitive analysis in any industry. Implications and future research directions have been discussed.

Keywords: *Competitive Analysis, Multi-criteria Decision Method, Pharmaceutical Industry, Web-based CRM Strategies.*

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INTRODUCTION

The concepts of competitor analysis and competitive intelligence have been discussed in both strategic management and marketing literature for more than three decades (Chen, Su, and Tsai, 2007; Amit, Domowitz and Fershtman, 1988; Chen, 1996; Baum and Korn, 1996). One key issue of this discussion is to avoid 'blind spots' that may arise in the process of monitoring known and potential competitors (Zahra and Chaples, 1993). This monitoring allows a firm to anticipate future competitive moves. In addition, firms conduct competitor analysis to gauge the future position of the competitor rather than current resources and positions, and as such focus on a competitor's resourcefulness (Hamel and Prahalad, 1989; Hopkins, 2003). While competitive intelligence is deemed important in managerial decision making (Porter, 1980; Smith, Ferrier and Ndofo, 2001), in the present paper, we extend the idea of the competitor analysis for a set of known competitors. Specifically, we examine how Customer Relationship Management (CRM) strategies could be used to create competitive advantage, when the external environment changes, due to advances in the technological environment. We use the context of changes in the environment due to a rapid growth of the information and communications technologies, such as the Internet.

Additionally, we focus on the pharmaceutical industry for the setting of our research. Traditionally, inter-firm rivalry studies have focused on one specific industry, for example the US airline industry (Chen, 1996); California commuter airlines (Bum and Corn, 1999); and US insurance industry (Fiegenbaum, Thomas and Tang, 2001). Our focus on competitor analysis, in light of the growth of the Internet as an enabling technology (Porter, 2001), seems appropriate because the advent of the Internet has significantly changed the information and knowledge available to consumers in the pharmaceutical industry. Further, Joshi and Yermish (2000) suggest that the Internet has made business processes more transparent. In turn, this transparency has forced the competitor analyst to consider and evaluate many sources of data, which underscores the need for new competitor analysis tools. Under such circumstances, a pharmaceutical firm must use competitive intelligence methods that match with the changes in the environment (Zahra and Chaples, 1993) to develop appropriate tools to avoid blind spots.

The rest of the paper is organized as follows. First, we provide a brief survey of the pharmaceutical industry considering the growth in information and communication technologies. Second, we conceptualize and measure the extent to which a firm intends to use the Internet technologies to manage its customer relationships. Third, we present a measuring tool that integrates competitor analysis with customer analysis in the context of a new technology that is rapidly diffusing among many competing firms. Fourth, while providing a tool, we intend to provide a theoretical lens in the area of competitor analysis. To create an objective and structured measure to assess the web activities of a firm, we apply Analytic Hierarchy Process (AHP) to obtain competitive intelligence in the process of customer relationship management among pharmaceutical firms. Finally, results are presented along with implications for research and practice concerning the use of the tool presented to conduct competitive intelligence when the external environment changes.

CONCEPTUAL FRAMEWORK

The spread of the information and communications technologies has changed the competitive dynamics of firms. When firms find their environment to be hypercompetitive or high velocity, they need to respond using speed and surprise so that they can shift the rules of competition (D'Aveni 1995). In high velocity environments, firm strategies are often more concerned with change (Eisenhardt and

Brown, 1997, 1999), speed (Eisenhardt, 1989; Eisenhardt and Tabrizi, 1995) and flexibility (D'Aveni, 1994). However, to respond quickly and with flexibility, a firm needs to monitor its known competitors.

With changes in the environment, however, the tried and tested tools of competitive intelligence may lead to blind spots (Zahra and Chaples, 1993; Zajac and Bazeran, 1991) because the changed environment may mask the resourcefulness of the competitors under new competitive situations. Thus, it becomes critical to anticipate competitive moves and prepare accordingly. This preparation involves three underlying components of competitor behavior: a) awareness of the competitive relationship as well as awareness about competitor's initiatives (Kathuria, 2000); b) motivations to respond to the competitor's initiatives or act in a preemptive way (Kathuria and Partovi, 2000); and c) capability to act on one's own intentions (Smith et al, 2001). Chen (1996) and Chen et al. (2007) applied this approach to investigate inter-firm rivalry, whereas Chen and Miller (1994) have used the awareness component for analyzing attacks and retaliation. While all three components give rise to the idea of competitive dynamics, for the present manuscript, our focus is on the monitoring that is derived from being aware of the competitive relationship and competitive intentions.

As a firm finds that new technologies, such as the Internet, are adopted by its competitors, it needs to evaluate the motivation of the adoption. Some competitors in the industry adopt a new technology to gain superior information about the new technology (Banerjee, 1992). On the other hand, some competitors are guided by institutional pressures for conformity and legitimacy and hence they are likely to embrace near identical routines and processes (Lee, Smith and Grimm, 2003). For Abrahamson and Rosenkopf (1993), adoption takes place because some competitors have a need for social legitimacy and others have a need due to the fear of loss of competitive advantage. Regardless of the reasons, for a focal firm it becomes critical to monitor the behavior of the competitors and good competitive intelligence might provide explanations of social legitimacy or competitive fear as the cause of adoption.

THE SETTING: CRM IN THE PHARMACEUTICAL INDUSTRY

In a rapidly changing environment, companies have to compete by providing superior value to the customers using either operational excellence, customer intimacy or product leadership strategies (Treacy and Wiersema, 1993). Before the onset of digital era, achieving customer intimacy was not so easy, so the companies mostly adopted operational excellence or product leadership strategies. With the growth of technology and real-time data availability, it has been easier to understand customer needs and build an intimate relationship with them. It has also helped the organization become more resource efficient (operational excellence) and facilitate development of new products and services (product leadership) to meet the customer needs. Thus, CRM is a strategic approach that focuses on developing relationships with key customers to create improved shareholder value (Payne and Frow, 2005).

The CRM approach transforms marketing from being traditional brand-oriented communication to customer-centric relational communication. This transformation creates profitable, long-term relationships with customers and key stakeholders through the combined use of relationship marketing strategies and Information Technology. For a comprehensive understanding of CRM and various research streams within CRM, please refer to recent literature reviews (cf., Soltani and Navimipour, 2016; Sota, Chaudhry, Chamaria and Chauhan, 2018). Using data and information, in the digital age, CRM empowers customers (Edelman and Singer 2015), as well as, helps a firm to: (1)

identify appropriate customers, who have the potential to be activated for engagement, (2) differentiate customers based on their extent of engagement potential, (3) interact with the customers to optimize engagement, and (4) customize products and services to meet the customers' needs (Peppers and Rogers 2004). Effective deployment of CRM strategies can create superior customer relationships, and relationships do matter in building loyalty (Verma, Sharma and Sheth 2016). It also has the potential to differentiate customers based on their value perception of the products and services of the focal firm relative to the competition. CRM strategies are also focused on meeting customer needs leading to more efficiency in resource allocation and utilization.

The pharmaceutical industry, like many innovative industries, considers launching new products and replacing the old products (creative destruction) to be essential for marketplace success (Jambulingam, Kathuria and Doucette, 2005). However, the research and development process for a new pharmaceutical product is often about ten to twelve years long, costing around 800 million US dollars (DiMasi, Hansen and Grabowski, 2003). When the product comes to the market, it is left with about eight years of effective patent life, and hence firms need to recoup their investments within that short time. For this reason, marketing has always been critical in this industry. A study of pharmaceutical firms found that competitively superior marketing and sales capabilities drive superior performance (George and Blumberg, 2000). Specifically, based on an industry-wide survey, they found that marketing and sales capability performance accounted for 42 percent of the variation in financial performance.

The key to success is to develop marketing and sales strategies that are customer-centric. The primary customers for the pharmaceutical industry are physicians and patients. The pharmaceutical industry has used two types of strategies to market to the customers. They are (1) push strategy and (2) pull strategy. The push strategy is effectively communicating and promoting to the physicians to convince them to become aware of the products and thus increase the propensity of prescribing their products. On the other hand, the pull strategy is where firms communicate to the patients and encourage patients to implore their physicians for specific pharmaceutical products. Pharmaceutical firms are assessing the viability of new channels of communication, including the Internet, to enhance their push and pull strategies. Unlike other mass media channels, the Internet can create a one-to-one relationship with the consumers (Tulskie et al., 2000, Belch and Belch 2008).

With the advent of the Internet, the success of pharmaceutical firms depends upon how well they meet the needs of their customers. As the adoption of the Internet became commonplace, Jan Leschly, the then CEO of SmithKlineBeecham, noted that pharmaceutical firms will focus more on the customer or patient needs in terms of price comparison, choice of meds, service, and general level of freedom in making decisions with respect to their pharmaceutical needs (FDA Pink Sheet, 1999). Consistent with Leschly's observation, we concur that the Internet enhances the management of customer relationships by enabling pharmaceutical firms to shift from mass marketing to targeted (one-to-one) interactive marketing (Mougayar, 1998; Brown, 2000). This is also consistent with the argument presented by Leeflang, Verhoef, Dahlström and Freundt (2014), who suggest that due to the rise in digital technologies organizational functions, such as marketing, have been fundamentally redesigned, and hence we suggest that CRM needs to be examined in this light.

Further, competition among pharmaceutical firms for brand recognition is increasing and use of the Internet serves as a vehicle to help their customers recognize their brand (Tulskie et al., 2000). Researchers have suggested that when "brick and mortar" firms move towards becoming "click and

We define customers as any party that ultimately drives demand for pharmaceutical products. In the present study both patients and physicians are treated as customers.

mortar", they try to gain four kinds of synergies: cost savings, improved differentiation, enhanced trust, and market extension if they manage to create an integration of physical and virtual environments (Steinfeld, Bouwman, and Adelaar, 2002). Clearly, it is desirable for the pharmaceutical firms to enhance all four aspects of these synergies. Internet marketing, or use of the Internet to communicate with the customer, has extensive economic benefits (Jambulingam and Sharma, 2010).

An important trend that is shaping the changes in the competitive environment of pharmaceutical firms is a convergence of information technology and innovations of new therapies. This includes pharmacogenomics leading to rapid drug development. With exploding new information, customers (both patients and physicians) want to learn about their options. Pharmaceutical firms see this as an opportunity to identify revolutionary new ways of communicating and connecting with customers. Thus, market extension (Steinfeld, Bouwman, and Adelaar, 2002) is very likely if pharmaceutical firms adopt the Internet.

The combination of customer focus and technological convergence has led to changes in CRM of the major pharmaceutical firms that have direct and mutually acknowledged competitors. The changes are also taking place because the firms have started to treat their customers as partners, not as targets (Edelman and Singer, 2015). Firms are creating Web activities to build their relationships with customer partners. But their focus on the customer type might vary depending upon their marketing focus. This would be applicable even when the firms operate in similar markets and have similar resources. They might focus either on the push strategy targeting primarily physicians or the pull strategy aimed mainly towards patients. Some firms might focus on both strategies equally. In addition, firms have moved away from market segmentation towards the creation of consumer communities (Hagel and Armstrong, 1997), which will be further facilitated by the adoption of the Internet. Thus, firms might incorporate the Internet-based CRM activities depending upon their focus on the type of customers served—patients, physicians or both.

Additionally, it may be noted that innovations and new technologies are not, however, adopted uniformly among competitors (O'Neil, Poudel and Buchholtz, 1998; Lee et al., 2003; Joshi, 2016). There may be variance in the adoption rate of a new technology due to: a) the technology being in its early stages, b) perceived ambiguity concerning efficacy of the new technology, and c) the organizational context (Abrahamson and Rosenkopf, 1993). The varying degree of adoption rate also depends upon the characteristics of the innovation itself (Lee et al., 2003). In the pharmaceutical industry, there may be ambiguity about the efficacy of the Internet for CRM activities because a) it is a regulated industry and there is lack of clear guidelines from the FDA on how industry can use the Internet for promotions, b) lack of understanding of the new Internet technology platform by the product managers, and c) lack of data estimating the return on investment (ROI) on the use of Internet technologies (Johnson 2009).

Given the above-mentioned factors different rates of adoption of the Internet by different firms is based on the firm's appetite to take risk, explore the internet technology, and also in coping up with the different levels of pressure exerted by the business partners of the focal firm (Hsu, Kraemer, and Dunkle, 2006). In addition, different firms have different portfolio of products such as cancer, diabetes, infectious diseases, erectile dysfunction, cholesterol lowering agents, blood pressure, OTC, etc. Firms with products for cancer might target primarily physicians, but firms with lifestyle drugs such as erectile dysfunction might primarily target patients. Given the portfolio of products the companies might have different emphasis on their web strategies. Thus, based on the above-mentioned survey of the pharmaceutical industry, we offer two propositions:

P1:

The extent of adoption of the Internet-based CRM strategies will differ among direct and mutually acknowledged pharmaceutical competitors.

