CHAPTER 2
LITERATURE REVIEW

2.1 Introduction
Understanding the interrelationships among E-service quality, Technology Readiness and E-Shopping Behaviour requires an examination of several areas of literature. This review of literature begins with E-Commerce and e-services for online shopping. Secondly the review is conducted for understanding definitions of service quality; specifically e-service quality and various dimensions of e-service quality. Technology readiness is another variable which may impact the shopping behaviour. Thus clear review of the term technology readiness and its components is initiated. Finally differences and common factors related to the shopping behaviour and e-shopping behaviour are reviewed. Thus the review of literature is carried out for following different areas: E-Commerce, E-services, E-retailing and e-shopping, E-service Quality, E-satisfaction, Technology readiness, E-shopping behaviour.

2.2 Perceptive of term E-Commerce
Zwass Vladimir (1996) stated Electronic commerce (E-commerce) as the sharing of business information, maintaining business relationships and conducting business transactions by means of telecommunication networks. According to him, electronic commerce approaches the end of its beginning and as it is redefined by the dynamics of the internet. E-commerce is now emerging from the convergence of several major information technologies and business practices. This study was not ready to accept E-commerce as a purely technological development. Doing business through e-commerce can be understood as the development of
information technologies along with organizational and management advances that pull the technology and are pushed by it in turn. This study visualized e-commerce as hierarchical structure comprised of several levels and each individual levels constitute three meta-levels: Technological Infrastructure, Services: Enablers of interpersonal communication and commerce, Products and services. This paper also pointed out some of the issues relating to hierarchical framework like limitation and asymmetries of infrastructure, integration of electronic payment methods into buying process, conversion of web surfers from browsers into consumers, movement of supply chains and products into the market space and business governance. However it is clear from the readings that expansion of commerce and technological innovations are the two levers which contribute to the economic growth.

Napier et al. (2001) in his book stated that traditionally, business has been conducted in physical building, often referred as brick-and-mortar marketplaces. When the marketplace is electronic, business transactions occur across a telecommunications network where buyers, sellers and others involved in the business transaction rarely see or know each other and may be physically located anywhere in the world. This process of buying and selling of products and services across a telecommunications network is often called electronic commerce and the electronic marketplace is called a marketspace. According to this book many people use the term e-commerce in a broader sense, encompassing not only buying and selling but also the delivery of information, providing customer service before and after the sale, collaborating with business partners and enhancing productivity within organizations. Some researchers prefer the term e-business to indicate the broader spectrum of business activities that can be conducted over the Internet. Most people
today us the term e-commerce, in its broadest sense, interchangeably with e-business.

Zeithamal, Parasuraman and Malhotra(2002) in their research work stated that to encourage repeat purchases and build customer loyalty, e-retailing companies need to shift the focus of e-business from e-commerce (the transactions) to e-service (all cues and encounters that occur before, during and after transaction).

Pather et al. (2003) in their review stated that in the 1990s, the commercialization of the internet set off a revolution in the use of Information Technology for conducting business. Over the period of time it has been anticipated that hundreds of millions of dollars have been spent on e-commerce or e-business. Despite some setbacks, e-commerce is still a very important business issue and as per researchers if implemented correctly, an e-commerce strategy can contribute substantially to corporate profits. According to these researchers the end-user of e-commerce Information Systems is now located out of the physical domain of the business and instead e-commerce businesses have to deal with new type of user known as e-customer. E-customer is not performing a role within the organization but interacts with the business website with the possible intention to conduct some transaction. Thus to investigate a relevant scale to measure effectiveness in the e-commerce environment authors suggested model for measuring user satisfaction and measuring service quality.

Another distinct feature of the e-Commerce environment is that the product or service that the business sells is delivered primarily through the use of information technology i.e. the web-site and the associated
applications that run on both the client and server side. (Pather Shaun et al. 2003)

Schneider Gary P. (2004) in his book used the term electronic commerce (or e-commerce) in its broadest sense; business activities conducted using electronic data transmission technologies, such as those used on the Internet and World Wide Web. The main elements of electronic commerce include: Consumer shopping on the web, often called business-to-consumer (or B2C); Transaction conducted between businesses on the web, often called business-to-business (or B2B); Transactions and business processes that companies, governments, and other organizations undertake on Internet to support selling and purchasing activities. Thus electronic commerce is the application of new technologies, particularly Internet and Web technologies, to help individuals, businesses and other organizations to conduct business in better way.

Canzer Brahm (2005) in his book defined e-business as the organized effort of individuals to produce and sell, for a profit, products and services that satisfy society’s needs through the facilities available on the Internet.

E-commerce (electronic commerce or EC) is the buying and selling of goods and services on the Internet, especially the World Wide Web. In practice, this term and a newer term, e-business, are often used interchangeably. E-business utilizes technology infrastructure and applications to synthesize and optimize new and existing business process. E-commerce covers business to business (B2B), business to consumer (B2C) and consumer to consumer (C2C), and business to employees (B2E) (Uzoka & Seleka, 2006).
2.3 Understanding of E-Services

E-service is an emerging and rapidly evolving area with the advancement of technology. It is conceptualized as a subset of e-commerce and can be demonstrated as new technological innovation(s). E-services are today considered as the building blocks for the service oriented architecture. E-Services as a general field of inquiry includes considerations of both delivered service and delivery mode. It is more useful for service-based offerings that comprise information and access to information for making more standard goods-related e-Commerce purchases (Stafford & Gillenson, 2003).

2.3.1 Definitions of E-Service

E-service has been defined as web-based service (Reynolds, 2000) or interactive services that are delivered on the Internet (Boyer et al., 2002). Hoffman and Bateson (1997) defined e-service is deeds, efforts or performances whose delivery is mediated by information technology (including the Web, information kiosks and mobile devices). Such e-service includes the service element of e-tailing, customer support and service, and service delivery.

The need to define the service encounter is not unique to e-service, but the boundary and elements of that encounter need to be re-visited in the e-service context. It is important not only to understand how consumers’ experience and evaluate the e-service delivery, but also how the delivery contributes to the total service experience and its evaluation. The nature of the service experience is likely to vary depending upon the activities or tasks being completed through the e-service engagement. The spectrum of tasks ranges from information collection through customer support to
transactions and shopping. Each task type will have its own stages (Rowley, 2006). For example, product purchase might involve need identification, product search, merchant search, negotiation and purchase (Brennan et al., 2003). Any or all of these stages could involve e-service.

E-service is defined as the provision of service over electronic networks (Rust and Kannan, 2002). This notion includes services provided by a typical service organization as well as the services provided by goods manufacturers where the quality of customer care plays an important role. The notion of electronic networks includes the Internet and wireless networks as well as electronic environments such as ATMs, smart card networks, kiosks, among others. E-service is an overarching customer centric concept, with its scope extending to the upstream and downstream channels of an organization (external customers) and including intra organizational entities (internal customers). E-service comprises all the interactive flows in the upstream and downstream channels such as the information-based interactive exchanges, negotiation interactions, promotion flows, title exchanges, and finally, product/service flows (except the actual physical flow of goods). In the downstream channel, e-service subsumes concepts such as customer/citizen-relationship management (CRM), relationship marketing, one-to-one marketing, and customer care. In the upstream channel, e-service subsumes e-procurement and supply chain functionalities, with one important philosophical difference—improving efficiency and cost is secondary to superior customer service and market expansion (Rust and Kannan, 2003).

Scupola (2008) in editorial special issue of Journal of Electronic Commerce in Organizations defined e-services, created a typology of e-
services and presented main characteristics of e-services. E-services can be conceptualized as a subset of e-commerce. E-services are a consequence of networked technologies. E-Services are defined here as services that are produced, provided or consumed through the use of ICT-networks such as Internet-based systems and mobile solutions. E-services can be produced by consumers, businesses, and governments and can be accessed via a wide range of information appliances (Hoffman, 2003). In addition, there are three main characteristics of e-services: The service is accessible via the Internet or other electronic networks. The service is consumed by a person via the Internet or other electronic networks. There might be a fee that the consumer pays the provider for using the e-service, but that might not always be the case as, for example, in some e-services offered by the government. Familiar e-services are online banking or online retailing (e.g., www.Amazon.com). Other types of e-services are e-learning such as courses offered online, e-health such as online medical advice (e.g., www.netdoktor.com), e-government (e.g., online government services such as tax information online), e-libraries providing electronic access to journal articles or book chapters and information and location services (Yee, 2006). As a result, four types of e-services can be conceptualized: business-to-business, business-to-consumer, government-to-business or to-consumer, consumer-to-consumer.

Online services can be accessed through Web site interfaces via traditional devices (eg. PCs, laptops). Increasingly, online services can also be accessed through wireless Web site interfaces via mobile devices (eg. Cell phones, PDAs) (Massey et al., 2007)

Electronic service or e-service as it has become more commonly known is now recognised as one of the key determinants for successful e-business
(Jamie & Aron, 2010). With the increase of e-service adoption in business field, the importance of measuring and monitoring e-service quality in the virtual world has been recognized.

2.3.2 Characteristics of E-Service

E-service is becoming increasingly important not only in determining the success or failure of electronic commerce (Yang et al., 2001), but also in providing consumers with a superior experience with respect to the interactive flow of information (Santos, 2003). E-service can be usefully conceptualized as an interactive information service. Information provided by or collected from and about customers can be gathered and analyzed by the e-service provider, and used as the basis for the customization of the service that the organization offers to the customer. In addition, the online service experience integrates service delivery and marketing communications, both of which are achieved through exchange of information (Ghosh et al., 2004). The more customers go online to fulfil their service needs themselves, the more scalable and cost-effective the business model (Schultze, 2003). This association between service quality and business performance has driven interest in e-service, online service and Internet retailing. This interest has been further fuelled by evidence of poor e-service quality in some contexts (Boyer et al., 2002; Janda et al., 2002; Zeithaml, 2002). Zeithaml (2002) identified the need for businesses to focus on the e-service in their e-business, and to understand the importance of e-service quality as a differentiating strategy.