P2:

The extent of intended Web strategies for CRM will vary by the type of customers served across the direct and mutually acknowledged competitors.

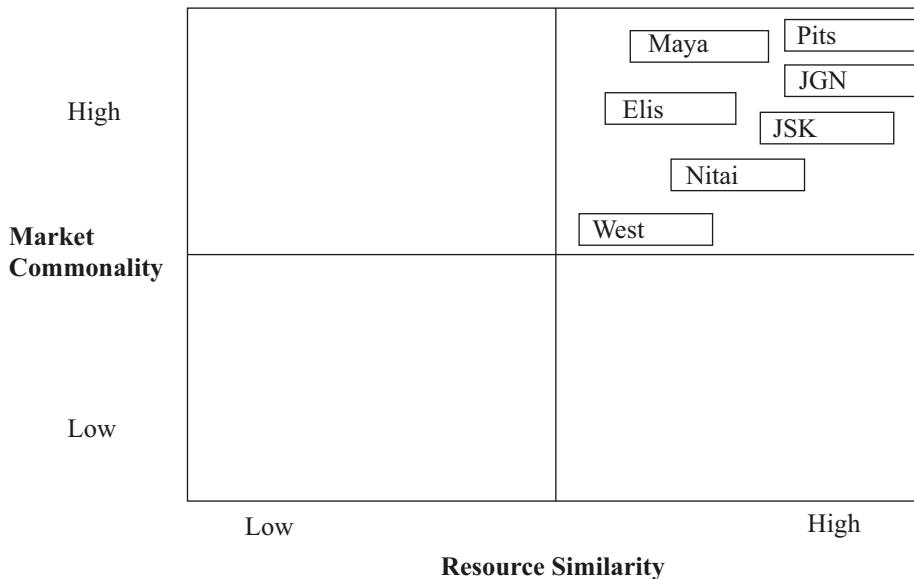
METHODOLOGY**Competitor Identification**

An essential step in a competitor analysis is defining a competitor for the focal firm. A firm's competitor acumen is shaped by the way it is embedded within market engagement relationships (Tsai et al., 2011). Competitors can be defined using either subjective or objective measures (Porter, 1980). In this study, we identify competitors using the framework proposed by Chen (1996). His framework integrates resource factors with market factors. Chen (1996) deploys two constructs: market commonality, and resource similarity. Market commonality is the degree of competitor presence manifested in the overlapping markets of the focal firm. The market commonality is conditioned both by the strategic importance of the shared markets to the focal firm and by the competitor's strength in those markets. The second construct, resource similarity, is defined as the extent to which a given competitor possesses strategic endowments comparable, in terms of both type and amount, to those of the focal firm.

Unique relationships with customers can be one of the most important sources of competitive advantage (Fleisher and Bensoussan, 2002), which can lead a firm to create value. Understanding how a competitor develops and manages its relationship with its customers is a critical component of competitor analysis. Given the ever-growing digitization and availability of information through the Internet, the task of competitor analysis has become highly challenging (Vibert, 2000). A good competitor analyst must match data sources with current methods to avoid blind spots (Zahra and Chaples, 1993).

We contacted three executives working for the competitive intelligence department of a pharmaceutical firm. This firm was ranked as one of the top 10 pharmaceutical firms in the world and is headquartered in the Northeast Region of USA. We contacted the Senior Director of Competitive Intelligence, the Director of Competitive Intelligence and the Assistant Director of Competitive Intelligence, all senior level executives. They were asked to identify direct and mutual competitors with similar resources and market commonality in the pharmaceutical industry, based on the guidelines we outlined above. The executives identified seven firms that had high resource similarity and common markets. These firms are depicted in Figure 1, but with disguised identity as Elis, JSK, JGN, Maya, Nitai, Pits and West.

Figure 1: Identifying Direct and Mutual Competitors



DATA COLLECTION

A manager engaged in competitive analysis must draw data from varied sources (Young, 1989). These sources may include annual reports to the shareholders, government statistics, tax records and bank data, and websites-all of which are in the public domain. Thus, to be more interpretive and comprehensive, as suggested by Young, we gathered data from many independent sources and triangulated it to apply to our approach.

The data for our analysis was obtained from press releases over a period of five years, concerning the intended Web activities of the seven pharmaceutical firms included in our study. These firms are among the top fifteen revenue generators in the pharmaceutical industry in recent years. We collected press releases about the intended web related CRM activities of sample firms. As an additional source of information, we interviewed pharmaceutical executives actively involved in the application of the Internet technologies to their industry. The executives were asked to assist us in interpreting web activities of the seven firms in the sample. In our efforts to triangulate, we also interpreted sample firms' websites (company and product websites of each company) and intended web activities from the documents filed by their strategic alliance partners with the Securities and Exchange Commission (SEC). The SEC requires firms to disclose any activity that may have significant impact on their future and if it is deemed sufficiently large in relation to their size. Due to relatively large size of the seven sample firms, some alliance activities might not have featured in their own SEC filings. But the same activity would appear in the SEC filings of their relatively small strategic alliance partners. When the changes in technology are complementary to the incumbent firms and they are likely to only modify part of the value chain then incumbents "...may be able to survive and even thrive, on radical technological change through cooperation" (Rothaermel, 2000, p.150) Thus, studying the alliance patterns of the competitors provides us with tools for future resourcefulness of the competitor (Hamel and Prahalad, 1989) as well as it provides a firm with greater awareness about the initiatives likely to be taken by its known competitors (Chen, 1996).

Web Activity Categorization

Pharmaceutical firms have two kinds of customers. The first kind is physicians, who prescribe the medication. The second are patients, who use the medication. We content analyzed each announcement, websites etc. to determine if the new Web activity pertained to physicians, patients or both. Next, we categorized the intention of each Web activity by using a modified typology originally proposed by CIBC World Markets(1999). Based on this typology, each Web activity announcement in our sample was classified to reflect basic intentions of the pharmaceutical firm with regards to adoption of the Internet for CRM purposes. The basis of this classification was the extent of use of the Internet for CRM and the target customer-patient or physician.

As a result, the following four types emerged: a) if the intended Web activity was meant to create only an information repository, without many changes over time, it was categorized as "Static Content"; b) if the intended Web activity was meant to create content that changed on a regular basis, it was categorized as "Dynamic Content"; c) if the intended Web activity was to enable two-way communication, between the pharmaceutical firm and its customers, it was categorized as "Connectivity"; and d) if the announcement indicated that a firm will have Web activities that lead to generation of revenues, it was classified as a "Commerce" activity.

In the healthcare industry, the goal of content sites is to promote information on health for the patient and facilitate information sharing for physicians. For patients, static content sites use the Web as an information repository, posting medical dictionaries, or list of diseases/treatments. Whereas dynamic content sites for patients provide online tools and access to current medical news. For physicians, static content sites typically provide medical information and dynamic content sites provide continuing medical education (CIBC World Markets, 1999).

"Connectivity" refers to a dialogue among physicians, patients, and the pharmaceutical firm using Internet-based networks. These sites, also called "transaction enabling" sites, use the Internet technology to link these healthcare participants to improve communications and facilitate transactions. Commerce sites or "e-commerce" sites use the Web as an alternative medium to sell products to consumers. These sites can be "business to business" (B2B) or business to consumer (B2C). Table 1 presents a summary of intended web activities of all seven firms in the aforesaid four categories separated by customer focus.

TABLE 1: Classification of Intended Web Activities Based on Content Analysis of Announcements

Name of the Activity	Elis	JSK	JGN	Maya	Nitai	Pits	West
Static Content: Patients	1	4	7	9	6	8	9
Dynamic Content: Patients	1	2	3	3	4	1	2
Connectivity: Patients	1	3	5	4	6	3	3
Commerce: Patients	1	1	3	8	5	3	4
Static Content: Physicians	1	1	1	6	2	1	7
Dynamic Content: Physicians	4	1	1	7	7	1	2
Connectivity: Physicians	12	1	1	8	7	1	1
Commerce: Physicians	3	1	1	4	1	1	1

Notes: Appendix A provides possible activities within each classification. A single announcement may indicate that a firm has intentions of engaging in more than one sub-activity and, as such, the score reflects that potential.

Using Analytic Hierarchy Process to Develop a Web Activity Measure for CRM

The proposed web activity measure to compare the competing firms' CRM activities was created using the Analytic Hierarchy Process (AHP). This approach has been applied when there are multiple evaluative criteria for ranking or priorities (cf. Saaty, 1980; Golden, Wasil and Harker, 1989). AHP is an interactive, structured process that allows the experts to work together as a group, and the process integrates objective market data with subjective judgment of the experts. The process is based on three steps: 1) describing a complex decision problem as a hierarchy; 2) evaluating the elements at each level along each of the criteria to estimate their relative importance (weight); and 3) integrating the weights to develop an overall evaluation of the alternatives (Partovi and Burton, 1993). The model uses a weighting algorithm to determine the importance of the options in relation to multiple criteria or objectives. The algorithm is based on the idea that pair-wise comparisons recover the relative weights (importance) of items or objects at any level of a hierarchy (Saaty, 1980).

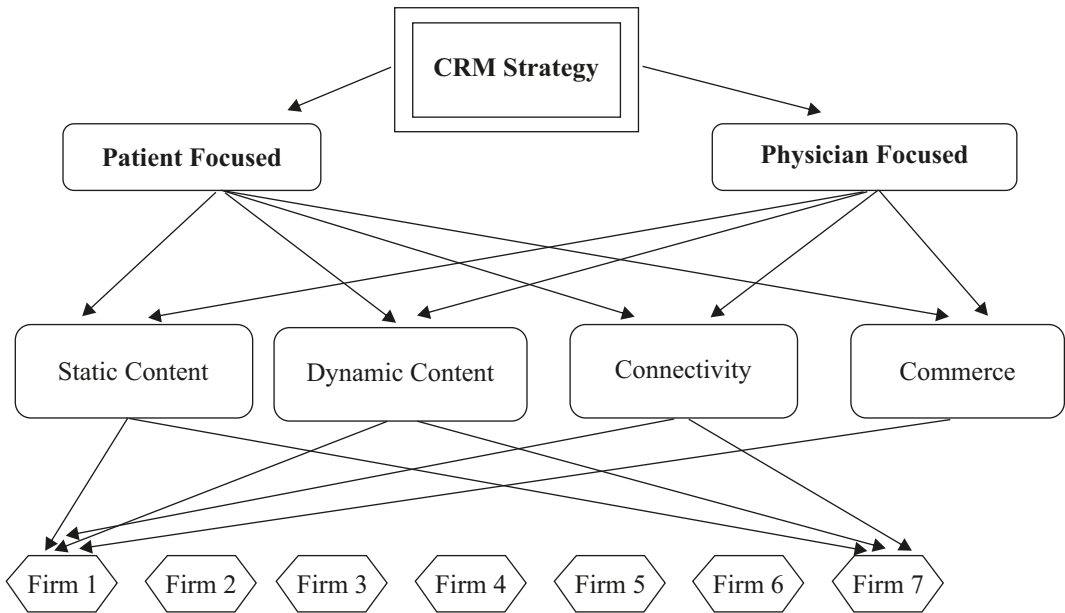
This methodology is superior to other scoring techniques because the weights determined in this scoring system use a ratio scale for subjective valuation, and thus are not arbitrary (Liberatore, 1989; Suh, Suh and Baek, 1994). Consequently, AHP involves experts who understand an industry well or who are qualified to assign judgmental values to ranking or selection process. The benefit of such a process is that everyone can articulate his/her preferences in a manner that is understood by all (Lockett, Hetherington, Yallup, Stratford and Cox, 1986).

Although AHP has been applied to several decision-making situations in areas such as operations management (cf., Partovi, Burton and Banerjee, 1990), it has not been applied in the competitor analysis area. Seiford and Zhu (2003) applied a similar multiple-criteria decision making technique called Data Envelopment Analysis to identify competitors, but not for conducting competitor analysis. Some have applied AHP and benchmarking for strategic analysis (cf., Strojny, 2015), but not for competitive analysis. Generally, the methodology applied in the competitor analysis field has utilized one-to-one comparison approach, but our intention is to compare seven firms using multiple criteria at different levels of decision hierarchy, and obtain a relative ranking of the firms. Thus, the use of AHP was deemed appropriate for the task at hand, and was considered novel and innovative for the field of competitor analysis.

Given the changing environment in the pharmaceutical industry, especially due to adoption of the Internet, we used the Delphi approach to obtain the inputs for AHP. As our industry experts, we used two faculty members who have been active researchers and consultants in the pharmaceutical industry. They have also been regularly teaching in a specialized MBA program designed exclusively for pharmaceutical executives. These experts were provided with the categorization of Web activity announcements of the seven sample firms.