E-service is technology-mediated or facilitated, and the two inherent characteristics of e-service that emerge from the technology facilitation are recurrent themes in the literature, viz, e-service as information
service, and e-service as self service. One perspective on e-service is to conceptualize it as information service (Rust and Lemon, 2001), since the primary value exchanged between the two parties is information. This perspective on e-service as information service has a number of consequences. Fundamentally it means that both search and information retrieval and the information content of web sites have a role to play in consumer evaluation of service quality. Most authors have described the e-service experience as a self-service experience (Dabholkar, 2000; Sara, 2000; Meuter et al., 2000; Zhu et al., 2002), although Surjadaja et al. (2003) differentiate between e-service and self-service. They argue that in self-service operation, a customer has to go to the technology (such as an ATM) to receive a service, whereas in e-service, a customer can receive the service through the Internet at home or in other places. Self service is defined as “service in which there is no direct assistance from or interaction with a human service agent” (Solomon et al. 1985).

Indeed, some writers suggest that e-service does not support relationship building in the same ways as face-to-face since the interaction is customer-to-organization, and not customer-to-individual provider (Schultze, 2003). On the other hand, e-service, unlike traditional service, is not constrained by distance and opening hours, and thus delivers convenience. In conclusion, technology mediation, which we describe as a defining characteristic of e-service, generates two inherent characteristics: e-service as information service; and e-service as self-service, each of which in their turn contribute to the nature of the e-service experience (Rowley, 2006).

According to Rowley (2006), Self-service or e-service is often part of a wider service delivery. The modelling and evaluation of the e-service
experience can be undertaken at three different levels: web site experience, online service experience, and total multi-channel experience.

A related approach is to regard the service experience as consisting of a number of different partial performances or service components, each of which can be evaluated separately by the web site visitors (Santos, 2003; Zeithaml et al., 2002; Bauer et al., 2005). Using this approach, Bauer et al. (2005) identified three service categories: core services, additional services and problem-solving services. Chen and Chang (2003) identified three components in the online shopping experience: interactivity (connection quality, web site design), transaction (value, convenience, assurance, entertainment, evaluation) and fulfilment (order processing, delivery, post-sales service). The need to identify the scope and elements in the service experience is also acknowledged by Parasuraman et al. (2005) in their work on E-S-QUAL in which they distinguish between core services and recovery services.

Rust and Kannan, 2003 suggested, e-service is a customer-centric concept, and thus, the strategic and tactical components of an e-service orientation focus on increasing value defined at the customer level. At the strategic level, an e-service orientation calls for moving the emphasis from products and transactions to service and relationships, and building customer equity. These are supported at the tactical level by personalization and customization, self-service strategies, privacy and security risk management, and e-service measurement.

The effectiveness of various value components in creating e-service value may vary across consumers, however, some consumers have been unsatisfied with their e-service experiences at times (Lin Chien-Hsin,
Some feel uncomfortable with virtual e-service environments (Jahng et al., 2001), while others find e-services to be time consuming and spatially inconvenient (Heinonen, 2006).

### E-Service Definitions

**TABLE 2.1: ACADEMIC AND PRACTITIONER DEFINITIONS OF E-SERVICE**

<table>
<thead>
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2.4 Significance of term E-Shopping and E-Retailing

The number of people accessing the internet and entering into commercial transactions has been on the rise, and online shopping has been a growing phenomenon all over the world (Joines et al., 2003; and Jayawardhena, 2004). Such transactions have been witnessed for both organizational as well as personal buying and the trend will continue to rise through online retailing.

2.4.1 Definition of e-shopping/ online shopping/ e-retailing

Bakos (1991), describes an e-market as “An inter organisational information system that allows the participating buyers and sellers to exchange information about prices and product offerings”. Liu and Arnett (2000), define it as, “a way of conducting business by companies and customers performing electronic transactions through computer networks”.

Meuter et al. (2000) have defined e-retailing in terms of the internet market as, “a virtual realm where products and services exist as digital information and can be delivered through information-based channels”. One may define online-retailing as use of an electronic media through which the customer and the marketer may enter into a transaction for sale
and purchase, so as to benefit both the parties in the long run (Sahney S.et.al., 2008).

Online shopping is a complex process that can be divided into various sub-processes such as navigation, searching for information, online transactions, or customer interactions. Customers are unlikely to evaluate each sub-process in detail during a single visit to an online store, but rather will perceive the service as an overall process and outcome (van Riel et al., 2001).

Online shopping is the process consumers go through when they decide to shop on the internet. Using the internet to shop online has become one of the primary reasons to use the internet, combined with searching for products and finding information about them (Joines et al, 2003). Smith and Rupp (2003) also stated that the consumers have never had access to so many suppliers and products/service options. Online shoppers mainly interact with the Web-based computer system and cannot physically touch or feel actual products, they make decisions mainly with information provided electronically by the online store (Chung-Hoon Park.,Young-Gul Kim, 2003).

2.4.2 Perceived benefits of online shopping
Researchers such as Hoffman, Novak, and Chatterjee (1995), Alba, Lynch, Weitz, and Janiszewski (1997), and Peterson, Balasubramanian, and Bronnenberg (1997) have discussed benefits of online shopping. These benefits provide the sorts of convenience that are not readily available in traditional shopping media.
The explosive growth of the internet has revolutionized many aspects of daily life (Fetto, 1999; Rutledge, 2000). There is much to be learned about how the Internet fits in people’s lives, how they use it as part of a set on choices, and what deters them from using it for certain purposes, such as making purchases (Kaufman-Scarborough, Carol; Lindquist, Jay D, 2002).

Surveys of customers indicate their frustration with the lack of convenience provided by “bricks and mortar” stores. They report problems with crowded store conditions, out of stock merchandise, and poorly-trained salespersons, prompting shoppers to search for more favourable ways to browse and to purchase. In fact, retailers have been criticized for developing in-store strategies based on their own convenience, rather than that of their customers. (Sediers et al., 2000)

Several types of convenience can be considered throughout the online shopping process. For instance products those are easy to reach possess “access convenience”, while products that are easy to find and to compare exhibit “search convenience”. “Possession convenience” occurs when products are easy to obtain, while ease of purchase and return enable shoppers to have “transaction convenience”. In addition shopping is quick and without delays embodies “time convenience”. Shopping close to home, home delivery and shopping through non-store methods at home are all ways of gaining “place convenience” (Sediers et al., 2000).

E-shopping offers a similar set of convenience, and also introduces some new conveniences for shopping. For instance, while e-shopping attempts to be quick and efficient, its round the clock availability adds a dimension of “schedule convenience” that allows the shopper to access merchandise
and makes comparisons regardless of the time of day (Bellman et al. 1999).

Advantages for customers to buy online include easy and wide access of products, services, information; overall convenience; and direct effects of functional and utilitarian benefits (Donthu and Garcia, 1999; Seiders et al., 2000; Ruyter et al., 2001; Chen and Chang, 2003; and Monsuwé et al., 2004). However, some customers prefer to shop and browse on the internet due to the fun, enjoyment and excitement involved, that is the emotional and hedonic pleasures, either as individuals or as social groups (Bloch and Richins, 1983; Hirschman, 1983; Childers et al., 2001; Menon and Kahn, 2002; and Parsons, 2002). So, a consumer’s motivation to shop online may be either due to an utilitarian motive as a ‘problem solver’ or a hedonic motive in terms of ‘fun, fantasy…and enjoyment’ (Hirschman and Holbrook, 1982).

The internet is considered a mass medium that provides the consumer with purchase characteristics as no other medium. Certain characteristics such as any time shopping, variety of products, comparative prices and special offers are making it more convenient for the consumer as compared to the traditional way of shopping. Internet provides screened and comparative information for alternatives, consumers may reduce the cost of information search and the effort in making purchasing decisions (Chung-Hoon Park,.Young-Gul Kim, 2003).

Sandra et al.(2006), concluded that the four dimensions emerging for perceived benefits of online shopping included shopping convenience, product selection, ease/comfort of shopping, and hedonic/enjoyment. Shopping convenience is perceived to be the ability to shop almost
anytime from a variety of locations without visiting a store. Ease/ comfort of shopping are thought of as avoiding the physical and emotional hassles of shopping in other channels. These benefits have been shown to be the dominant motives for non-store shopping (Bhatnagar & Ghose, 2004a, 2004b; Eastlick & Feinberg, 1999; Korgaonkar & Wolin, 2002). Product selection, the availability of a wide range of products and product information to support consumer decision-making, has also been shown to be an important benefit of online shopping. Hedonic/enjoyment has to do with the fun and excitement experienced by trying new experiences, custom designing products, etc. There is considerable empirical support for the role of hedonic motives in non-store shopping (e.g., Childers et al., 2001) and some support for hedonic motives in online shopping (Parsons, 2002, Wolfinbarger & Gilly, 2001).

Advantages for marketers to sell online include the ability to reach a large number of consumers worldwide (Strauss and Frost, 1999); to reach out to the younger lot of population; and to fight the constraints of sale through traditional means of physical presence in stores (La and Kandampully, 2002), which ultimately increases productivity and efficiency.