We used AHP to decompose a complex problem of evaluating the Web activities of pharmaceutical firms with respect to customer relationship management, involving multiple criteria into a hierarchy as depicted in Figure 2. The overall objective of the decision lies at the top of the hierarchy, which in this case was to obtain relative rankings of the sample pharmaceutical firms. The next level in the hierarchy involving the primary criteria was the customer focus - patient or physician. The secondary criteria used in the hierarchy were the four possible uses of the Web, namely static content, dynamic content, connectivity and commerce. At the bottom of the hierarchy were seven competing pharmaceutical firms.

Figure 2:
 Multi-level Classification of CRM Strategy of Pharmaceutical Firms



Measuring Web Activity in the Pharmaceutical Industry

In this section, we provide a step-by-step description of how AHP was used in developing a measure of Web activity. First, we describe how we elicit experts' input for the AHP. Next, we illustrate how the input from the experts was converted into preference matrices, and how the corresponding set of weights was obtained. Finally, we demonstrate how the aggregate relative assessments of firms related to their web activities for CRM purposes were computed.

The instructions and questionnaires provided to the experts were extensive and for the sake of brevity we are unable to provide it in this paper. However, an outline of the questionnaire provided to the experts for comparative evaluation of the seven firms using multiple criteria is included in Appendix A. The complete questionnaire with instructions can be obtained from the authors. We used the Delphi approach with minor variation. First, both experts separately evaluated relative importance of the primary and secondary criteria. Next, they were asked to compare the intended Web activities of each firm in relation to the other six firms using the two levels of criteria outlined above. The experts were asked to reach consensus, however, if they failed to reach consensus after several attempts, lack of consensus was resolved by averaging their assessments to arrive at the inputs for AHP. This was necessary given the time constraint on the part of the experts and many comparisons: 13 for the primary and secondary criteria and 168 between-firm comparisons, at the lowest level of the hierarchy.

At the primary level in the hierarchy, while comparing relative importance of the two elements of customer focus, physician versus patient focus, the industry experts reached consensus that pharmaceutical firms' Web activities focused towards physicians were three times as important as the activities focused towards patients. At first this may seem peculiar, but, because the pharmaceutical industry is regulated and most of the drugs cannot generate revenue for the firm unless prescribed by the physicians, the relative weights assigned by the experts reflect the unique feature of this industry.

At the secondary criteria level, there were twelve comparisons made. The inputs from the experts were converted into a preference matrix using Saaty's (1980) recommended scale of comparisons, and corresponding sets of weights for the secondary criteria, for physician as well as patient focus, were calculated. The preference matrix and a corresponding set of weights for the physician focus are shown in the example below. As shown in the matrix, the use of the Web for facilitating dynamic content activities for physicians are more (about two times) important than connectivity.

Preference Matrix for Secondary Criteria under Physician Focus

Criteria	Content Static	Content Dynamic	Connectivity	Commerce	
Content Static	2/37	1/35	3/79	1/13	W= 0.049 0.126 0.266 0.559
Content Dynamic	13/64	4/37	2/27	10/83	
Connectivity	6/19	11/34	2/9	1/5	
Commerce	32/75	34/63	2/3	53/88	

A similar preference matrix and a corresponding set of weights were calculated for the patient focus, as reported in Table 2, column 5. We observe interesting patterns at the secondary criteria level. The most striking observation was the focus on providing "connectivity" abilities in a website. The experts' ranked "commerce" to be most important if it was physician focused. If the website's focus was on patients, "commerce" was the least important. Once again, the regulated nature of this industry would explain such a drastic difference in preference. For example, there are opportunities for the pharmaceutical firms to provide commerce activities, such as online prescription filling or continuing education certification, to physicians. On the other hand, there are scant possibilities in offering commerce activities to patients directly. Even if these firms could offer over-the-counter (OTC) drugs, they may be prohibited to use the Web to directly deal with the patients.

TABLE 2: Weights for Each Criteria and Aggregate Relative Assessment For Each Firm Based on AHP

1	2	3	4	5	6						
					Weights obtained through AHP for Individual firms						
Goal	Primary Criteria	Wts. Thru' AHP	Secondary Criteria	Wts. Thru' AHP	Elis	JSK	JGN	Maya	Nitai	Pits	West
Rank of Web Activity	Patient Focus	0.25	Static Content	0.143	0.020	0.036	0.068	0.321	0.190	0.181	0.183
			Dynamic Content	0.240	0.029	0.088	0.095	0.237	0.453	0.030	0.067
			Connectivity	0.566	0.018	0.048	0.147	0.097	0.297	0.149	0.243
			Commerce	0.051	0.027	0.027	0.067	0.419	0.163	0.078	0.220
Rank of Web Activity	Physician Focus	0.75	Static Content	0.049	0.048	0.048	0.048	0.399	0.174	0.096	0.186
			Dynamic Content	0.126	0.225	0.033	0.033	0.135	0.467	0.033	0.075
			Connectivity	0.266	0.342	0.034	0.034	0.342	0.182	0.034	0.034
			Commerce	0.559	0.276	0.046	0.046	0.494	0.046	0.046	0.046
Rank of Web Activity	Rank based on Criteria 1& 2 for each firm (patient focused)			0.021	0.055	0.119	0.179 ³	0.3121	0.12 ¹	0.191 ²	
	Rank based on Criteria 1& 2 for each firms (physician focused)			0.276 ²	0.041	0.041	0.404 ¹	0.141 ³	0.044	0.053	
Aggregate Relative Assessment using Criteria 1 & 2 (combining the patient and physician focus)				0.212 ²	0.045	0.061	0.348 ¹	0.1843	0.06 ³	0.088	

Notes: Patient focused ranks: 1 Nitai, 2West, 3Maya Physician focused ranks: 1Maya, 2Elis, 3Nitai Grand total Rank: 1Maya, 2Elis, 3Nitai

Further, among the patient focused Web activities, "connectivity" was given the highest importance by the experts, whereas with regards to the physician focus it was about half as important. The difference for connectivity ratings once again is based on the behavior difference between physicians and patients. For patients, particularly, the ones suffering from chronic diseases, connectivity with pharmaceutical firms may become a source of emotional support. The connectivity may allow them to create a virtual community of people who are suffering from similar ailments. On the other hand, for physicians, connectivity may be viewed as a distraction rather than assistance, given the demands on their time.

Next, the pairwise comparisons of each firm, with respect to all of the secondary criteria, under physician focus as well as patient focus (primary criteria), were converted into a set of corresponding weights. We will illustrate this with respect to the static content criteria under the physician focus.

Performance Matrix for Static Content Under Physician Focus

	Elis	JSK	JGN	Maya	Nitai	Pits	West	
Elis	1	1	1	1/7	1/3	1	1/9	W= 0.048 0.048 0.048 0.399 0.174 0.096 0.186
JSK	1	1	1	1/7	1/3	1	1/9	
JGN	1	1	1	1/7	1/3	1	1/9	
Maya	7	7	7	1	3	7	9	
Nitai	3	3	3	1/3	1	3	7	
Pits1	1	1	1	1/7	1/3	1	9	
West	9	9	9	1/9	1/7	1/9	1	

In this example, Maya's intended Web activity related to building static content aimed at physicians is nearly twice as much as Nitai and West, and about four times more than Pits'. Similarly, weights were calculated for each of the eight (4x2) combinations of the two criteria, which provided a relative evaluation for the seven firms on each of the four secondary criteria, under physician- as well as the patient-focus. The weights are furnished in the third panel of Table 2, under Physician focus.

Next, the relative assessment of a firm is calculated by determining the product of the criteria priorities and the extent of a firm's web activities by customer focus-physicians and patients. In the example below, we show how the weights representing relative assessment of the firms' web activities aimed at physicians are calculated. Similarly, weights for the patient focus were determined.

Relative Assessment of Firms' Web Activities with Physician Focus

	Static	Dynamic	Connectivity	Commerce	W
Elis	0.048	0.225	0.342	0.276	0.276
JSK	0.048	0.126 0.333	0.034	0.266	0.041
JGN	0.048	0.033	0.034	0.046	0.041
Maya	0.399	0.135	0.342	0.494	0.404
Nitai	0.174	0.467	0.182	0.046	0.141
Pits	0.096	0.033	0.034	0.046	0.044
West	0.186	0.075	0.034	0.046	0.053

Finally, the aggregate relative assessments of firms were computed by determining the product of the primary criteria priorities and the weights determined in the step above.

Aggregate Relative Assessments of Firms' Web Activities

Elis		0.276		0.021		0.212
JSK		0.041		0.055		0.045
JGN		0.041		0.119		0.061
Maya	=0.75	0.404	+0.25	0.179	=	0.348
Nitai		0.141		0.312		0.184
Pits1		0.044		0.121		0.063
West		0.053		0.191		0.088

RESULTS

Table 2, bottom panel, provides the overall rankings of each of the seven firms and their Web activities. The experts' relative assessment of physician focus versus patient focus, when assessing the Web activities of a pharmaceutical firm, is reflected in the overall rankings. Since physician focus was weighed in three times compared to the patient focus, it is safe to say that the aggregate relative assessments of firms' Web activities are driven by the importance given to physician focus. As seen in Table 2, Maya is ranked at the top with a weight of 0.348, followed by another group of firms - Elis and Nitai with scores of 0.212 and 0.184 respectively. JSK is at the bottom of the pile with a score of 0.044 and West with a score of 0.087 ranks higher than JSK but lower than Elis and Nitai. The remaining two, Pits and JGN with scores of about 0.06, are far behind the ranking obtained by Maya. These results support our Proposition P1 that the direct and mutual competitors show a difference in the extent of intended Web activities for CRM purposes.

Additionally, results from Table 2 suggest that Elis, which is ranked at the bottom with regards to the patient focus, moves up to the second rank when evaluated from the physician focus. This is because Elis' focus is on influencing physicians more than patients. West, on the other hand, has primary focus on patients because they have more OTC products in their portfolio. Hence, it is ranked second in the patient focused Web activities. Maya and Nitai are consistently ranked among the top three within both patient and physician focus, but Maya ranks first based on its intended physicians focused web activities whereas Nitai is at the top based on patient focused activities. This indicates that the adoption of the Internet based technologies for CRM purposes is different for firms focusing on physicians as opposed to patients. Thus, we find support for our Proposition P2, that adoption of the Internet for CRM is different depending on the type of customer served-patients, physicians or both.

DISCUSSION OF RESULTS

The aim of this paper was to develop a competitor analysis tool that would allow us to benchmark Internet-based CRM activities of competing firms. To achieve this objective, we integrated the existing literature on competitive analysis, diffusion of innovation, awareness about competitors (Lee et al., 2003; Chen, 1996; Zahra and Chaples, 1993; Abrahamson and Rosenkopf, 1993; Zajac and Bazerman, 1991) and customer relationship management (Peppers and Rogers, 2004). The resultant propositions were tested by applying a multi-criteria decision making technique, AHP, that was used to compare the intended Internet-based CRM activities of pharmaceutical firms. In the process, we demonstrated the usefulness of AHP for benchmarking Web activities of firms in a competitive setting. The rankings reported in Table 2, as an outcome of the application of AHP, indicate that our propositions (P1 and P2) were supported.

We had postulated that adoption of the Internet would be different among competing pharmaceutical firms, particularly with respect to the Web-based CRM activities. In the present study, our focus was on four types of Web activities-static content, dynamic content, connectivity, and commerce-aimed at two types of customers, physicians and patients, which allowed us to compare direct and mutually acknowledged competitors. Using AHP, we could demonstrate differences in adoption of the Internet among competing firms. While we acknowledge that many other factors may be involved in a firm's decision regarding adoption of the Internet-based CRM, our approach helped us understand the importance of customer focus towards the adoption of Internet-based CRM activities.

In the case of the pharmaceutical industry, we find that the competitors will adopt the Internet-based CRM in varying degrees because the perceived usefulness of the Internet based on the portfolio of their products for CRM purposes. Further, from the organizational context, the rate of adoption of the Internet is also dependent upon a competitor's focus on the type of customers-in our case, patients, physicians, or both. Our approach provides a manageable tool for a competitive analyst considering the information explosion due to the Internet (Vibert, 2000; Joshi and Yermish, 2000). When applied to the pharmaceutical industry, we find that the sample firms intend to conduct CRM in varying degrees using the Internet. Maya, Elis and Nitai are vigorously adopting the Internet for customer relationship management. On the other hand, JSK and JGN, relatively speaking, have not been as active in adopting the Internet based CRM activities as they may not have been able to ascertain the efficacy of the Internet for CRM purposes yet. Further, from the organizational context, it is possible that their current systems of CRM might be performing as desired and hence no need to adopt the new technology vigorously. This finding is consistent with Evans and Wurster (2000) who suggest that firms may resist new Internet technologies if they have been strongly entrenched and committed to their legacy systems.