2.4.3 Perceived risks of online shopping

According to Kaufman et al. (2002), some Internet browsers may have never intended to complete their purchase online, preferring to shop in a bricks and mortar setting. Some consumers may simply use shopping carts to investigate and tally possible future purchases, with no intent to purchase at the specific time that they are online.
Lindquist and Kaufman-Scarborough (2000), questioned whether the browsing on the internet can be correlated with purchasing on the internet, since some shoppers enjoy browsing as a separate activity, while others buy without browsing if their choice is clear and determined in advance. Because of problems like security fears, lack of skill with computers, slow response time by e-tailers, and confusing Web sites, studies report that numerous shoppers use non-store methods to search and compare, while going to the ‘bricks and mortar’ setting to make their purchase (Koprowski, 2000; Levy and Nilson, 1999).

There are often concerns and reservations of not buying online due to the lack of physical presence in a store (Wee and Ramachandra, 2000) or even lack of direct personal interaction between the buyer and seller; problems with returning products, that fail to meet expectations, and the inability to touch or feel the product (Ruyter et al., 2001; and La and Kandampully, 2002). Concerns of risk, insecurity and privacy (Merriman et al., 2002; and Bhatnagar et al., 2000) also affect consumer acceptance of buying online.

As per Sandra et al., (2006), the three dimensions emerging for perceived risks included financial risk, product risk, and time/ convenience risk. These three types of risk are consistent with previous research showing that common risks associated with online shopping include credit card security (financial risk), concerns about the quality and suitability of the product (product risk), and the time required for finding a suitable web site, searching for information and processing the transaction (time risk) (Forsythe & Shi, 2003).
2.4.4 Customers attitude towards online shopping

The attitudes toward online shopping are affected by the web experience of usefulness (Monsuwé et al., 2004) and enjoyment (Hirschman, 1983; and Childers et al., 2001); consumer demographic and personality traits (Burke, 2002; and Dabholkar and Bagozzi, 2002); situational factors (Wolfinbarger and Gilly, 2001) and previous online shopping experiences (Shim et al., 2001).

The growth of online retailing is being driven by ever increasing online buyers and sellers and the changed attitude of internet users who look for speed, promptness, convenience and better bargains. Saving of time and effort, as also the availability of wide range of products at best prices are the other factors which are responsible for the growth of online retailing. Online sellers can offer best prices as they don’t have to spend on inventory handling and maintenance cost. In spite of these, consumers are often apprehensive and wary of shopping online due to computer illiteracy, technological complexity and often lack of understanding of the buying/transaction process through internet (LaMonica, 1999; and Seiders et al., 2000).

Forsythe Sandra, Liu Chuanlan, Shannon David, And Gardner Liu Chun (2006), applied constructs from the innovation adoption process (Rogers, 1995) to explain and predict online shopping behaviour. Thus, stated that in the context of online shopping, perceptions of benefits and risks are antecedents of consumers’ perceptions of Internet shopping and of their online shopping behaviours. They suggested, a sound measure of the perceptions associated with online shopping is needed to provide a firm foundation for research to investigate the interrelationships between benefit-risk perceptions and attitudes toward online shopping, specific
online shopping behaviours (e.g., visiting vs. purchasing), shopping outcomes (e.g., purchase frequency, dollar amount spent), and future online shopping intentions. They also proposed that consumers strive to maximize the perceived value of their shopping experience by assessing the tradeoffs between the expected benefits and the perceived risks associated with shopping online.

2.5 Scrutiny of term E-Service Quality

E-service quality can be defined as overall customer evaluations and judgments regarding the excellence and quality of e-service delivery in the virtual marketplace (Santos, 2003).

2.5.1 Importance of E-Service Quality

Oliveria et al. (2002) stated that electronic service (e-service) might be the key to long term advantages in the digital times, and e-service quality is becoming even more critical for companies to retain and attract customers in the digital age. Companies accepted and adopted the new information and communication technology in the performance of their activities, not only to support traditional activities, but also to support those arising from new opportunities, mainly from the Internet (Hongxiu & Reima, 2008). Electronic service quality (E-SQ) is a new developing area of research, which has strategic importance for businesses striving to address customers in the electronic marketplace (Khaled Atallah Al-Tarawneh, 2012).

According to Parasuraman, Berry and Zeithmal (1985), a perception of service quality is a result of a comparison between what consumers consider the service should be and their perceptions about the actual performance offered by the service provider. Delivering quality in
services has been shown to be an important strategy for marketers who are trying to differentiate their service offerings by establishing customer value and satisfying customer needs (Ozment and Morash, 1994). The issue of service quality is being recognized as strategically important with managers of companies with a Web presence, as more and more customers are taking the plunge and engaging with companies over the Internet (Slywotzky and Morrison, 2001). As Internet retailers gain more experience, they realize that customers are concerned with the process of how the service is delivered (Katz, 2001).

Yang (2001) and Zeithaml (2002) believe that e-service experience greatly affects the establishment of trust and relation with customers, and enterprises must pay attention in this regard. Oliveira et al. (2002) believe that e-service quality can increase the competition of the company’s requirement for fulfilment. A higher level of e-SQ contributes to achieving the main business goals (Zeithaml et al., 2000, 2002a). Gefen and Straub (2004) investigated effects of different determinants of e-service on e-trust and show that predictability and integrity of e-services have significant affect on e-trust. Zha, Ju and Wang (2006) showed in their research that dimensions of e-service quality are strongly predictive of customer satisfaction and trust. Radwan, AL-Dwairi, Muntaz and Kamala (2009) introduced integrity, ability, and quality services as attributes of e-vendor and showed that these factors have influence on customer trust.

Zeithamal et al.(2002), compared the assessment of E-SQ with traditional service quality from both the customer’s and the organization’s perspective. They suggested a means-end approach having the overall construct of e- SQ in terms its dimensions, the attributes that comprise each dimensions and the specific concrete cues that signal each attribute.
FIGURE 2.1: CONCEPTUAL MODEL FOR UNDERSTANDING AND IMPROVING E-SERVICE QUALITY (E-SQ)

Understanding the determinants of service quality, customer satisfaction and purchase intentions for online shopping is important for both marketing researchers and online stores managers. Moreover, previous studies have revealed that service quality in online environments is an important determinant of the effectiveness of e-commerce (Yang, 2001; Janda et al., 2002). However, few studies have examined the relation among different dimensions of e-service quality in predicting overall service quality, customer satisfaction, and purchase intentions for online shopping. Lee, Gwo-Guang & Lin, Hsiu-Fen (2005) in their study attempt to derive the instrument dimensions of e-service quality through modifying the SERVQUAL model to consider the online shopping context, and develop a research model to examine how e-service quality
dimensions affect overall service quality, customer satisfaction and purchase intentions.

FIGURE 2.2: E-SERVICE QUALITY DIMENSIONS (MODIFYING SERVQUAL MODEL)

For online customers, high standard e-service quality is the means by which the potential benefits of the internet can be realized (Yang, 2001). Because it is much easier to compare product technical features and prices online than through traditional channels, e-service quality becomes a key factor for customers (Santos, 2003). Online customers thus expect equal or higher levels of service quality than traditional channel customers (Lee, Gwo-Guang & Lin, Hsiu-Fen, 2005).

Parasuraman et. al. (2005) has defined e-SQ broadly to encompass all phases of a customer’s interactions with a Web site: The extent to which a Web site facilitates efficient and effective shopping, purchasing, and delivery. Ruyter et al. (2001, p. 2) describe e-service as “content-centred and internet-based customer service, driven by the customer . . . with the goal of strengthening customer-service provider relationships”. Collier and Bienstock (2006) defined e-SQ as “customer’s perceptions of the outcome of the service along with recovery perceptions if a problem should occur”. Rowley (2006) gives a definition (in conclusion of many
scholars’ opinions), “e-service, based on information technology, includes the information provision and system support, the logistic transportation of service and the trace and exchange of information”

A review of existing literature on e-service quality shows still more different dimensions in e-service quality that are useful for different research contexts (Madu and Madu 2002, Li and Suomi, 2009; Santos 2003; Field et al. 2004; Ho and Lin, 2010: Kim and Stoel 2004; Yang and Fang 2004; Long and McMellon 2004; Gounaris et al. 2005; Lee and Lin 2005; Kim et al. 2006; Cristobal et al. 2007). In line with the different conceptualizations of e-services, previous efforts to measure e-service quality also display different approaches (Bauer et al., 2006; Loiacono et al., 2000; Wolfinbarger and Gilly, 2003; Yoo and Donthu, 2001; Zeithaml et al., 2002). Rowley (2006) points out that the existing literature on e-service quality mainly studies the dimension and measuring method of e-service quality, customers’ online experience.

On the basis of a comprehensive review and synthesis of the extent literature on e-SQ, Parasuraman, Zeithaml, & Malhotra (2005) mention five broad sets of criteria as relevant to E-SQ: (a) information availability and content; (b) ease of use or usability; (c) privacy/security; (d) graphic style; and (e) reliability/fulfilment. Collier and Bienstock (2006) contend that the construct of e-service quality does not cause ease-of-use or information accuracy, suggesting that it is just the opposite; the dimensions of design and ease-of-use form the overall evaluation in the customer’s judgment of quality. Yang and Jun (2008) measured e-service quality using two groups: Internet purchasers and Internet non-purchasers. They found that reliability was the most important dimension
for Internet purchasers even when compared to access, ease of use, personalization, security, and credibility.

Past research has found a positive relationship between service quality and repurchase intentions, willingness to recommend, loyalty, and behavioural intentions (Cronin et al., 2000; Cronin and Taylor, 1992; Oliver, 1980; Zeithaml et al., 1996). Reichheld and Schefter (2000) indicated that retention of e-customers can only be accomplished by providing superior service quality. Zeithmal et al. (2002) proposed that e-service quality has a positive impact on customers’ e-shopping behavior. DeLone and McLean (1992, 2004) also suggested that, service quality will affect user intention.

2.5.2 Definitions and Dimensions of E-Service quality

Parasuraman et al. (1988) conceptualize service quality as the relative perceptual distance between customer expectations and evaluations of service experiences and service quality using a multi-item scale called the SERVQUAL model. The SERVQUAL model includes the five dimensions of tangibles (physical facilities and the appearance of personnel), reliability (ability to perform the promised service dependably and accurately), responsiveness (willingness to help customers and provide prompt service), assurance (employee knowledge base which induces customer trust and confidence), and empathy (caring and individualized attention provided to customers by the service provider) (Parasuraman et al., 1988). Moreover, several studies have proposed that the SERVQUAL scale items must be reformulated before they can be meaningfully used in the online shopping context (van Riel et al., 2001; Santos, 2003).
Doll and Torkzadeh (1988) have purified scale proposed by Baroudi and Orlikowski (1988) to a scale that gauges five quality dimensions influencing end-user satisfaction with information systems: content, accuracy, format, ease of use, and timeliness.

Dabholkar (1996) conducts a research work on the dimensions of e-service quality focusing on website design, and he argues that 7 dimensions of e-service quality can be illustrated as the basic parameters in the judgement of e-service quality, including website design, reliability, speed of delivery, ease of use, enjoyment and control.

Joseph et al. (1999) have uncovered six underlying dimensions of online banking service quality: convenience/accuracy, feedback/complaint management, efficiency, queue management, accessibility and customization.

Loiacono, Watson, and Goodhue (2000) created WebQual, a scale for rating Web sites on 12 dimensions: informational fit to task, interaction, trust, response time, design, intuitiveness, visual appeal, innovativeness, flow-emotional appeal, integrated communication, business processes, and substitutability. However, this scale’s primary purpose was to generate information for Web site designers rather than to measure service quality as experienced by customers.

Kaynama and Black (2000) build on the traditional SERVQUAL dimensions to develop an e-service quality measure comprised of seven dimensions: content, access, navigation, design, response, background, and personalization.
Zeithaml, Parasuraman, and Malhotra’s (2000) study identified dozens of Web site features at the perceptual attribute level and categorized them into 11 e-SQ dimensions: Reliability: Correct technical functioning of the site and the accuracy of service promises (having items in stock, delivering what is ordered, delivering when promised), billing and product information. Responsiveness: Quick response and the ability to get help if there is a problem or question. Access: Ability to get on the site quickly and to reach the company when needed. Flexibility: Choice of ways to pay, ship, buy, search for, and return items. Ease of navigation: Site contains functions that help customers find what they need without difficulty, has good search functionality, and allows the customer to manoeuvre easily and quickly back and forth through the pages. Efficiency: Site is simple to use, structured properly, and requires a minimum of information to be input by the customer. Assurance/trust: Confidence the customer feels in dealing with the site and is due to the reputation of the site and the products or services it sells, as well as clear and truthful information presented. Security/privacy: Degree to which the customer believes the site is safe from intrusion and personal information is protected. Price knowledge: Extent to which the customer can determine shipping price, total price, and comparative prices during the shopping process. Site aesthetics: Appearance of the site. Customization/personalization: How much and how easily the site can be tailored to individual customers’ preferences, histories, and ways of shopping. The collection of Web site attributes pertaining to these 11 dimensions served as the e-SQ domain from which researchers drew items for the e-SQ scale.

Yoo and Donthu’s (2001) SITEQUAL believed the e-service quality includes four dimensions such as the accessibility, handling speed of the
memorizer, the artistic design and the response rate of interaction. They developed a nine-item SITEQUAL scale for measuring site quality on four dimensions: ease of use, aesthetic design, processing speed, and interactive responsiveness. Like WebQual, SITEQUAL does not capture all aspects of the purchasing process and therefore does not constitute a comprehensive assessment of a site’s service quality.

Cox and Dale (2001) set up 6 dimensions of online retailing service quality with the comparison of the traditional dimensions of service quality, and the six dimensions are website appearance, communication, accessibility, credibility, understanding and availability.

Barnes and Vidgen (2002) developed a completely different scale to measure an organization’s e-commerce offering, which they also called WebQual. This scale provides an index of a site’s quality (customer perceptions weighted by importance) and has five factors: usability, design, information, trust, and empathy.

E-service quality is defined as seven dimensions that form two scales: a core e-SQ scale and a recovery scale (Zeithamal, 2002). Core e-SQ consists of four dimensions – efficiency, reliability, fulfilment and privacy. The recovery scale includes dimensions such as responsiveness, compensation and contact. According to researcher there is variety of determinants associated with the above mentioned dimensions of e-service quality.

Wang and Huarng (2002) identified following nine factors that affect e-satisfaction. These nine factors consists of general feedback on the web site design, competitive price of the product, merchandise availability,
merchandise condition, on-time delivery, merchandise return policy, customer support, E-mail confirmation on customer order, promotion activities. Wang M. (2003) aimed at assessing e-service quality via customer’s e-satisfaction. For this purpose he defined e-service quality and e-satisfaction and their relationship. Further presented means to access e-service quality.

Wolfinbarger and Gilly (2002) develop an e-service quality scale which was initially titled COMQ and later was progressed to eTailQ with the following four dimensions: website design, reliability, security and customer service (Wolfinbarger and Gilly 2002, 2003).

Madu and Madu (2002) have proposed the following 15 dimensions of online service quality based on their literature review: Performance, Features, Structure, Aesthetics, Reliability, Storage capacity, Serviceability, Security and system integrity, Trust, Responsiveness, Product differentiation and customization, Web store policies, Reputation, Assurance and Empathy.

Jessica Santos (2003) proposed and discussed conceptual model of key determinants of e-service quality as follows. Model proposed that e-service quality dimensions are of two types: incubative and active for increasing hit rates, stickiness, and customer retentions. An incubative dimension includes ease of use, appearance, linkages, structure and layout, and content. The active dimension includes reliability, efficiency, support, communication, security and incentives.
Van Riel et al. (2003) described their own e-service quality dimensions. They use design of user interface, reliability, security, customization, and responsiveness as major factors that drive e-service quality. These dimensions reflect the different nature of dealing with a website as opposed to interacting with service employees.

Wolfinbarger and Gilly (2003) developed a 14-item scale called eTailQ. The scale contains four factors: Web site design (involving some attributes associated with design as well as an item dealing with personalization and another dealing with product selection), reliability/fulfilment (involving accurate representation of the product, on-time delivery, and accurate orders), privacy/security (feeling safe and trusting of the site), and customer service (combining interest in solving problems, willingness of personnel to help, and prompt answers to inquiries).
Yang Zhilin et al. (2004) employed a two-stage approach in developing a reliable and valid measurement of online service quality. In this study as a result six dimensions with their associated 20 scale items, reduced from the original 31, were derived. The six dimensions generated include: reliability, responsiveness, competence, ease of use, security, and product portfolio.

Parasuraman et al. (2005) described the development, refinement, psychometric evaluation, properties, and potential applications of a multiple-item scale for measuring e-service quality (e-SQ) of sites on which customers shop online. They labelled and defined the final E-S-QUAL Scale, considering following four dimensions, as Efficiency: The ease and speed of accessing and using the site. Fulfilment: The extent to which the site’s promises about order delivery and item availability are fulfilled. System availability: The correct technical functioning of the site. Privacy: The degree to which the site is safe and protects customer information. An e-recovery service quality scale (E-RecSQUAL) was created on three dimensions as Responsiveness: Effective handling of problems and returns through the site. Compensation: The degree to which the site compensates customers for problems. Contact: The availability of assistance through telephone or online representatives. The purpose of E-S-QUAL (and E-RecS-QUAL) is solely to measure the service quality of Web sites.

Fassnacht and Koese (2006) argue that e-service quality’s first-order sub-dimensions of attractiveness of selection, information quality, ease-of-use, and technical quality are actually reflections of delivery quality (i.e. a second-order dimension).
Kim et al (2006) identified 9 e-service quality items, being: efficiency, fulfillment, system availability, privacy, responsiveness, compensation, contact, information and graphic style in online retailing.

Li and Suomi (2009) proposed eight dimensions of e-service quality, which are: website design, reliability, responsiveness, security, fulfillment, personalization, information and empathy.

Khaled Atallah Al-Tarawneh (2012) addressed the e-service quality issue in the electronic marketplace. The purpose of this study is to investigate e-service quality dimensions from customer’s perspectives. The study proposed a six-dimension scale for measuring e-service quality: Reliability; Responsiveness; Ease of use; Personalization; Security; and Website design from the customer’s perspective.
## Service Quality Dimensions