For managers, these results suggest that to gain a competitive edge in the realm of CRM through the Internet, firms need to monitor their competitors' Web activities by use of frameworks and with a focus on a few key variables. For example, from a competitive intelligence or competitor analysis perspective, a firm that considers itself like West would focus on patient-related Web activities rather than physicians-oriented Web activities. One of the advantages of using competitor analysis as described in the present study is that it provides a tool for benchmarking and rank ordering of a group of competitors. This is an essential ingredient for successful competitive intelligence. By using AHP, a firm can fine-tune its competitive analysis at different hierarchical levels, as demonstrated in Table 2. This would certainly be useful in the development of a firm's competitive strategies and customer relationship management system.

CONCLUSION AND IMPLICATIONS

In this paper, we have demonstrated that while there are no existing tools that facilitate competitive analysis considering the growth of the Internet and communication technologies and different customer orientations, existing frameworks can be extended with a proper application of theoretical perspectives. We have shown that with extensions and modifications of competitor analysis perspective from Chen's (1996) framework, one may capture competitive trends in a firm's environment due to the growth of the Internet and communication technologies. Particularly, this becomes evident when Chen's framework is combined with the adoption of innovation framework (Abrahamson and Rosenkopf, 1993; Lee et al., 2003). It is possible to create specialized approaches that will help a focal firm understand its competitors' moves in the rapidly growing electronic commerce environment.

LIMITATIONS AND RESEARCH DIRECTIONS

This study is not free from limitations, which provide opportunities for future research. For instance, the analysis in the present paper focuses on rank ordering, but does not attempt to map which strategy or which kind of Web activity would lead to better performance. Thus, future research should include measuring and evaluating a comprehensive Web strategy along the entire value chain and then applying a technique like AHP to rank order the importance of each value chain activity, considering the Internet adoption by a firm.

Future studies should consider expanding the proposed model to incorporate social media, mobile technology, apps, and wearables in assessing customer engagement. The extent to which customers are activated or gain engagement is less understood. Future research should examine different aspects of various online tools and their activation potential to engage customers. For example, in the pre-diagnosis and diagnosis state, a customer, i.e., a patient might not seek care due to lack of awareness, social stigma, infrequent medical checkups and cost burden. What type of online communication, such as social media, mobile or wearable technology would provide better methods of education, collaboration with patient groups, and access to medications at affordable prices?

Future research should also examine how the customer insights and intelligence gained from the patient and physician experiences could be used to develop better products and services. Additionally, how can we predict customer activation, engagement and loyalty using more precise metrics? Future research should address how to customize the content that is unique to each customer, based on their need and interests. Can pharma develop digital technologies that can be customized for each customer type—physicians and patients? Finally, payers have recently been more important customers to pharma companies. How to engage payers using the digital online technologies can also be a fascinating extension of this research.

MANAGERIAL IMPLICATIONS

While this study has focused on the rise of the Internet and related competitive analysis with respect to adoption of the Internet technologies among pharmaceutical firms, the technique and approach are both generalizable to a larger degree because the information and communications technologies are crucial for managing organizational operations and improving organizational performance (Porter, 2001; Rajendran and Vivekanandan, 2008; Schlemmer and Webb, 2009). The key point we are proposing to the managers is about the adoption of a new technology and the related competitive advantage. For instance, in the next phase of digital transformation, firms will focus on the adoption of Internet of Things (IoT) as a tool for gaining competitive advantage (Gubbi, Buyya, Marusic, and Palaniswami, 2013), and for any firm the competitive analysis tools, such as AHP, will be vital again.

Competitive analysis is essential for a manager to gain competitive advantage through the adoption of new technologies in an innovative way (Joshi, Das and Mouri, 2015). If the managers, in charge of competitive analysis, do not create and use appropriate tools to understand the adoption of new technologies by its competitors, they would find their firms at a disadvantage in a fast-changing technology cycle.

The competitive analysis methodology presented in this study can be adopted in other industries and sectors, beyond the pharmaceutical industry, which are experiencing changes in their competitive landscape due to the new technologies related to communications and data analysis. This methodology is particularly significant if customers are segmented by their buying behavior, geography or other characteristics. For instance, the software industry will be a good candidate because of the diffusion of emerging technologies, such as the use of open source coding in software development, and its segmented customer base: individual, corporate, and government.

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APPENDIX A

Sample questions answered by the two experts:

Primary Criterion.

Preference Matrix for Web Activity

How important (preferred) is Patient focus of a web site to Physician focus in judging/evaluating WebActivity of various pharmaceutical firms?

Equally important

Moderately MORE important

Moderately LESS important

Strongly MORE important

Strongly LESS important

Very strongly MORE important

Very strongly LESS important

Extremely MORE important

Extremely LESS important

Secondary Criteria.

Preference Matrix for Patient Focused Web Activity

How relevant /important (preferred) is Content type of a web site to Content Access in judging/evaluating PatientFocused Web Activity of various pharmaceutical firms' web sites?

Equally relevant /important

Moderately MORE relevant/ important

Moderately LESS relevant/important

Strongly MORE relevant/important

Strongly LESS relevant/ important

Very strongly MORE relevant/important

Very strongly LESS relevant/ important

Extremely MORE relevant/ important

Extremely LESS relevant/important

How relevant/ important (preferred) is Content type of a web site to Connectivity in judging/evaluating Patient FocusedWeb Activity of various pharmaceutical firms' web sites?

Equally relevant /important ...

(Similar questions were asked to make all possible pair-wise comparisons for the Patient Focused Web Activity.)

Preference Matrix for Physician Focused Web Activity

How relevant /important (preferred) is Content type of a web site to Content Access in judging/evaluating Physician Focused Web Activity of various pharmaceutical firms' web sites?

Equally important

Moderately MORE important

Moderately LESS important

Strongly MORE important

Strongly LESS important

Very strongly MORE important

Very strongly LESS important

Extremely MORE important

Extremely LESS important

(Similar questions were asked to make all possible pair-wise comparisons for the Physician Focused Web Activity.)

APPENDIX A (continued...)

Between Firms Comparison.

Pairwise comparisons of the seven Websites on Patient focused Attribute X (e.g., Static Content)

Please fill the upper diagonal matrix only. Moving from left to right, compare Elis's web site with JSK's, then with JGN's, and so on, on the above mentioned criterion, using the following scale:

1 = Equally appealing

3 = Moderately MORE appealing

5 = Strongly MORE appealing

7 = Very strongly MORE appealing

9 = Extremely MORE appealing

1/3 = Moderately LESS appealing

1/5 = Strongly LESS appealing

1/7 = Very strongly LESS appealing

1/9 = Extremely LESS appealing

	Elis	JSK	JGN	Maya	Nitai	Pits	West
Elis	1						
JSK		1					
JGN			1				
Maya				1			
Nitai					1		
Pits1						1	
West							1

(Similar matrices were provided for the other three attributes - dynamic content, connectivity and commerce - for Patient Focus.)

APPENDIX A (continued...)

Pairwise comparisons of the Seven Websites on Physician focused Attribute X (e.g., Dynamic Content)

Please fill the upper diagonal matrix only. Moving from left to right, compare Elis's web site with Glaxo's, then with J&J's, and so on, on the above mentioned crieterion, using the following scale:

1 = Equally appealing

3 = Moderately MORE appealing

5 = Strongly MORE appealing

7 = Very strongly MORE appealing

9 = Extremely MORE appealing

1/3 = Moderately LESS appealing

1/5 = Strongly LESS appealing

1/7 = Very strongly LESS appealing

1/9 = Extremely LESS appealing

	Elis	JSK	JGN	Maya	Nitai	Pits	West
Elis	1						
JSK		1					
JGN			1				
Maya				1			
Nitai					1		
Pits1						1	
West							1

(Similar matrices were provided for the other three attributes-static content, connectivity and commerce-for Physician Focus.)

VALIDATE PETER-LYNCH MODEL ON INDIAN STOCK MARKET

Suyash Bhatt*

ABSTRACT

The concept of value investing became synonymous with Warren Buffet, the seeds of which were sown by Benjamin Graham. There many who have created a structure approach towards stock selection and investment. One of the veteran in this field Peter Lynch who managed a portfolio equal to GNP of nations like Ecuador. He insisted on few fundamental parameters like, Price Equity Ratio, Sales, Price to Earnings, Debt Equity and Price to Cashflow. This is the first time validation is done on India Equity Indices or for that matter Indian Stock Market.

INTRODUCTION

Peter Lynch developed the PEG ratio as an effort to solve a limitation of the P/E ratio by factoring in the estimated growth rate of future earnings. If two companies are trading at 15x earnings, and one of them is growing at 3 percent but the other at 9 percent, you can classify the latter as a better bargain with a higher probability of making you a higher return. The formula for PEG is:

PEG Ratio = P/E Ratio / company's earnings growth rate

To understand the ratio, a result of 1 or lower says the stock's either at par, or undervalued based on its growth rate. If the ratio results in a number above 1, conventional wisdom says the stock is overvalued relative to its growth rate.

Keywords: Markets, Investment Decision, Behavioral Finance.

JEL Codes: E44, G11, G41

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Another veteran who is believed to be guru of Warren Buffet, Mr Benjamin Graham is described as the father of value investing. He offered a simple and effective formula to calculate the stock's intrinsic value. Graham's formula is used to measure an individual company's intrinsic value. We have already written a paper to study the effectiveness of Benjamin Graham's formula on BSE100 stocks, to find out if the value investing method works. This method also helps to quickly and accurately identify undervalued companies and overvalued companies. We have conducted research based on past 10 years' data to validate our findings.

LITERATURE REVIEW

O'Neil, W. J., & Ryan, C. (1988); in this book, O'Neal teaches the science behind growth investing. He introduces us to a new abbreviation CANSLIM which could be used for stock picking.

He will also teach you the step by step approach that he and his company use to advise fund managers and other institutional money managers. Growth Investing basically advocates buying stable but fast-growing (earnings-wise) companies. This approach doesn't put much weight on valuation and financial ratios, it does, however, involve market and price chart analysis, and active trading. All of the principles that O'Neal teach in this book are backed by solid historical data and facts.

Bhatt, S. (2013) This paper examines one of the most popular method for gauging quality of select Indian Bank. In today's dynamic world trying to cope up with the aftermath of subprime crisis and the euro zone crisis we would like to revisit a technique known as CAMELS Rating System. This technique is applied on 8 listed Indian Banks SBI, Union Bank, IDBI Bank, HDFC Bank, BOB, AXIS Bank, IndusInd Bank, PNB which is a mixture of public sector and private banks. This technique evaluates banks measures banks stability on capital adequacy ratio, asset quality ratio, management quality ratio, earning ratio, liquidity ratios and sensitivity ratio. The results of this study reveal that this technique is critical in not only evaluating stability of bank but could also be used for making preliminary investment decision.

He, G., & Litterman, R. (1999) In this article we demonstrate that the optimal portfolios generated by the Black-Litterman asset allocation model have a very simple, intuitive property. The unconstrained optimal portfolio in the Black-Litterman model is the scaled market equilibrium portfolio (reflecting the uncertainty in the equilibrium expected returns) plus a weighted sum of portfolios representing the investor's views. The weight on a portfolio representing a view is positive when the view is more bullish than the one implied by the equilibrium and the other views. The weight increases as the investor becomes more bullish on the view, and the magnitude of the weight also increases as the investor becomes more confident about the view.

Bhatt, S. (2013). This research paper examines performance of top twelve Indian mutual funds by Asset Under Management(AUM). We use seven portfolio performance measurement parameters like Alpha, Beta, Standard Deviation, R Squared, Sharpe Ratio, Treynor Ratio and Jensen's Alpha. The study reveals which amongst these mutual fund is the best performer based on all these parameters and the benchmark taken for this is NIFTY Index. The mutual funds selected are HDFC Top 200 Fund, Franklin India Bluechip Fund, ICICI Prudential Focused Bluechip Equity Fund, DSPBR Top 100 Equity Fund, Birla Sun Life Equity Fund, DSPBR Top 100 Equity Fund, UTI Mastershare Fund, Reliance Equity Opportunity Fund, SBI Magnum Equity, Reliance Top 200 Fund, SBI Bluechip Fund, ICICI Prudential Top 200 Fund, Principal Large Cap Fund. This study is primarily done to evaluate performance of the select mutual funds over a period of five years.

Bhatt, S. (2014). In this paper we validate use of Piotroski F-Score analysis for identifying value stocks. Piotroski F-Score analysis devised a scale according to specific criteria found in the financial

statements which encompasses aspects like Profitability, Leverage, Liquidity, Operating Efficiency to give a holistic view of the performance and position of the company. This method proved successful in interpreting the strengths and weaknesses a company possesses and the opportunities available for the company to develop upon and the threats it faces in doing so. One aspect that is missing in this method of analysis is the time horizon applicable to the relevance of its results. Hence, this method could be made more effective if we add the time horizon applicable for the results to remain relevant. Therefore, the parameters are grouped in such a way that all the factors that are more sensitive to short term changes are made into one while the factors that are driven in long term are made into another. The sensitivities of parameters are different on the short and long term performance of the company and hence weights are assigned to each parameter in line with the effect it has on the company's performance. This exercise ensures that the factors that are more critical are given more weightage than the less critical ones. This research was applied to all the companies of Banking and Automobile sector that are a part of the Nifty Index for validating this model.