### TABLE 2.2: ACADEMIC AND PRACTITIONER DIMENSIONS OF E-SERVICE QUALITY

<table>
<thead>
<tr>
<th>SR. No.</th>
<th>Studies</th>
<th>Dimensions of E-service Quality</th>
<th>Gaps</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Parasuraman et al. (1988) The SERVQUAL model includes the five dimensions.</td>
<td>Tangibles, Reliability, Responsiveness, Assurance, and Empathy.</td>
<td>A multiple-item scale for measuring service quality (called SERVQUAL) was developed to measure service quality in service and retailing organization. It was quite general in nature, not specific to e-service quality and e-retailing.</td>
</tr>
<tr>
<td>2.</td>
<td>Doll and Torkzadeh (1988) - A scale that gauges five quality dimensions influencing end-user satisfaction with information systems</td>
<td>Content, Accuracy, Format, Ease of use, and Timeliness.</td>
<td>The instrument designed to measure the satisfaction of users who directly interact with specific information systems but not specifically e-shopping applications. Additional work is needed to develop the breadth of end-user computing in an organization (i.e. penetration) and the degree</td>
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<td></td>
<td>Dabholkar, P.A. (1996) - A research work on the dimensions of e-service quality focusing on 7 dimensions of e-service quality</td>
<td>The basic parameters in the judgment of e-service quality, including website design, reliability, speed of delivery, ease of use, enjoyment and control. The scenarios and questionnaires were about customers using a touch screen to order a meal in a fast food restaurant (technology-based self-service), or ordering verbally. A sample of College students was selected.</td>
<td>of sophistication (i.e. skills) of individual end users.</td>
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<td>3.</td>
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<tr>
<td>4.</td>
<td>Joseph et al. (1999) Six underlying dimensions of online banking service quality</td>
<td>Convenience/accuracy, Feedback/complaint management, Efficiency, Queue management, Accessibility and Customization. The study was measuring service quality factors specific to electronic banking. However generalizing the same for e-retailing industry need further analysis. However, the study was done in Australia, which needs similar study in Indian context.</td>
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<tr>
<td>5.</td>
<td>Loiacono, Watson, and Goodhue (2000) created</td>
<td>Informational fit to task, Interaction, Trust, Response time, Design, Intuitiveness, Visual</td>
<td>This scale's primary purpose is to generate information for Web site designers rather than</td>
</tr>
<tr>
<td></td>
<td>WebQual, a scale for rating Web sites on 12 dimensions.</td>
<td>appeal, Innovativeness, Flow-emotional appeal, Integrated communication, Business processes, and Substitutability</td>
<td>to measure service quality as experienced by customers.</td>
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</tr>
<tr>
<td>6.</td>
<td>Kaynama and Black (2000) E-service quality measure comprised of seven dimensions.</td>
<td>Content, Access, Navigation, Design, Response, Background, and Personalization.</td>
<td>Using online travel services as a case study, an assessment tool, E-QUAL, was developed to evaluate the service quality of electronic commerce businesses from the consumers' perspective.</td>
</tr>
<tr>
<td>7.</td>
<td>Zeithaml, Parasuraman, and Malhotra’s (2000) study identified 11 e-SQ dimensions</td>
<td>Reliability, Responsiveness, Access, Flexibility, Ease of use, Efficiency, Assurance/trust, Security/privacy, Price knowledge, Site aesthetics, Customization/personalization</td>
<td>The scale was designed to measure website quality and not the online shopping experience as whole.</td>
</tr>
<tr>
<td>8.</td>
<td>Yoo and Donthu’s (2001) SITEQUAL scale for measuring site</td>
<td>Ease of use, Aesthetic design, Processing speed, and Interactive responsiveness.</td>
<td>Like WebQual, SITEQUAL does not capture all aspects of the purchasing process and therefore does not constitute a comprehensive</td>
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<td>quality on four dimensions</td>
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<tr>
<td>9.</td>
<td>Cox and Dale (2001) - Six dimensions of online retailing service quality</td>
<td>Website appearance, Communication, Accessibility, Credibility, Understanding and Availability</td>
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<td></td>
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<td>This study outlined service quality factors for user interface over the internet but suggests that the future research should focus on identifying suitable determinants for the e-commerce environment.</td>
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<tr>
<td></td>
<td></td>
<td>WebQual is a method for assessing the quality of an organization’s e-commerce offering. The WebQual Index gives an overall rating of an e-commerce Web site that is based on customer perceptions of quality weighted by importance. Although this approach gives an indication of User perceptions, it does not take into account lifecycle aspects of service quality. In order to make a fuller assessment of service quality, the</td>
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</table>
11. Zeithaml, 2002 seven dimensions that form two scales: a core e-SQ scale and a recovery scale

<table>
<thead>
<tr>
<th>Study</th>
<th>Description</th>
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<tbody>
<tr>
<td>Zeithaml, 2002</td>
<td>Core e-SQ consists of four dimensions – Efficiency, Reliability, Fulfilment and privacy. The recovery scale includes dimensions such as Responsiveness, Compensation and Contact.</td>
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</tbody>
</table>

The scale has been validated in e-tailing context where products are ordered over the internet. However, the study knows almost nothing about the demographic, behavioural and experience correlates of E-SQ.


<table>
<thead>
<tr>
<th>Study</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>Wang and Huarng (2002)</td>
<td>General feedback on the web Site design, Competitive price of the product, Merchandise availability, Merchandise condition, On-time delivery, Merchandise return policy, Customer support, E-mail confirmation on customer order, Promotion activities.</td>
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</table>

This study identified key determinants of online shopper Post-shopping evaluation, and investigates how these key determinants affect their overall star ratings. This will help an individual online store to understand customer’s purchase behaviour and to improve service quality and customer satisfaction. |
<table>
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<tr>
<th></th>
<th></th>
<th>Performance, Features, Structure, Aesthetics, Reliability, Storage capacity, Serviceability, Security and system integrity, Trust, Responsiveness, Product differentiation and customization, Web store policies, Reputation, Assurance and Empathy.</th>
</tr>
</thead>
<tbody>
<tr>
<td>13.</td>
<td>Madu and Madu (2002) proposed 15 dimensions of online service quality</td>
<td>The focus was on identifying those characteristics that are perceived by customers as a necessity in achieving customer satisfaction in a virtual operation. Researchers aimed at investigating quality management issues that affect the competitiveness of Web storefronts and their ability to deliver quality products and services to customers. However, the further research is needed to identify the significance of the dimensions as well as the mutual exclusivity of these dimensions.</td>
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<tr>
<td>14.</td>
<td>Jessica Santos (2003) proposed e-service</td>
<td>The e-service quality model proposed in the study did not provide any specific</td>
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<tr>
<td></td>
<td></td>
<td>The study was predominantly based on views of college students and recent college</td>
</tr>
</tbody>
</table>

Quality dimensions are of two types: incubative and active layout, and Content. The active dimension includes Reliability, Efficiency, Support, Communication, Security and Incentives. Measurement scales. The two dimensions and 11 determinants proposed in this research provide a theoretical framework in e-service quality. Further research is needed to generate items or statements to flesh out these determinants, and to develop rating scales and instructions for these statements. It would be interesting to investigate this area with consideration of the differences (if any) between: businesses offering mainly goods and those offering mainly services; B2B versus B2C. Other interesting area for further research includes an investigation of e-service quality in different online service categories.
graduates, which cannot be generalized. Also, the study focused on only one type of e-service, online flight reservation websites. The study should be replicated for different categories of e-service, creating a broader base for generalizations about the relationships between customer disposition, service quality dimensions and zones of tolerance.

| 16. | Wolfinbarger and Gilly (2002, 2003) E-Service quality scale- initially titled COMQ and later progressed to eTailQ with four dimensions | Website design, Reliability, Security and Customer service. | The sample used in this online survey was not a random sample; rather, it was from an online panel that is more upscale and technologically sophisticated than the general Internet population. However, as less technosavvy consumers begin to engage in online shopping, their needs and preferences will need to be compared to those found here using |
participants who likely reflect the “early majority” of online shoppers. The research was done with American consumers, it remains to be seen whether or not International populations perceive quality in the same fashion. The purpose was to develop a general model of e-tail quality; future research should investigate how characteristics of various product categories may affect the importance of the four factors in predicting quality.

| 17. | Yang Zhilin et al. (2004) six dimensions | Reliability, Responsiveness, Competence, Ease of use, Security, and Product portfolio. | The participants in this study were respondents residing in USA; they may possess attributes and behaviours that differ from those in other parts of the world. In this study customer reviews of only online banking |
services were considered to identify online service quality dimensions. To verify the dimensions developed in this study and to enhance the generalizability of the research findings, future inquiries could take up various forms of online businesses.

| 18. | Parasuraman, Zeithaml, and Malhotra’s (2005) Final E-S-QUAL Scale and e-recovery service quality scale (E-RecSQUAL) | E-S-QUAL Scale - Efficiency, Fulfilment, System availability and Privacy. E-RecSQUAL - Responsiveness, Compensation and Contact. | The purpose of E-S-QUAL (and E-RecSQUAL) was solely to measure the service quality of Web sites and not the service quality experience of online shopping experience. |
| 19. | Kim et al (2006) identified nine e-service quality items | Efficiency, Fulfilment, System availability, Privacy, Responsiveness, Compensation, Contact, information and Graphic style | This study modified E-S-QUAL model and labelled as E-A-S-QUAL (E-S-QUAL for apparel) which is expected to capture extensive service attributes available on apparel retail |
20. Li and Suomi (2009) proposed eight dimensions of e-service quality: Website design, Reliability, Responsiveness, Security, Fulfilment, Personalization, Information and Empathy. The purpose of this paper is to uncover and interpret the current researches in the dimensions of e-service quality, and propose a theoretical scale to measure e-service quality, which provides fresh insight into the dimensions of e-service quality. There is scope for further work on the measures of e-service quality factors in the context of online shopping which have impact on customer’s web sites. Online service attributes identified in this research were isolated from women’s apparel web sites; thus, some of these attributes may not be applicable to other product categories. Future research may need to replicate this study using retail web sites selling different product categories.
| 21. | Khaled Atallah Al-Tarawneh (2012) Six-dimension scale for measuring e-service quality | Reliability; Responsiveness; Ease of use; Personalization; Security; and Website design | This study addresses the e-service quality issue in the electronic marketplace. The purpose of the study was to investigate e-service quality dimensions from customer’s perspectives. However, the study only considered internet banking customers of commercial banks in Jordan. | perception of e-service quality and satisfaction, and the relationship between e-service quality, customer satisfaction and retention to e-service adoption. |
2.6 Study of the terms Customer Satisfaction and E-Satisfaction

Customer satisfaction represents the customer’s perceptions and evaluation of service performance in terms of fulfilment of expectations, values and norms, underpinning the confirmation/disconfirmation paradigm (Yi, 1989). Satisfaction has been shown to be positively related to loyalty and this effect also occurs in online environment (Oliver, 1999).