Bhatt, S. (2014). In this paper we evaluate performance of Indian Mutual Funds in ELSS(Equity Linked Savings Scheme) category. We have selected 28 out of 43 ELSS Plans available in Indian Market; the schemes that are left out are new and do not have a track record of more than 3 years at the time of study. We have attempted to measure the fund performance on Fama-French Model. We have tried to answer using this model as to whether the return generated by Fund is due to Fund Managers ability to pick stocks and diversify or due to common stock portfolio. This is demonstrated from four parameters to decode return using Fama& French Model. We have collected daily NAV for three years for the stated funds to arrive at the stated conclusion. Our study suggest that, Religare Tax Plan and Reliance Tax saver are the best performing ELSS funds on the basis of Fama-French Model, Jensen's Alpha and Sharpe Ratio over the rest of 28 funds. This is because majority of return is due to Compensation for Diversification and Net Selectivity. This is a benchmark study as it not only give reason for good return using Fama& French Model but also measures portfolio performance using Jensen's Alpha and Sharpe Ratio.

Bhatt, S. (2015). In this paper we want to validate Kisor-Whitebeck Model which uses the most fundamental parameter for valuing a company which is price earning multiple. This is a first of its kind application of Kisor-Whitebeck Model on Indian Capital Market. It uses three basic parameters i.e. Earnings growth rate, Pay-out ratio and Standard deviation of EPS. This model is applied on Indian Capital Market represented by SENSEX and its 30 stocks. We can categorise these stocks as undervalued stocks, overvalued stocks and appropriately valued stocks. This model has certain limitation like lack peer comparison, global liquidity scenario etc. which is discussed in our paper.

Bhatt, S. (2016) The objective of this paper is to have a broad understanding of the CANSLIM theory of investment and also to identify stocks using this theory and to use it as a tool for investment. The hypothesis of the study is to check if the identified stocks outperform or they are in line with the index Nifty 50 of the national stock exchange. The interpretation of the data, the values required for the seven abbreviations of the CANSLIM approach. The data collated in the excel sheet and accordingly the stocks that fulfill the CANSLIM criteria were identified. Hence the second best stocks i.e which fulfilled 5 out of 7 mandates for can slim are selected. The returns of the above selected stocks are then compared with the returns of the index nifty 50.

Bhatt, S. (2016). In this paper, we have calculated Graham Harvey Measures for top ten ELSS funds in India according to their Asset Under Management. ELSS fund are selected as they have more than 95% composition of equity component and lock in period of five years. Graham and Harvey in their research paper "Market timing ability and volatility implied in investment newsletters' asset allocation

recommendations"; discusses the methodology to predict market timing to alter their investments for portfolio managers. They introduced two new performance measures for a Fund/Portfolio. Both measures provide different relative performance valuation, with respect to Market Index's Return - Risk. Sharpe ratio, although a useful metric, suffers lack of benchmarking information. Sharpe Ratio is absolute measure of performance. Since the Graham-Harvey research is based on long-term prospect of the Portfolio investment, ELSS funds are taken for research. The performance of ELSS funds has been evaluated with the help of Graham and Harvey Measure and Sharpe Ratio. Our finding suggest that Graham and Harvey Measures are superior to Sharpe ratio for performance grading. Due to paucity of time and resources, the paper research is limited to evaluating performance of ELSS funds for period of April 2007 to December 2012 using Graham Harvey Measure.

Bhatt, S. (2018), In this paper applies the concept of Value-at-Risk (VaR) to Indian Capital Markets and examines the different computational approaches to VaR and their relative differences in measuring the downside of the risk involved in the investment of equities by applying the concept of VaR on a portfolio comprising of the stocks listed on the Indian Capital Market Index - the BSE SENSEX; by testing the model on time series data i.e. historical daily returns of the Index over a two month horizon and back testing the results of the Monte- Carlo Simulation against historically obtained VaR estimates.

DATA ANALYSIS

Peter Lynch developed the PEG ratio as an effort to solve a limitation of the P/E ratio by factoring in the estimated growth rate of future earnings. If two companies are trading at 15x earnings, and one of them is growing at 3 percent but the other at 9 percent, you can classify the latter as a better bargain with a higher probability of making you a higher return. The formula for PEG is:

PEG Ratio = P/E Ratio / company's earnings growth rate

To understand the ratio, a result of 1 or lower says the stock's either at par, or undervalued based on its growth rate. If the ratio results in a number above 1, conventional wisdom says the stock is overvalued relative to its growth rate as shown in Annexure 1, Annexure 2 and Annexure 3.

The following are the parameter of Peter Lynch Model which we have embedded to create the matrix as shown in Annexure 1, Annexure 2 and Annexure 3.

PETER LYNCH CRITERIA
PEG Ratio < 1 AND
Sales > 500 AND
Price to Earning < 40 AND
Profit growth > 20 AND
Debt to equity < 0.2 AND
Price to Cash Flow > 5

There are six parameters on which we can give a BUY call using PETER LYNCH CRITERIA. The aim of this exercise is not only to predict value stock but validate your prediction based on coming years prediction. For example if we take stock like BHEL it gives a continuous BUY Call for 5 years with high ROE on Investments. A details result of calculation is shown in Annexure 1, 2 and 3.

CONCLUSION

As seen if we apply Peter Lynch Model on BSE 100 stocks based on six parameters like, Price Equity Ratio, Sales, Price to Earnings, Debt Equity and Price to Cash flow we get a list of value stocks year on

year as shown in Annexure 1. Annexure 2 and Annexure 3. Also the reliability of this model is very high as it consistently beats mean return from the index. We can apply this on small cap and mid cap stocks to get a better return over a long run. We have applied this model on BSE 100 stock over a period of 12 years and we see consistency in prediction of BUY call on stocks. It is interesting to observe that the Model is skewed to measure growth in PE Multiple of value stock based on Year-on-Year growth of parameters like Price Equity Ratio, Sales, Price to Earnings, Debt Equity and Price to Cash flow. Investment strategy created using this model is seen to be highly profitable.

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ANNEXURE 1:

Current Year	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
ACC BUY	BUY	BUY	-	BUY	-	BUY	-	-	BUY	-	-	BUY	BUY
Ashok Leyland BUY	BUY	BUY	BUY	BUY	BUY	BUY	-	-	-	-	-	BUY	BUY
Asial Paints	BUY	BUY	BUY	-	BUY	-	BUY	BUY	-	-	BUY	-	-
Bharat Forge BUY	BUY	BUY	-	-	-	BUY	BUY	-	BUY	BUY	-	-	BUY
Reliance Infra	BUY	BUY	BUY	BUY	BUY	-	BUY	BUY	-	-	BUY	BUY	-
Britannia Inds. BUY	BUY	BUY	BUY	-	-	BUY	BUY	BUY	BUY	BUY	BUY	-	BUY
Exide Inds.	-	-	BUY	BUY	BUY	BUY	-	BUY	-	BUY	BUY	BUY	-
Cipla	BUY	BUY	BUY	BUY	BUY	-	BUY	BUY	-	-	-	-	-
Colgate Palm BUY	BUY	BUY	BUY	-	BUY	-	BUY	BUY	-	-	-	-	BUY
Eicher Motors BUY	BUY	-	BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY
Nestle India BUY	-	BUY	BUY	-	BUY	BUY	-	-	-	-	BUY	BUY	BUY
Ambuja Cem. BUY	BUY	-	BUY	-	BUY	-	BUY	-	BUY	-	BUY	BUY	BUY
Grasim Inds BUY	BUY	BUY	BUY	-	BUY	-	BUY	BUY	-	-	BUY	BUY	BUY
HDFC BUY	BUY	BUY	BUY	-	BUY	BUY	BUY	BUY	BUY	BUY	BUY	-	BUY
Hero Motocorp BUY	BUY	-	BUY	-	BUY	-	BUY	-	-	BUY	BUY	BUY	BUY
ABB BUY	BUY	BUY	BUY	BUY	BUY	BUY	-	-	BUY	BUY	BUY	BUY	BUY
Hindalco Inds. BUY	BUY	BUY	-	-	BUY	-	BUY	-	-	-	-	BUY	BUY
Hind. Unilever BUY	BUY	-	BUY	BUY	BUY	-	BUY	BUY	-	BUY	-	-	BUY
ITC BUY	BUY	BUY	BUY	-	BUY	BUY	BUY	BUY	BUY	-	-	-	BUY
Cummins India	BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY	-	-
Larsen & Tourbo BUY	BUY	BUY	-	BUY	BUY	-	-	BUY	-	-	-	-	BUY
M & M BUY	BUY	BUY	-	-	BUY	BUY	-	BUY	BUY	-	-	BUY	BUY
Bosch BUY	BUY	BUY	BUY	BUY	BUY	BUY	-	-	BUY	BUY	-	BUY	BUY
Reliance Inds.	BUY	BUY	BUY	-	BUY	-	-	BUY	BUY	BUY	BUY	-	-
Vedanta BUY	BUY	BUY	BUY	BUY	BUY	BUY	-	-	BUY	-	BUY	BUY	BUY
Siemens BUY	BUY	BUY	-	BUY	BUY	BUY	-	-	BUY	BUY	BUY	-	BUY
Tata Chemicals BUY	BUY	BUY	BUY	-	-	BUY	BUY	-	-	BUY	BUY	BUY	BUY
Tata Power Co. BUY	BUY	-	BUY	BUY	BUY	BUY	-	BUY	-	BUY	BUY	BUY	BUY

ANNEXURE 2:

Current Year	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Tata Powr CO. BUY	BUY	-	BUY	BUY	BUY	BUY	BUY	BUY	-	BUY	BUY	BUY	BUY
Tata Global BUY	BUY	BUY	BUY	-	-	-	BUY	BUY	BUY	-	BUY	BUY	BUY
Tata Motors	BUY	BUY	BUY	BUY	BUY	-	-	-	-	-	BUY	-	-
Tata Steel Buty	BUY	BUY	BUY	-	-	BUY	-	-	BUY	-	BUY	-	BUY
Wipro	BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY	-	-	-
Dr. Reddy's Lab BUY	BUY	BUY	-	-	BUY	BUY	BUY	BUY	BUY	-	-	-	
Titan Compny BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY	-	BUY	-	BUY	BUY
St Bk of India	-	BUY	BUY	BUY	BUY	-	BUY	BUY	-	BUY	-	-	-
Shriram Trans.	BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY	-	-	BUY	BUY	-
Reliance Capital BUY	BUY	BUY	BUY	-	-	-	BUY	BUY	-	BUY	BUY	BUY	BUY
BPCL	-	BUY	-	-	BUY	-	-	BUY	BUY	BUY	BUY	BUY	-
SAIL BUY	-	BUY	BUY	-	BUY	-	-	-	BUY	-	-	BUY	BUY
HPCL BUY	-	BUY	-	-	BUY	BUY	-	BUY	BUY	BUY	BUY	BUY	BUY
BHEL BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY	-	-	-	-	BUY	BUY
Hind. Zinc BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY
Kotak Mah. Bank BUY	BUY	-	BUY	-	BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY
UPL BUY	BUY	BUY	-	BUY	BUY	BUY	-	BUY	BUY	BUY	-	BUY	BUY
Infosys	BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY	-
Motherson Sumi BUY	BUY	BUY	BUY	-	BUY	BUY	-	BUY	BUY	-	-	BUY	BUY
Lupin	BUY	BUY	BUY	BUY	BUY	BUY	-	BUY	BUY	BUY	-	BUY	-
Zee Entert. BUY	-	BUY	BUY	BUY	BUY	-	-	BUY	BUY	BUY	-	BUY	BUY
Dabar India	BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY	-	-
Federal Bank BUY	BUY	BUY	BUY	BUY	-	BUY	BUY	BUY	-	BUY	-	BUY	BUY
Bajaj Fin. BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY
LIC Housing Fin. BUY	BUY	BUY	BUY	BUY	BUY	BUY	-	BUY	BUY	BUY	BUY	BUY	BUY
Sun Pharma Inds	BUY	BUY	BUY	BUY	-	BUY	BUY	BUY	-	BUY	-	BUY	-
Aurobindo Ph. BUY	BUY	BUY	BUY	-	BUY	BUY	-	BUY	BUY	BUY	BUY	BUY	BUY
JSW Steel BUY	BUY	BUY	BUY	-	BUY	BUY	-	BUY	-	BUY	-	BUY	BUY
HDFC Bank BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY
TCS	BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY	-	BUY	BUY	-

ANNEXURE 3:

Current Year	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
TICICI Bank BUY	BUY	BUY	BUY	-	BUY	BUY	BUY	BUY	BUY	BUY	-	-	BUY
IDBI Bank BUY	BUY	BUY	BUY	BUY	-	-	BUY	-	-	-	-	BUY	BUY
Power Grid Corpn BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY
Bank of Baroda BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY	-	BUY	-	-	BUY	BUY
Canara Bank BUY	-	-	BUY	BUY	BUY	BUY	-	-	-	BUY	-	BUY	BUY
Union Bank BUY	BUY	BUY	BUY	BUY	BUY	BUY	-	BUY	-	BUY	-	BUY	BUY
Maruti Suzuki BUY	BUY	BUY	BUY	-	BUY	-	-	BUY	BUY	BUY	BUY	BUY	BUY
Indusind Bank BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY
Axis Bank BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY	-	BUY
Bank of India B	BUY	BUY	BUY	BUY	-	BUY	BUY	BUY	BUY	-	-	BUY	BUY
HCL Technologies BUY	BUY	BUY	-	BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY
ONCC BUY	BUY	BUY	BUY	-	-	BUY	BUY	-	BUY	-	-	BUY	BUY
DLF	BUY	BUY	BUY	-	-	-	-	-	-	-	-	BUY	-
Punjab Natl, Bank BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY	-	-	-	BUY	BUY
United Sprits	BUY	BUY	-	-	BUY	BUY	-	-	-	-	BUY	-	-
NTPC BUY	BUY	BUY	-	BUY	BUY	BUY	BUY	BUY	-	-	BUY	-	BUY
IOCL	-	BUY	BUY	-	BUY	-	-	BUY	BUY	-	BUY	BUY	-
Coal India BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY	-	-	BUY	-	BUY
NMDC BUY	BUY	-	-	-	BUY	BUY	BUY	BUY	BUY	BUY	-	BUY	BUY
Power Fin. Corpn. BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY
Gail (India) BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY	-	BUY	-	-	BUY	BUY
Mario	BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY	-	-
Reliance Power BUY	BUY	BUY	BUY	-	BUY	-	-	BUY	-	-	BUY	BUY	BUY
Bharti Airtel	BUY	BUY	BUY	BUY	BUY	-	-	-	BUY	BUY	BUY	-	-
M&M Fin. Serv. BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY	-	-	-	BUY
Tech Mahindra	BUY	BUY	BUY	BUY	-	-	BUY	BUY	BUY	-	BUY	-	-
Rural Elec. corp BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY
Jindal Steel BUY	BUY	BUY	BUY	BUY	BUY	BUY	BUY	-	-	-	-	-	BUY
Glenmark Pharma.	-	BUY	BUY	-	BUY	BUY	-	BUY	-	-	BUY	BUY	-
Cadila Health BUY	BUY	BUY	BUY	BUY	BUY	BUY	-	-	BUY	BUY	BUY	-	BUY

TO IDENTIFY THE REASONS THAT ACT AS CRITICAL RESISTORS FOR ONLINE SHOPPING (A SURVEY IN DELHI NCR REGION)

Ruchi Malik Gorai*

ABSTRACT

On-line shopping is a form of electronic commerce where the buyer is directly online to the seller's computer usually through the internet. The sale and purchase transaction is completed electronically and interactively in real time for eg: Amazon.com and Flipkart.com. Unfortunately, India has lagged in e-retail growth story due to low density of internet connections, lower penetration of credit cards and customer anxiety in using new technologies. The growing use of Internet in India provides a developing prospect for online shopping. These online retailers are formulating many enduring promotional offers that is motivating people to change their behaviour and rather shop online. In case of services like banking, travel and tourism a drastic change is surely witnessed. However, in case of physical products there are multiple factors that are acting as resistors for them to shop online. This paper focuses on those factors which acts as a major hindrance for anyone while shopping online. These critical resistors are broadly divided into the following categories: psychological, behavioural, demographic cultural and social factors and product category factors. For the present study a sample of 300 was considered from Delhi (NCR) region to find out how these factors play a critical role while shopping online.

INTRODUCTION

In India Internet usage is escalating every day. India is considered as one of the most lucrative retail destination throughout the world. The good news for Indian retailers is that a high percentage of the population using the Internet falls in the 20-45 age groups. These factors are encouraging big companies to enter into the digital world and use it as a tool to increase revenue and grab audience's attention.

Nowadays retailers have started offering almost everything under the sun on internet. From products like groceries to services like online gaming and jobs, e-retailing covers all frontiers. E-retailing uses internet as a medium for customers to shop for the goods or services. It assists retailers to establish their base of loyal customers. It helps in selling in places where the brand does not have a physical presence. Also, increases the sales in tier-1 cities where though products are available but people are time crunched and are always looking for convenience. It can be either pure-plays or bricks-and-clicks. Pure-play uses internet as primary means of retailing while bricks-and-clicks uses the internet as an addition to the physical store.

Keywords: *E-tailing, Online shopping behaviour*

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Even though online retail sales continue to grow much faster than retail sales through stores and catalogs, we now realize that internet is not a revolutionary new retail format that will replace stores and catalogs. While the Internet continues to provide opportunities for entrepreneurs in the retail industry, it is now primarily used by traditional retailers as a tool to complement their store and catalog offerings, grow their revenues and provide more value for their customers. It is a more technologically advanced mode of shopping (Karayanni, 2003).

For retailers in India, e-tailing is gaining recognition as it entails many benefits for them. These are: no real estate costs, ease and comfort to shoppers (specially those who are time-crunched), global reach, and huge potential customer base, and lesser human resource requirement. But there are several challenges which act as a barrier for the e-tailing to get the edge over traditional retailing format. They incur huge transportation and warehouse costs, there is huge competitive pressure, shopping is still a touch-feel-hear experience, level of shopper's comfort and usage of debit/ credit card.

LITERATURE REVIEW

On the basis of existing literature an effort is made to identify the critical resistors for online shopping. A broad classification of these critical resistors are made into five categories. These are: perceived risk factors, demographic factors, cultural and social factors, behavioural factors and product category factors.

Perceived risk Factors: Broadly these include risks, which play an essential role in consumer behavior, and it makes a valuable contribution towards explaining information-searching behavior and consumer purchase decision making.

Financial risk: Despite the significant spur of online shopping, one of the greatest resistors for the consumers is the financial risk. Financial risk is the perception that a certain amount of money may be lost or required to make a product work properly. Also, it is defined as potential net loss of money, and includes consumers' sense of insecurity regarding online credit card usage, which has been evidenced as a major obstacle to online purchases.

Product risk: E-tailing makes it very difficult to examine physical goods with the element of touch and feel totally missing in online shopping. Consumers have no option but to rely on pictures shown on the computer screen and the product reviews. Product risk is the perception that a product purchased may fail to function as originally expected (Kim et al., 2008). And it is the loss incurred when a brand or product does not perform as expected, is largely due to the shoppers' inability to accurately evaluate the quality of the product online (Bhatnagar et al., 2000).

Time risk: Time risk is the perception that time, convenience, or effort may all go for a waste. This may be because of delays receiving products.

Delivery risk: Potential loss of delivery associated with goods lost, goods damaged and sent to the wrong place after shopping. Consumers fear that delivery will be delayed due to various circumstances, consumers fear that the goods may be damaged when handled and transported, or no proper packaging and handling during transportation (Claudia, 2012).

Social risk: Social risk refers to the perception that a product purchased may result in some kind of embarrassment or disapproval among family and friends. In most cases, people try to obtain advice or consent from others in their social group in order to avoid social risk.

These perceived risk factors are very vital in discouraging people to shop online in India. This is because majority of Indians are finding it financially risky and also get a disapproval from family and friends while doing online transactions.

Demographic factors

There are several demographic variables that act as a critical resistor for online shopping.

Gender differences: One may look at the literature and find out that whether it is females or males who are not only resisting rather discouraging online shopping. A brief profiling of such customers can further help to understand their personality traits and the manner in which they can be targeted by the online retailers. On one hand there are few researches suggest that male have a more positive attitude towards online shopping as compared to females (Khare and Rakesh, 2011). On the other hand, there are several studies that confirms that purchase intention of female is strongly influenced by web browsing (Gugnani et al, 2017).

Income classification: On the basis of household income, population can be segregated into different stratas. The study can further be conducted which strata are resisting online shopping and the reasons for it.

Marital status, age and residential income: The e-tailer can find out answer to the questions such as: is it married or college student, young or old, in northern region or southern region or particular state who shop more internet and those who always are great critics for online shopping. The researches suggest that online shopper classification can be done on the basis of age, gender etc. (Hill et al, 2013). In India, the literature further suggests that people who are shopping online have a different demographic profile: they are young, time crunched people, and mostly staying in metro cities.

Cultural and Social factors: the culture and sub-culture of the place and the society you live in decides to a greater extent what you purchase and how you purchase. So, online shopping has to have social acceptance in order to improve its usage across all societies and culture.

Societal trends: This means that how is the society that you live in is reacting to online shopping. This may either attract you or resist you from doing the same.

Peer group review and Opinion of family and friends: Human beings have a greater need of social acceptance. Because of peer reviews and comments, people sometimes abandon products or services.

Indian culture has started becoming more open to western and newer and newer opinions. Since there is a greater resistance of change by the older generation and they govern the societal trends to some extent, so the cultural factors are also one of the major roadblock for the success of these online retailers.

Behavioural factors: Persons own behaviour also influences his or her decision to buy online or from an offline store.

Touch and feel component: Many people have a greater urge for physical touch and feel of the product before making a final decision to buy the product. This is one of the major resistors in online shopping. Though e-tailers tries to provided virtually real shopping experience of the product but it cannot be fully replaceable.

Shopper Classification: Whether you are a shopaholic, genuine shopper, regular ones: you will have some personality traits. This will further attract you or resist you from shopping online. In fact a new phenomenon that has come up is called online shopping addiction (Rose et al, 2014).

Human behaviour is highly unpredictable. Indians may start following the mob because everyone is doing so!! . So, the behaviour might show greater variations depending on the circumstances, need and mood swings.

Product category factors: Different categories of product have shown different levels of acceptance amongst people for online retailing. For eg: widely accepted for travel decisions, but not for buying vegetables and grocery. It depends upon the categories of products as mentioned below.

Product service continuum: Services got a greater acceptance on internet way back in early 2000's like railway booking, airline booking. However, clothing and apparel where in touch and feel is the major deciding factor has just started picking up.

Low involvement vs. High involvement product: Some of the high involvement products like laptops, mobiles, tablets have bought most of its space online. The resistance in these cases is shrunk through huge benefits in terms of discount offers with the latest features and more variety that are passed on to the consumers.

Perishable vs. Non perishable products: Perishable products again are perceived of not to be a wiser choice for shopping online because of the risk associated with it in terms of getting damaged/ spoiled in transit or delay in transit.

With time Indians have accepted rather prefer to book online railway or air tickets. However, the acceptance level is lower in grocery and clothing and apparel. The major element in resisting online shopping of physical product is the touch and feel assurance which the customer gets while shopping from any physical store.

RESEARCH METHODOLOGY

The research is based on both Primary research as well as secondary research. The primary research is conducted with the help of a structured questionnaire. The secondary research is basically exploration done in the form of literature review to get further segregation of psychological, demographic, cultural and social, behavioural, and product category factors.

Research Design: The research design which is used for the present study is exploratory research design which helps in providing broad framework of the factors that acts as a critical resistors for online shopping. These factors are mentioned in Table 1 below. Keeping in mind the below mentioned factors a structured questionnaire was prepared.

Table 1: Critical Resistors for Online Shopping

Perceived risk Factors	Demographic factors	Cultural and Social factors	Behavioural factors	Product Category factors
Financial risk	Gender differences	Societal trends	Touch and feel component	product service continuum
Delivery risk	Income classification	Peer group review	Shopper classification	Low involvement vs. High involvement products
Product risk	Education and occupation levels	Opinion of family and friends		Perishable vs. Non perishable products
Time risk	Marital status			
Social risk	Age			
	Residential Location			

Sampling Design and Data collection: For the present study convenience sampling technique was used. Though it has got many disadvantages, but a thorough inspection of sample at each and every stage helped in understanding the picture for the entire population set. The sample consisted of 300 respondents (170 females and 130 males). Further a segregation is done on the basis of occupation (service, business, college student, house maker, retired). Table 2 gives the demographic profiling of respondents.

Table 2: Demographic profile of respondents

Variable		Frequency	Percentage
Gender	Male	170	56.67
	Female	130	43.33
Age	Less than 25	50	16.67
	25-39	80	26.67
	40-54	75	25
	55- 62	60	20
	63 & above	35	11.67
Occupation	Service	90	30
	Business	70	23.33
	Student	55	18.33
	Homemaker	40	
	Retired	45	
Marital Status	Married	200	66.67
	Single	100	33.33

DATA ANALYSIS AND INTERPRETATION

Based on the research design, the hypotheses are further classified into 5 broad categories To explore the five hypotheses six point Likert-type scale was used for measuring the perceptions with respect to different factors. This instrument had a reliability (Cronbach alpha) of .87.