Zeithaml and Bitner (2000) defined customer satisfaction as the customers’ evaluation of a product or service in terms of whether that product or service has met their needs and expectations. Customer satisfaction is based on an evaluation of product-related standards, product consumption experiences and/or purchase-related attributes (Giese & Cote, 2002). To ensure customer is satisfied with the services, the companies need to achieve quality not only by eliminating the cause for direct complaint but they need to provide their product or services with excellent, attractive quality and also the delight to the customers (Feciková, 2004). Apart from that, consumer satisfaction is derived from the customers’ comparison of their actual experience with a service and contrasted with the customers’ service expectation (Gilbert & Veloutsou, 2006). Customer satisfaction is an emotional reaction after consumers purchase and experience a product or service. These accumulative reactions have become the customer satisfaction with a company (Shih-Chih, 2011). Customer satisfaction levels are positively affected by the two contributors of technology readiness, which is optimism and innovativeness whereas discomfort and insecurity are inhibitors that negatively influence customer’s satisfaction towards the use of self-service technology (Abdullah & Halim, 2012).
Roy & Butaney (2010) in their study considered e-Satisfaction from the psychological perspective. They referred to customer’s total prior experience with a given website. For the purposes of this study, operationally e-satisfaction is defined as the extent to which the web site has exceeded the customer’s expectations and requirements, in terms of satisfaction with functional performance of the site as well as with the perceived satisfaction with overall quality of experience e.g., in terms of transacting business on the site.

2.6.1 Effects of E-Satisfaction

Shankar, Smith and Rangaswamy (2003) indicated that the effect of satisfaction on loyalty is stronger in online than offline. Customer loyalty is an outcome of the customer’s overall satisfaction. Satisfied customers tend to have higher usage of service, possess stronger repurchase intention and are often eager to recommend the product or service to their acquaintances than those who are not satisfied. In addition, dissatisfied customers are more likely to search for alternative information and switch to another retailer and is also more resistant to developing a close relationship with the retailer. Ha’s (2005) study further indicates that the customer’s satisfaction with the site’s performance influences the customer’s repurchase decisions and intentions.

Customer satisfaction is closely related to interpersonal trust and is considered as antecedent of trust (Ghane1, Fathian &. Gholamian, 2011) Ribbink et al stated in their study, a positive effect of satisfaction on trust can be expected in the online environment as well. Customers’ satisfactory experiences with a specific e-tailor are expected to increase their willingness to make more online purchases from that e-tailor
(loyalty), as well as their trust in the online medium as such. Satisfaction with a specific application of the e-tailor will increase confidence in the e-tailor as a whole. It is therefore expected that e-satisfaction directly and positively affects e-trust (Ribbink, Riel, Liljander and Streukens, 2004).

2.6.2 Factors affecting E-Satisfaction

According to Zeithamal (2002) the level of e-satisfaction is also determined by the quality of services, the price level and the purchase process. Szymanski, D. M., & Hise, R. T. (2000) examined the role that consumer perceptions of online convenience, merchandising (product offerings and product information), site design, and financial security play in e-satisfaction assessments. They find that convenience, site design, and financial security are the dominant factors in consumer assessments of e-satisfaction.

Wang and Huarng (2002) identified following nine factors that affect e-satisfaction. These nine factors consists of general feedback on the web site design, competitive price of the product, merchandise availability, merchandise condition, on-time delivery, merchandise return policy, customer support, E-mail confirmation on customer order, promotion activities. Wang M. (2003) aimed at assessing e-service quality via customer’s e-satisfaction. For this purpose he defined e-service quality and e-satisfaction and their relationship. Wang M. (2003)’s empirical study indicates that the primary determinant of e-satisfaction in positive reviews is on-time delivery and the primary determinant of e-satisfaction in negative reviews is customer support. E-service quality and e-satisfaction are critical components in the globalization of e-commerce. High quality e-service is the key to success for any e-tailors doing business in this competitive global e-commerce environment.
2.7 Understanding of the term Technology Readiness

Many service providers have adopted a wide range of technologies in the process of service delivery. Customers use the new technologies to produce and consume services without direct personal contact with firm representatives. Self Service Technologies (SSTs) are technological interfaces that enable customers to take advantage of a service without any service employee involvement (Meuter et al., 2000). Types of SSTs include telephone/interactive voice response, interactive kiosks and the internet. There is limited understanding of what influences customers’ perception and adoption of SSTs. Since these new technologies have transformed the nature of customer communication and service (Howard and Worboys, 2003), it is necessary to investigate how customers assess the attributes of SST service and how service outcomes are affected. Although consumers are increasingly sophisticated in their technological interactions, they may avoid certain SSTs if uncomfortable, even when benefits are obvious (Meuter et al., 2003).

Studies have indicated that customers often accept the use of SSTs, but also commonly exhibit anxiety related to operation (Meuter et al., 2003; Meuter et al., 2005; Parasuraman, 2000; Yen, 2005; Zeithaml et al., 2002). These new service options bring flexibility to consumers and result in saving time. Nevertheless, some customers feel uncomfortable when confronted with an SST, resulting in frustration with technology-based systems (Parasuraman, 2000). Studies also have shown that some people exhibit certain degree of technophobia (Meuter et al., 2003) or are technology pessimists (Edison and Geissler, 2003; Modahl, 1999). Utilization of SSTs differs based on individual psychographic characteristics such as Technology Readiness (TR). Therefore, firms
deploying technology in their services need to understand their customers’ readiness to use such SST service options.

For online services, there is a strong and growing interest in understanding what individuals believe about technology and how these beliefs can influence design requirements and ultimately evaluation of success or failure. (Barley, 1986; DeSancits & Poole, 1994; Orlikowski & Gash, 1994; Tan & Hunter, 2002)

The extent literature strongly suggests that people simultaneously hold positive and negative beliefs about technology-based products and services (Cowles, 1989; Davis, Bagozzi, & Warsaw, 1989; Cowles & Crosby, 1990; Dabholkar, 1994; Mick & Fournier, 1998). Thus the meaning of technology for any person arises out of a process of contrast and similarity (Kelly, 1955; Duck, 1994; Marsden & Litter, 1998)

Although paradoxical beliefs about technology may coexist, people can be arrayed along a continuum anchored by strongly positive (highly technology ready) at one end to strongly negative (highly technology resistant) at other (Mick & Fournier, 1998; Parasuraman, 2000)

The Technology Attitude Model [TAM] was developed by Davis (1989). This model suggests that both perceived ease of use of technology and perceived usefulness correlate with system use. The model hypothesises that actual system use is affected by behavioural intentions, which are affected by attitudes toward use. The beliefs about the system, perceived usefulness and perceived ease of use, directly affect attitudes toward use. Davis concluded that the relationship between perceived usefulness and user acceptance is stronger than that of perceived ease of use and user acceptance.
A more recent model considering consumer choice and technology is the technology readiness quotient (TRQ) (Parasuraman and Colby 1998). Technology readiness refers to people’s propensity to adopt and use new technologies for accomplishing goals in home life and work. This includes education. Parasuraman and Colby (1998) argue technology readiness is an individual-level trait that is defined by four dimensions, including: Optimism - belief in the benefits of technology; Innovativeness - tendency to pioneer and influence; Comfort Level - feeling of control over technology; Assurance - confidence in the security of technology-based transaction.

Customers’ technology readiness (TR) should be taken into account in order to accurately predict the perception and behaviour of customers (Parasuraman, 2000). Technology readiness (TR) refers to people’s propensity to embrace and use new technologies for accomplishing goals in home life and at work (Parasuraman, 2000). The TR construct can be viewed as an overall state of mind resulting from a gestalt of mental enablers and inhibitors that collectively determine a person’s predisposition toward technologies (Parasuraman, 2000). The construct is based on four dimensions: Optimism, Innovativeness, Discomfort and Insecurity. Optimism and innovativeness are the positive drivers of TR, encouraging customers to use technological products/services and to hold a positive attitude toward technology, while discomfort and insecurity are negative drivers, making customers reluctant to use technology.

Optimism refers to a positive view of technology and a belief that it offers people increased control, flexibility, and efficiency in their lives (Parasuraman & Colby, 2001). Innovativeness is a tendency to be a
technology pioneer and thought leader. Innovativeness measures the extent to which an individual believes he or she is at the forefront of trying out new technology based products and/or services and is considered by others as an opinion leader on technology-related issues (Parasuraman & Colby, 2001). Individual with high optimism and innovativeness is expected to have stronger intrinsic motivation to use the new technology and enjoy the stimulation trying new technology, hence result in customer satisfaction. Innovativeness according to Putit (2008) is consumer predisposition to adopt online transaction behaviours earlier then rest of his/her social system. Previous studies indicate that innovativeness have a strong positive effect on behavioural intention to use technology related product or service such as IT-based innovation (Yi, Fiedler, & Park, 2006), mobile data service (Yang, 2010) and web casting (Lin, 2004).

Discomfort is a perceived lack of control over technology and a feeling of being overwhelmed by it (Parasuraman, 2000). This represents the extent to which people have a general paranoia about technology-based products and services, believing that they tend to be exclusionary rather than inclusive for all kinds of people (Tsikriktsis, 2004). Insecurity on the other hand is the feeling of distrust of technology and scepticism about its ability to work properly. Although somewhat related to discomfort, this dimension focuses on specific aspects of technology-based transactions, rather than on a lack of comfort with technology in general (Tsikriktsis, 2004). Feeling of insecurity might result in people’s resistance towards the use of technology such as rejection, postponement and opposition that will effect business operation. Consumers might also distance themselves if they have a negative view towards the technology and assumes that the innovation might be harmful, unhealthy or might cause injury (Kleijnen,
Leeb, & Wetzelsc 2009). Insecurity is the result of lack of trust in technology and its ability to work properly. A perceived lack of security towards the SST system will resulted in slower rate of adoption among consumers (Parasuraman, 2000). Therefore, it is expected that insecurity will have a negative relationship with customer satisfaction (Abdullah & Halim; 2012).