Hypotheses Testing: For the present study five alternate hypotheses were formed under the broader category: Perceived risk factors, demographic factors, cultural and social factors, behavioural factors and product related factors. Every category further have some sub hypotheses as mentioned below.

I) Perceived Risk Factors:

H1A: The perceived risk factors is negatively related to online shopping behaviour of the consumers.

H1.1A: The greater is the perceived financial risk, the lesser is the intensity to shop online.

H1.2A: The greater is the perceived delivery risk, the lesser is the intensity to shop online.

H1.3A: The greater is the perceived product risk, the lesser is the intensity to shop online.

H1.4A: The greater is the perceived time risk, the lesser is the intensity to shop online.

H1.5A: The greater is the perceived social risk, the lesser is the intensity to shop online.

TABLE 3: H1A: THE PERCEIVED RISK FACTORS IS NEGATIVELY RELATED TO ONLINE SHOPPING BEHAVIOUR OF THE CONSUMERS.

	Intensity to Shop	Sig Value
	Pearson Correlation [®]	
Perceived risk someone might steal credit card number	-.23	.038*
Risk that product might be damaged or faulty when delivered.	-.14	.014*
Risk that product will not perform upto the expectations	-.51	.022*
Risk that product might not reach on time	-.43	.024*
Acceptability of online shopping with parents and close friends	.61	.09*

(*hypotheses accepted at one percent significance level)

Interpretation: Table 3 reveals that the perceived risk factors and customer's intensity to shop is negatively and significantly correlated. Thus, alternate hypotheses are accepted. In other words, the higher is the perceived risk, lower will be the customer's intensity to shop online. The data clearly depicts that product delivery risk and financial risk is no more a critical resistor in online retailing.

II) Demographic Factors: H2A: Demographics factors of consumers significantly impact the online shopping behavior of the consumers.

Table 4: H2.1A: The intensity to shop significantly differs across different age groups

Age groups	N	Mean	Std Deviation
14-39 years	130	78.9	5.92
40 - 59 years	120	75.4	6.41
Above 60 years	50	25.5	8.31
Levene's Test of equality of variances			
		F	Sig Value
Equal variance assumed		18.8	.000*

(* hypotheses accepted at one percent significance level)

Interpretation: The three segments of age groups that were considered are: 14 -39 years, 40 - 59 years and 60 years and above significantly differs in terms of their intensity to shop.

Table 5: H2.2A: The intensity to shop significantly differs across male and female

Age groups	N	Mean	Std Deviation
Male	170	82.12	5.13
Female	130	77.67	6.58
Levene's Test of equality of variances			
		F	Sig Value
Equal variance assumed		14.2	.000*

(* hypotheses accepted at one percent significance level)

Interpretation: The result indicate that male respondents have a higher intensity to shop online a compared to female respondents. It also indicate that intensity to shop significantly differ between males and females respondents.

Table 6: H2.3A: The intensity to shop significantly differs across married and unmarried people

Marital Status	N	Mean	Std Deviation
Married	200	70.2	4.98
Unmarried	100	73.3	5.64
		Levene's Test of equality of variances	
		F	Sig Value
Equal variance assumed		13.7	.23

The result indicate that intensity to shop did not significantly differ between married and unmarried respondents. This implies that the behaviour of married and unmarried people is not significantly different in terms of online shopping.

Table 7: H2.5A: The intensity to shop significantly differs across different levels of occupation

Occupation	N	Mean	Std Deviation
Working	160	79.7	3.59
Non Working	140	73.2	5.08
		Levene's Test of equality of variances	
		F	Sig Value
Equal variance assumed		21.4	.14

Interpretation: The mean for the intensity to shop between working and non working respondents differs slightly and this difference is insignificant.

III) Cultural and social factors: H3A: The cultural and social factors of consumers significantly impact the online shopping behavior of the consumers.

Table 8: H3.1A: Opinion of friends and relatives significantly impacts online shopping parameters of consumer

	Intensity to Shop	
	Pearson Correlation	Sig Value
Favourable Opinion of friends or relative to shop online	.66	.008*

(* hypotheses accepted at one percent significance level)

Interpretation: The above table shows that if friends and relatives have a favourable opinion about online shopping, there is a greater probability of intensity to do online shopping.

IV) Behavioural Factors: H4A: The behavioural factors of consumers significantly impact the online shopping behavior of the consumers.

Table 9: H4.1A: Intensity to shop online is related to whether the consumer is shopaholic or a genuine shopper

Gender	N	Mean	Std Deviation
Shopaholic	100	89.2	4.3
Genuine Shopper	200	79.1	5.42
Levene's Test of equality of variances			
		F	Sig Value
Equal variance assumed		17.8	.002*

(* hypotheses accepted at one percent significance level)

Interpretation: Interpretation: There is a significant difference between the shopaholic and a genuine shopper in terms of their intensity to shop.

V) Product related factors: H5A: The product category significantly impact the online shopping behavior of the consumers.

H5.1A: Services have higher intensity to shop online

H5.2A: High involvement products have lower intensity to shop online

Interpretation: Table 10 suggests out of the sample of 300 respondents, what percentage shop online across different categories. It clearly depicts that majority have people do airline, movie ticket and railway ticket booking online. However, a very small percentage of people buy medicines online.

Table 10: List of Categories with respective percentage to shop online

S No:	Category	Percentage
1	Airline/train reservations	82%
2	Banking and other financial services	60%
3	Movie Tickets	90%
4	Hotel Reservations	60%
5	Electronics	55%
6	Clothing and Apparels	30%
7	Medicines	5%
8	Furniture and Home Decor	15%

CONCLUSION

It is clear that there are many critical resistors for online shopping. The intensity to shop is largely dependent on the five factors: demographic, cultural and social, behavioural, product related and perceived risk factors. Though occupation and marital status did not seem to be a significant factor in the present study, many factors such as types of risk, age group, gender, type of shopper, product category and opinion of friends or relatives play a critical role while deciding to shop online or not. It is critical for the e-tailer to understand the interplay of all these critical resistors in order to be the most successful retailer in this dynamic Indian market.

In the next 5 years, online retailing in India will mushroom even further. On one hand technology is facilitating this fast pace of online expansion, on the other hand the e-tailers urge to understand their customers even better are further helping them in rapid expansion. It will be very critical for the e-tailers to understand online shopping behaviour of people, traits of customers who shop online and factors that are given more importance while shopping online. This study is able to delve into these areas at a regional level.

SCOPE OF FUTURE STUDY

Although e-tailing has lagged in India just like e-commerce but hopefully in future it would see a lot more actions as internet habit of Indian online users are on a rise and low sales and higher overhead cost makes it tougher for companies to expand their retailing footprint in India. If E-marketers know the factors affecting online Indian behavior, and the relationships between these factors and the type of online buyers, then they can further develop their marketing strategies to convert potential customers into active ones, while retaining existing online customers. So, a detailed and a more exhaustive study can be conducted with a more exhaustive list of critical resistors. This study can further be done at a more in-depth level for different categories of retail segments. For instance, in online grocery retailing convenience is the most. Furthermore, it is evident from the data that women do more online shopping than men. However, they are more critical in their analysis. Thus, a more in-depth study can be done for demographic factors affecting online retailing in India.

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ELECTRONIC CUSTOMER RELATIONSHIP MANAGEMENT (E-CRM): A STUDY OF ITS ROLE, INFLUENCE & BENEFITSTO E-COMMERCE

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ABSTRACT

Internet and other developing computing and communicative techniques have redesigned the way of commerce, erased old boundaries of time, place and have shaped novel cybernetic societies of customer and suppliers with new demands of products and services. E-CRM has also been becoming an important aspect in this regard since the emergence of technology as it encompasses all the CRM functions over the internet. Emerging usage of internet for commercial purposes has increased the impact of e-commerce on the entire business events done globally. Now India, China, Brazil and many South East Asian nations have become the center of the IT-enabled services and now providing essential means to conduct worldwide e-commerce effortlessly. Therefore, with increased competition in the global e-market, now the emphasis is slowly flowing to the customers. So real challenge lies in retaining those customers rather than just acquiring new. That is why most of the business organizations in the world have already started assimilating Customer Relationships Management Strategies and Policies into the e-commerce ambiance so as to provoke customer's interest and instant customers' fulfillment in the long run so that the customer is retained without unwavering loyalty. The main reason for presenting this subjective paper is to focus on how the CRM plays its role in E-commerce and what sort of impact does it give on the same. Globalization also has brought in its wake a widespread and wonderful prospect for the development of e-commerce thus increasing the significance of business at a low cost and in the disturbance-free transactional atmosphere in a very rapid time. Apart from that, Localization also dictates and makes local socio-political conditions to be measured while incorporating CRM strategies in the modern e-commerce environment. Overall, this paper is an effort to showcase the E-CRM's role in E-Commerce, its impact and various benefits that it gives to E-commerce.

Keywords: CRM, Customer Loyalty, E-CRM, & E-Commerce, etc.

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INTRODUCTION

Internet's uprising is indeed helpful for the customer and has the necessary shift of market power from sellers to buyer's hand. This innovative economy's customers have very diverse expectations than earlier. Company's understanding of the alteration and its capacity to take advantage from it intend to be crucial for the success. Web, Internet & emergent computing technologies have actually eased the business, by removing old-fashioned restrictions of time and locations, as a result generating newer and more virtual customers and suppliers' societies with new and effective mandate for the product and service. Overall, E-commerce is just a single portion of e-business. Formerly, companies' websites only showing the company products etc. then companies-initiated e-commerce as being the distribution channel in adding to the existing arrangement for sales that have eventually build an e-commerce arena.[10]

The word e-commerce or Electronic commerce entails of all the business actions done by using emergent electronic mode i.e., A computer network, which comprises leading business practices through the electronic media, by bringing the Information Technology (I.T.) into work, such as Electronic Data Interchange (EDI). Simply saying, E-commerce includes marketing of products and services over the Internet & World Wide Web (WWW). Customers buy anything straight from a car drive or a TV sitting restfully in the room and give it to the one sitting far away by a simple mouse click. For the distribution or the word, shipping is generally used for the delivery of the products ordered. Each & every leading businesses & firm now making their transaction electronically i.e. by a computer, and the computer is not left as just the concept but also capable of making the transaction fully automatic. Every commercial application now becoming in the shape of e-commerce and also one of the crucial features for carrying each transaction swiftly. This business world enclosed by extremely competitive and unpredictable market situations. Now any new idea or technology would be standard only if it delivers sturdy benefits to each and every stakeholder. E-commerce gives some distinct advantages as well-

A. Portability/Handiness-Because of its handiness and portability it improves the organization's basic mode of working.

B. Market Share Enhancement- Now e-market is being used by multiple customers at the equal time or we can say at the same time at various places. This enhances the scope of business at large.

C. Supply Chain Combination Cycle- Now every operation became dynamic and customer-centric. On the basis of transactions' nature led through e-commerce, most commercial activities of the internet can be largely categorized of groups like B2B, B2C, C2B, C2C, and G2B.

let's discuss few of the above-mentioned categories very briefly.

1. Business to Business (B to B): These transactions are done online between business to business.

2. Business to Consumer (B to C): These commercial transactions empower companies to get connected with their customers, make sales & service to their customers over the Internet.

3. Consumer to Business (C to B): In these transactions, consumers stipulate their necessity and the business attempts to fulfill them so the consumer can have the best of bargains and businesses have just competition.

4. Consumer to consumer (C to C): Through these transactions customer trade among themselves by way of auctions & bid. In Indian perspective it is not much common but its scope is gradually increasing with the upsurge of various social media tools.

CRM and E-Commerce: Full form of CRM is Customer Relationship Management. It's just a methodology which is actually used to learn more and more about the customers' need and behaviors for building & developing stronger associations with them. Numerous technological modules are there for the CRM, nonetheless prejudicing about CRM in mainly technological relations is a pure mistake. More valuable way to think of CRM as a procedure that will help take masses of pieces of information together is a complex strategy that supports companies comprehend, expect and accomplish the customer needs. The foremost agenda of CRM comprises bifurcating the group of a customer, as a result, to offer appropriate & differentiated services for each of these groups. Customers in-fact justify minimum a basic level of services, but more tactically sound customers deserve a greater level cluster services indeed. CRM is way beyond a bunch of technologies [12].

Additionally, it is proposed to be a recurring process to guarantee constant, frequently refined and reliable results. Basically, CRM includes the attainment and placement of information about their prospective customers to help the company to sell maximum possible of their offerings even efficiently and effectively. It is a well-organized method that allocates property investment to optimize the value of their customer. CRM confirms the channel with the accurate offer. The genuine or possible worth of separate customer relationship analytically directs the firm's marketing decisions about allocation of investment and its disbursement. The CRM, indeed signifies and enhances marketing activities. Overall through CRM, Specific customer relationships are prioritized and improved, application of channels is optimized, and each operation along with marketing contact is also optimized. Through CRM, an even balance of needs and values of a customer are attained. CRM makes businesses to try the technology, use human resources to achieve insight into the customer behaviour and value of those customers as well. E-CRM is a set of software and hardware, along with management's commitment. Generally, E-CRM can be of two kinds as of Operational and Analytical.