Parasuraman and Colby (2001) found customer segments with differing TR profiles vary significantly in terms of internet-related behaviours, while Yen (2005) indicated that not all users are equally ready to embrace technology-assisted services. Therefore, TR cannot be ignored in assessing customers’ adoption of SSTs because it plays a vital role in the resulting perceptions and behaviours.

TR is a multidimensional psychographic construct that refers to the propensity of customers to embrace and use new technologies for accomplishing goals (Parasuraman, 2000, Parasuraman, & Colby, 2001). TR has been applied in a variety of contexts including consumer markets (Parasuraman & Grewal, 2000), online services (Taylor, Celuch, & Goodwin, 2002; Rust & Kannan, 2003), educational choice (Hendry, 2000), and health care (Rosen, Mittalm Mulsant, Degenholtz, Castle, & Fox, 2003).

Consumer's demonstrating high technology readiness are more likely to turn to technology-based ‘help’, including manuals and documentation; technical support and system update messages. Parasuraman and Colby (1998) claim that those consumer's lower in technology readiness are concerned about security and the associated risk with technology.
Mick and Fournier (1998) also identified eight technology paradoxes consumers cope with: control/chaos, freedom/enslavement, new/obsolete, competence/incompetence, efficiency/inefficiency, fulfils/creates needs, assimilation/isolation, and engaging/disengaging. Technology tends to trigger both positive and negative feelings, which result in anxiety.

TR has been indicated as the antecedent of e-service quality (Zeithaml et al., 2002). Parasuraman and Grewal (2000) also found that perceived service quality can be influenced by TR. In addition, Meuter et al. (2003) suggested that technology anxiety is related to consumers’ evaluation of SSTs. Liljander et al. (2006) and Zeithaml et al. (2002) further suggest that customers’ TR has a positive impact on their evaluation of e service quality.

TR is the overall mental situation that includes positive (optimism and innovativeness) and negative (discomfort and insecurity) feelings when consumers interact with technology based services and is similar to the positive (at-ease/comfort/relaxation) and negative (discomfort/anxiety) feelings included in social comfort when customers interact with a service representative, which was found to influence satisfaction (Butcher et al., 2001).

Furthermore, Liljander et al. (2006) and Yen (2005) indicated that TR is related to customer satisfaction with SSTs because a customer with greater attitude, ability, and willingness to adopt technology would be more likely to enjoy and express satisfaction with SSTs than those with lower TR.
Zeithaml et al. (2002) proposed that TR has a positive impact on e-shopping behaviour. Therefore, it is expected that TR will have a positive effect on customers’ behavioural intentions.

Chris Lin et al. (2006) study results reinforce the role TR plays in consumer-SST interactions. Firms should thus pay special attention to TR in order to improve favourable outcomes of SST implementation. Results suggest the influence of TR on SST-satisfaction is mediated through SST-service quality. In other words, customers with more positive levels of attitude toward technology, ability to use technology, and willingness to adopt technology are more likely to appreciate SSTs, resulting in higher perception of service quality, which in turn enhances customer satisfaction. However, this interesting finding requires further theoretical and empirical assessment in future research.

Lin Chien-Hsin (2010) stated that the effectiveness of various value components in creating e-service value may vary across consumers, especially in terms of their differing levels of technology readiness (TR). Some feel uncomfortable with virtual e-service environments (Jahng et al., 2001), while others find e-services to be time consuming and spatially inconvenient (Heinonen, 2006). Consumers have also been frustrated by technology failures, process failures, and technology- and service-design problems in e-service environments (Meuter et al., 2000). Generally, technology failures in e-service encounters are more uniform and common than failures in human-to-human service encounters (Meuter et al., 2000). These findings are consistent with the so-called ‘paradox of technology’: technology is a double-edged sword, experienced positively by some and negatively by others (Mick & Fournier, 1998). Lin’s (2010) study identifies the construct of ‘TR’ to represent consumers’ beliefs
about technology, which is derived from their past experience, expertise, or risk perceptions in similar e-contexts.

TR may be used to depict individual differences in capacity and motivation for solving technology-related issues (Matthing, Kristensson, Gustafsson, & Parasuraman, 2006). Consumers’ TR has been proposed to positively influence their perceived online service quality (Lin & Hsieh, 2006; Yen, 2005), perceived usefulness and ease of use of e-service systems (Lin, Shih, & Sher, 2007), and subsequent behavioural intentions (Lin & Hsieh, 2006, 2007); however, empirical findings remain scarce (Zeithaml, Parasuraman, & Malhotra, 2002). Lin’s (2010) surmises that when consumers evaluate e-service value, they retrieve and process cognitive information about technology. Naturally, it can be understood that TR beliefs reinforce or mitigate the formation process of consumers’ e-service value.

TR is related to self-efficacy (Lin et al., 2007), which is defined as an individual’s assessment of his/her ability to perform a behaviour (Bandura, 1994). Consumers with high levels of self-efficacy are expected to have more confidence in their ability to use e-services than other consumers (Dabholkar & Bagozzi, 2002). Consumers’ self-efficacy is positively related to perceived overall service value (McKee et al., 2006) and cognitive valuation of e-service systems (Lin et al., 2007), and negatively related to technology anxiety, which fosters timidity in technology use (Meuter, Ostrom, Bitner, & Roundtree, 2003). TR also may be associated with people’s inherent novelty seeking, an aspect of innovativeness that refers to an individual’s desire to seek out new stimuli (Hirschman, 1980). Consumers who are high in novelty seeking tend to have more positive valuations of new technology than others, to have a
stronger motivation to use technology, and to enjoy the stimulation derived from using new technology (Hirschman, 1980).

As compared with other consumers, low-TR consumers, constrained by less favourable beliefs about e-services, may be less motivated or completely unable to precisely process product quality cues, and subsequently may become less personally involved in e-service delivery and pay less attention to complex intrinsic quality cues. By contrast, high-TR consumers, focusing on complex intrinsic benefit cues, are more likely than others to overcome information overload (Thompson, Hamilton, & Rust, 2005) and to believe they are more effective in generating real value for themselves in e-service encounters. High-TR consumers would not be greatly concerned about reliability and control aspects of e-services; the beneficial features engendered from e-service innovation would lead them to try them anyway (Dabholkar & Bagozzi, 2002). The less perceived technology anxiety of high-TR consumers also facilitates them to more positively evaluate the service-enhancing attributes of e-services (Lin & Hsieh, 2006; Meuter et al., 2003). Therefore, Lin (2010) proposes that high-TR consumers assign greater weights to service-enhancing components when forming their overall e-service value than do low-TR consumers.

Because of technology’s expanding role in service delivery, Massey et al. (2007) draw upon research in consumer behaviour that has investigated customer’s beliefs about technology to examine customer usability perceptions for online services (Cowles, 1989; Cowles & Crosby, 1990; Dabholkar, 1996; Mick & Fournier, 1998; Parasuraman 2000; Parasuraman & colby, 2001). The purpose of this study was to examine the relationship between TR and usability in an online service context.
Massey et al. contend that TR and usability are related because: both involve inherently subjective phenomena such as attitudes and opinions, both are concerned with how specific customers interact with a technology based service, and both focus on the accomplishment of goals via technology.

Parasuraman and Colby (2001) offer a typology of customers based on the various combinations of both positive (contributing) and negative (inhibiting) beliefs regarding technology. The typology provides a useful means to segment customers into distinct groups. In describing TR, Parasuraman and Colby (2001) identified five distinct groups: Explorers, Pioneers, Sceptics, Paranoids and Laggards. According to researcher explorers are a relatively easy group to attract when a new technology-based product or service is introduced. Laggards are typically the last group to adopt a new technology-based product or service. Pioneers desire the benefits of technology, but are more practical about the difficulties and challenges. Sceptics need to be convinced of benefits. Paranoids may find the technology interesting but are more concerned about risks. Prior research on the adoption of various new technologies suggests that each TR segment enters the market at different times i.e. Explorers before Pioneers, Pioneers before Sceptics, etc. (Parasuraman and Colby, 2001; Tsikriktsis, 2004).

The results of Massey et al.(2007) exploratory analysis provide evidence that, TR customer segments vary in usability requirements and usability evaluation of specific online service interfaces are influenced by a complex interaction between site type, access method, and TR customer segment. As organizations continue to expand their online service offerings, managers must recognize that the interface exists to serve the customer, so their design must be matched to market needs and TR.
2.8 Perceptive of the term E-Shopping Behaviour

Analysing consumer behaviour is very old phenomenon. The renowned marketing expert Philip Kotler has published several works on the topic of consumer behaviour theories. These theories have been used for many years not only to understand the customers, but also to create a marketing strategy that will attract the customer efficiently. Hence understanding and identifying the customer is closely related to the company’s marketing strategies. These theories can also be applied to identify the online shopping behaviour and to create certain customer segments. However, some distinctions must still be made when considering traditional consumer behaviour and online consumer behaviour.

Donal Rogan (2007) explains the relationship between consumer behaviour and marketing strategy. He states that “strategy is about increasing the probability and frequency of buyer behaviour. Requirements for succeeding in doing this are to know the customer and understand the customer’s needs and wants.”

Chisnall (1994) points out that human needs and motives are inextricably linked and that the relationship between them is so very close that it becomes difficult to identify the precise difference which may characterize them.