Working/operational E-CRM is given significance to customer touch points which may have contacts with customers over telephones as well as letters and e-mails. So, customer touch points may have some web centered e-mails, telephone calls, direct sales call & fax etc. Systematic/Analytical CRM is an assembly of data and is perceived as a continuous course. That needs technology to analyse customer's data. Key resolution in this would be to recognize and comprehend customers' demographics purchase pattern etc. just to generate new business opportunities that give importance to customers. An important and effective advantage of web grounded E-CRM is the quantity of information accessible to customers' web surfing. At times, this can be understood as a drawback of web-based E-CRM. Overall, we can anticipate that the prospect of web-based E-CRM is entirely in the hands of personalised and customized websites.

Technology of E-CRM: New technologies are being used to revolutionize the way of interaction between customers and enterprises and ultimately building lasting E-Commerce relationships. Numerous studies have observed into how online interface affects online based consumer behavior and the findings have been diversified. As new technologies arise for the majority of the usage in E-Commerce, it is of more importance to evaluate their effectiveness with respect to E-CRM. With respect to the technological point of view, several key research questions are being endorsed are:

- What is the impact of technology on service quality i.e. (reliability, responsiveness, assurance, empathy, tangibles)?
- How are the demographics going to interrelate with technology?
- Is the loyalty of customer transformed when networking with technology as compared to employees?

LITERATURE REVIEW

e-CRM is a blend of software, hardware, application and management's commitment, also taking numerous forms depending upon the organizational objectives. It has 2 types: Analytical and Operational e-CRM. Analytical e-CRM is a collection of customer's data as a continuous process and operational e-CRM means the varied way of approaching to the customers by e-mails, fax, and phone etc. (Dyche, 2001) [5].

e-CRM is focused on attracting and possessing economically treasured customers and avoiding less profitable ones (Romano and Fjermestad, 2001)[14]. e-CRM is also committed for constructing loyalty and success, augmenting customer satisfaction, shortened procedures, lesser costs, improved vision and decision making of the organization (Reichheld, 1996[13]; Winer, 2001)[20].

e-CRM is also one of the modern technique businesses are adopting to upsurge and strengthen their marketing skills and competences (Alhaiou et al., 2009)[3]. e-CRM has been developed and became progressively popular as a Communication means and used as a relationship-building platform with the rising global diffusion of the Internet, (Lam et al., 2013)[11].

In today's contemporary and purely competitive business environment, e-CRM is blood for the success and better future of Indian businesses. With the help of big data, companies can comprehend and approximate customers' needs, wants and may satisfy them by creating customer-centric marketing plans that might help in making worth for customers, making available tailored products and services (Sheth et al., 2000)[17].

Internet and email being a part of electronic and interactive media, are also playing substantial part in operationalizing CRM and support effective customized information between the organization and customers (Kennedy, 2006)[9]. In fact, e-CRM has become a must-have for every organization to exist these days. It does not merely provide a competitive advantage but also lets customers to be in stake with the company from many places, being a result of internet's increased access points in modern days (Karami,2013)[8].

By means of technology along with optimizing interactions with customers, companies can make a 360-degree view of customers to study the past interactions and also to optimize future ones (Chen and Popovich, 2003)[4].

As it is clearly shown in the reviewed literature that most of them were conceptually revolving around e-CRM. Apart from them some literature also discussed about e-CRM's role in today's marketing scenario and had showed that how it has become so vital for the organizations to survive. In lieu of the above literature and taking other relevant literature as a supporting statement, this study shall throw light specifically on the e-CRM's role on e-commerce. Furthermore, this will also work over e-CRM's influence on modern booming e-commerce transactions and dealings. This will eventually make the study eligible to talk about the cream benefits of e-CRM that it gives to e-commerce arena or we can say online marketing as a whole.

OBJECTIVES

- 1- To elaborate the role that Customer Relationship Management (CRM) plays in E-Commerce.
- 2- To analyse the impact & influence of Customer Relationship Management (CRM) over E-Commerce.
- 3- To find out the benefits that Customer Relationship Management (CRM) gives to E-Commerce.

RESEARCH METHODOLOGY

This study is of qualitative nature and generally describes the CRM's role and influence in the success of E-Commerce in today's technologically sound business era and also throws light on benefits that CRM gives to this electronic mode of Business and hence makes use of secondary data. The entire study is based only on observation and documentary analysis. Furthermore, the required & relevant secondary data are collected from various Research Papers, Journals, Publications & Websites of the various academic portals.

FINDINGS

The finding part has been divided in three parts as per the objectives of the study. So, let's discuss it one by one.

1- Role of Customer Relationship Management (CRM) in E-Commerce.

By applying a decent CRM system, a company can simply access the market data that will let them serve the customers better. CRM is all about communicating with big data that is ever rising with the advancement of digital marketing and social platforms. CRM gives a 360-degree interpretation of the customers, shoppers and web browsers. The traders should use this data to examine the preferences and tastes of their customers of the various demographics and design a robust strategy. Let's see how the incorporation of CRM to B2C and B2B in E-Commerce space will help to push the small and medium businesses to greater elevations and also strive with the larger businesses.

i- Loyalty Rewards- Very often, retailers do have some kind of loyalty programs for the customers. To have superior retention tracking of customers and offer them incentives accordingly, they need to monitor the different ways they communicate with their customers. For all these events and programs CRM is required.

ii- Assimilation and Smooth Execution- All principal CRM systems can be assimilated with third-party software. Thus, you can plan your system to share data between accounting as well as banking records, suppliers, contractors and many more. A properly fixed CRM will make seamless logistics, unified product handling, accurate payment tracking as well as refund processes. With numerous systems, you can extract all data into customer relationship management and have the capacity to have a single console to regulate the workflow.

iii- Advanced control over vital data- CRM permits quick access to important data related to all customers such as their address, delivery data, purchases, mode of payment, refunds etc. with CRM, it's easy to record all the communication as well as contact with customers in a very short span of time.

iv- Integrated tracking and structured storage - CRM lets users gain access to anything and everything and pinpoint all available data from a prime location. The plus point of CRM is that it becomes very simple to monitor customers even after the sales process. Now you can know if the customer is actually satisfied or not with the product or service. Complaints can also be registered and consolidated online. Based on customer purchase history and data related to his/her preferences retailer can offer products or services personalized to his/her likings.

v- Future orientation- CRM empowers follow up reminders and have the knack to dispatch emails at arranged intervals. The software boosts cross-selling as well as up-selling hence boosting the customer retention ratio. CRM systems are not static at all, they are regularly being restructured and improved to successfully meet current and future business needs.

2- Impact & influence of Customer Relationship Management (CRM) over E-Commerce.

CRM observes customers as a vital strength of the organization and preserving the relationship of the customer is an essential course of a business. Business who succeed in retaining its customers is even five times extra profitable. CRM effects and gives a positive impact on E-Commerce by adopting following techniques.

i- Stylish and designed website- What is more annoying for a customer than complex, un-user-friendly websites? Customers may visit your website suggested by search engines or driven by other links from websites. When a customer is upset with the website and is unable to find what they were searching for, it is most likely that they would not visit again in the future. So, to have a good retention ratio, you must have the most user-friendly website.

ii- Permission/Consent marketing- Shaping a good relationship with customers, it is recommended that seller must firstly request for their consent before that they offer more info about the products. Opt-in email is a good example. In this type of emails, prospective customers give their permission to the company before the company directs them emails about the information on numerous products.

iii- Database management and marketing- Naturally, customer loves to feel being valued or esteemed by the organization. E-business can provide this kind of service by using a skill named as database marketing. The company gathers data from customers and summarize those data under the database of the company. Now, this information is ready to be used for structuring a good relationship with customers. Here a perfect example of the same is, Amazon.com uses its profile of the customers to endorse those books which are measured fit for its customers. Endorsements are actually made principled on the information given by customers telling what are their book preferences.

iv- Online community and blogs- Building and Maintaining relationship is a cooperative process, customers want to be heard as significantly as they have already heard of the company.

The online community, like web blogs or forums, makes customer able to freely share their views and suggestions that are very crucial for business development. As soon as soon customers start feeling being heard and appreciated, they start to visit and return to the desired website again in the future.

3- Benefits of Customer Relationship Management (CRM) to E-Commerce.

There are various benefits that CRM gives to the E-Commerce. Eventually, it can be viewed from two perspectives like Customers Perspective & Banking Perspective. Let's discuss both points in brief detail.

A- Customers Perspective- CRM gives following benefits to customers in E-Commerce.

i- Communication to Customers and their Satisfaction- According to Harris (2004)[6], E-CRM makes customers to have any service available anytime round the year and seller can also assist the customer in any way he/she requires and give away any information about the company's product or service, on the basis of the previous permission when the customer was browsing over pages at the Sellers's website. The E-CRM also upholds long lasting relationship with customers with given that trust, integrity and friendship.

ii- Processing Speed of the transaction via e-response- According to Jason et. al. (2006)[7], e-responses or e-feedbacks are being widely used by businesses to acknowledge receipt of instructions, payment and information's delivery as well. Various companies have reformed the mark time to 24 from 48 hours by the way of E-CRM as customers are now being able to visit the company's website at their own prescribed time. It is also emphasized that the character of e-responses supports to build up the relationship between the learner and customer.

iii- Improved quality of service- Taylor (2009)[18] says that the main prospects of service quality are reliability, empathy, performance receptiveness, excellence, and assurance. Additionally, bringing high-quality services is a way company succeed in advancing and progressing their relationships with customers. Bringing great quality services is a condition for achieving customer satisfaction and only customer satisfaction can increase the company's loyal and dedicated customers. Furthermore, numerous of the quality magnitudes of supposed E-CRM are new and most are linked with technology: navigation easiness, suppleness, effectiveness, site features and knowledge of price etc.

iv- Ease of access and confidence- Conveniences and confidence or trust both plays an energetic role for choosing a company or organization and if the consumers are not happy with the accessibilities, it only takes a little time of customer to switch over between the organization. According to Sharp, D. E. [16] with the speedy increasing knowledge and advantage of the customer's e-retailer are now trying to persuade customers giving facilities like easy user interface, promotional offers on sales, EMI purchase, convenience, friendliness and faster responsiveness.

B- Banking Perspective- From the view of banking facilities, the following benefits are being given by the CRM to E-Commerce.

I- Personalized services- Every interaction with the customer is an opportunity to figure out a strong association between business and customer. As per Adebajo (2003)[1], Customization can be defined as serving the sole requirements of individual customers. Giving interactive and friendly customer conversations may become the reason that organization can progress those individual customer relationships. The main thing here is to recognize the needs of the customer and provide the best possible answer that makes it a quality service to the customers because today's customers are now becoming choosier and the success is based primarily on tailored services.

ii- Enhanced relationship with customers- To build a long-term dealing, organizations are required to be in steady touch on regular basis. According to Shanmugam (2004)[15], once the organization attains the customers and is able to have them enduringly forever, then only it infers that the customer becomes extra dedicated and making a good use of services of the organization.

iii- Authenticity of transactions and its security- According to Albrecht Enders (2008)[2], J. T. security and safety is the major issue and obstacle to internet transactions. So, it is important that companies' websites must have been able for sufficient privacy declarations and a clarification of security procedures and also to train the customers about the unofficial and unauthorised users like hackers. Though, it is noble that businesses are also trying hard to guarantee secure payments on the internet by using newest technologies like encryption and firewalls.

iv- Email for business communications- As per the Venugopal(2008) [19], as email is the comparatively cheaper and faster way used to socialize information like sending confirmations orders, update on transactions, endorsing new services and responding to enquiries from the customers. Because a large number of emails are needed to customers, organizations have applied computerized/automated emails systems. emails may also cover the reviews, responses and any edited contacts by providing all these E-CRM bringing a connection between the seller and customer over email business communication.

CONCLUSIONS

Internet has not only been a means of communication rather a backbone for the conduction of e-commerce transactions globally. More than 30 years ago, a novel world of electronic communication known as the internet emerged on the horizon. Today, this new electronic world is not limited to

boundaries but far ahead itself, it is here connecting us and stimulating every concept of the detached horizon in time and space. Along with the same rapid leap, the growth of e-commerce is carrying world into quicker, closer reach for numerous businesses, altering strategic vision, and their processes and operations.

As we are also well versed about the unlimited spread and scope of internet and its compliance to the business operations in contemporary business world, days are not far ahead when people or customers over e-CRM interferences will get each and every product/service tailored to the smallest details.

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