Buyers’ characteristics are important theories from Kotler and Armstrong (2007) and it explains the way that the consumer interprets and receives motivation from advertisements. The decisions of consumers are influenced by a number of individual characteristics that are linked to the consumer’s specific needs (Kotler & Armstrong, 2007).
Allred, Smith and Swinyard (2006) identify the online customer to have the following characteristics: younger, wealthier, better educated, having a higher “computer literacy” and are bigger retail spenders. Donuthou and Garcia (1999) identify the online customer as: older, make more money, convenience seeker, innovative, impulsive, variety seeker, less risk aware, less brand and price conscious and with a more positive attitude towards advertising and direct marketing. Smith and Rupp (2003) identify that consumer from a higher social class generally purchase more and have a higher intention to purchase online than the lower social class.

Monsuwe, Dellaert and Ruyter (2004) explained that the personal online consumer characteristics and income has a vital role for online purchase behaviour. The authors pointed out that customers with higher household income would have a more positive attitude towards online shopping. Smith and Rupp (2003) identified the age factor as a determinant for online purchase intentions. Authors argued that older people having no frequent access to internet and computer would not indulge in online shopping whereas it other way round for young adults because younger people were also to have more technology knowledge.

2.9 Gap Analysis

Though, there are existing studies concentrated on online shopping around the world, many of these studies conclude that there is still a need for closer examination of the online shopping intention in specific countries, very much due to the fact of cultural differences and the prior imperfection of technology acceptance relationships of varying consumer markets (Bobbit & Dabholkar, 2001; Goldsmith, 2002; Salisbury, et al., 2001).
Majority of online retail stores do not focus on their online service to customers although e-service is very important in the Internet market. They do not recognize that the competition among online stores relies mainly on their online service and they do not have the motivation to adopt some strategies to develop or improve e-shopping behaviour of customers. Even though some e-stores have realized the importance of e-service expected to customers, they seem not to understand customer’s perception of e-tailor and how customers assess their online service quality. Currently, despite many studies concerning traditional service quality, relatively few studies have been conducted in the Internet market, and even less on online service quality in e-retailing. This study focuses on e-service quality dimensions in the Internet market with an empirical study on online shopping.

The relationship between perceptions of service quality on one hand, and customer retention and loyalty on the other (Anderson & Sullivan, 1993; Brady & Robertson, 2001; Reichheld & Sasser, 1990) is generally considered to hold equally well in an online service environment (Reichheld & Schefter, 2000; Zeithaml et al., 2000). However, research on customer evaluations of self-service technology (SST) (Bitner et al., 2000; Dabholkar, 1996; Meuter et al., 2000) has been scarce. It is evident that service researchers must pay more attention to customer evaluations of technology-based services (Parasuraman & Grewal, 2000). However, the study of relationship between perceptions of service quality with respect to the specific e-service such as online shopping is needed in Indian context.

There are many scales developed specifically for the online shopping environment; therefore one must be cautious regarding their application
in other shopping contexts. There are few evidences that the scales replicate relatively well across independent online shopper samples. Continuous vigilance is necessary, given the fast pace of Internet development. Further, efforts should be directed toward testing the measure of perceived shopping risks so as to enhance the scalability of the measure. Forsythe et al. (2006) developed the scale to address the broad utilitarian and hedonic reasons people shop online. However, this encourages others to examine more specific hedonic or utilitarian motives.

From the literature review various research gaps were found as follows:

- Most of the research work related to e-shopping was done in other part of the world. Indian context needs to be explored.
- Research can use different methodologies to examine the relationship between e-service quality and customer purchase behaviour in online shopping context.
- The sample employed was not representative of the general population of online shoppers.
- Various e-service quality dimension models were not evaluated across different categories of product.
- Evaluation of value and joy factors was not done although these are significant contributors to the total e-experience.
- Understanding of people’s belief about technology readiness was not addressed. People’s belief on online shopping simultaneously holds positive and negative faith about technology-base product and services.
- In-depth analysis of TR components and their impact in increasing customers shopping behavior was not studied.
• The link between TR and usability is not well established in online shopping context. Empirical testing via both experiments and field study are essential to establish the link between TR-Usability.

• The examination of interrelationships among technology readiness, e-SQ and online shopping behavior was not covered.

2.10 Identification of variables for the study

As literature review suggests, for the present study three major variables are considered. Customer’s E-shopping behaviour is considered as dependent variable and customer’s Technology Readiness and E-Service quality of online stores are considered as independent variables.

Technology Readiness of customers in Indian context was decided to measure using Technology Readiness Index (TRI) scale developed and validated by Parasuraman (2000). The scale identified to measure technology readiness on four dimensions – optimism, innovativeness, discomfort and insecurity.

1. Optimism - A positive view of technology and a belief that it offers people increased control, flexibility, and efficiency in their lives.

2. Innovativeness - A tendency to be a technology pioneer and thought leader.

3. Discomfort - A perceived lack of control over technology and a feeling of being overwhelmed by it.

4. Insecurity - Distrust of technology and skepticism about its ability to work properly.

From the literature review following eleven dimensions was considered to measure e-service quality of online store:
1. **Reliability**: Reliability refers to the consistency of performance and dependability of companies (Parasuraman et al. 1985, 1988). Reliability has been interpreted as the currency and accuracy of product information (Kaynama & Black, 2000; Zeithaml et al., 2000), the technical functioning of the site, and the accuracy of execution of service promises (Zeithaml et al., 2000). According to some empirical studies, reliability is the most important dimension of e-service quality. In the virtual environment, it is vital to make customers to trust that the company is going to perform what it promises to do. Reliability can make customers recognize the consistency and credibility of the company as well. To be considered reliable, online service providers must deliver the promised services accurately and within the promised time frame.

2. **Responsiveness**: Relates to quick response and the ability to get help if there is a problem or question. Sending a timely response to e-mail requests or complaints, and confirmations of orders, seems important in e-services as well (Kaynama & Black, 2000; Zeithaml et al., 2000). Responsiveness refers to effective handling of problems and returns via the Internet. In e-service, company’s prompt service to customers via the Internet can make customers feel more comfortable during purchasing and continue purchasing without interruption.

3. **Access**: This refers to ability to get on the site quickly and to reach the online store when needed (Zeithamal et al. 2000). Access refers to the skill and capacity to provide a wide variety of goods and services to the customers, online (Sahney, S., et al., 2008). Also referred as system availability, means the correct technical function of the website. In e-service, the system
availability makes customers always accessible to the online service offered by online companies, which can help customers to have a good image of online companies. If customers cannot use the online system when they need online service, they will switch to some other online companies (Li, H., Liu, Y., & Suomi, R. 2009).

4. **Flexibility**: Choices of ways to pay, ship, buy, search for, and return items (Zeithaml et al. 2000). It refers to various mode of payment such as credit card, debit card, net banking and cash on delivery. Flexibility in terms of searching product category wise, brand wise, price wise, etc. Also refers to clear policies of return payments.

5. **Ease of use**: It is defined as how easy it is for customers to use website. Website should be designed for customer’s ease of use, including searching, navigating and use. Ease of use is an important determinant in the incubative dimension of e-service quality. Ease of use has been highly rated in customer’s e-service quality measurement, and it has been noted by some researchers (Dobholkar 1996, Zeithaml et al. 2002, Yang 2001, Fassnacht and Koese 2006). Ease of use implies simplicity in usage as an experience, while and during the online shopping process. It implies freedom from the effort and complexity involved during the shopping process (Darian, 1987; and Davis, 1989 and 1993, Sahney, S., et al., 2008).

6. **Efficiency**: Refers to the ease and speed of accessing the online store site. Site is simple to use, structured properly, and requires a minimum of information to be input by the customer (Zeithamal et al. 2000).
7. **Assurance & Trust**: The SERVQUAL dimension assurance includes confidence in the company, reputation and product warranties (Persuraman, 1988). Fair treatment of customers in the case of service failure is also strongly related to trust (Berry, 1999; Tax et al., 1998). Assurance & trust in e-service is related to the buying and payment process, the reliability of the website, privacy and securities issues, order fulfillment, service delivery, after sales service and the reputation of the company. Customers’ trust to online companies is critical for online companies’ success (Li, H., Liu, Y., & Suomi, R., 2009)

8. **Security/Privacy**: This refers to the degree to which the website is safe and customer information is protected. Customers perceive significant risks in the virtual environment of e-service stemming from the possibility of improper use of their financial data and personal data. (Li, H., Liu, Y., & Suomi, R., 2009).

9. **Price Knowledge**: This refers to extent to which the customer can determine shipping price, total price, and comparative prices during the shopping process (Zeithamal et al. 2000). This dimension includes information about various deal offers and discounts online store gives to the customer.

10. **Site Aesthetics**: Website is the starting point for customers to gain confidence. Website design can influences customers’ perceived image of company, and attract customers to conduct purchasing online easily with good navigation and useful information on the website. Website should provide appropriate information and multiple functions for customers (Li, H., Liu, Y., & Suomi, R., 2009).

11. **Personalization**: Even though there is no direct human interaction in the virtual e-service shows empathy to customers. Response to
customers should always be cognizant of customer’s needs and show understanding of customer’s needs. In the virtual environment of e-service, empathy is important in customer’s perception of the e-service quality without face to face encounter. Empathy here means care and individualized attention provided to customers via electronic channels (Li, H., Liu, Y., & Suomi, R., 2009).

The e-shopping behaviour was decided to determine through customer’s behavioural intentions and their satisfaction.

1. **E-shopping behavior**: This refers to whether customers search for and buy the products online. Customer’s overall perception about online shopping.

2. **Satisfaction**: Refers to customer’s total prior experience with an online shopping process. It is customer’s perception and evaluation of online shopping process performance in terms of fulfillment of expectations, values and goals.