Preface

Globalization has pushed the use of technology as a necessity in various business and economic functions. Advancing Information and Communication Technology (ICT) has become a key factor in the future development of **services** industry including **banking**, **transport**, **logistics**, **and retailing industries**. Technology applications have significantly contributed to the exponential growth and profits of the retailing institutions worldwide. This evolution had transformed the way retailing firms deliver their services, using technologies such as self service terminals and automated dispensing machines, mobile-marketing, virtual shops, credit card services, point of sales terminals, logistics management using radio frequency identification technology and delivering electronic cash. Whenever a major technology innovation is diffused, a wave of new firms enters the market implementing the innovation for profits and retailing sector has emerged as one of the major hubs of Internet technology.

The technology transfer to retailing industries prompted in mid 70's in developed countries and expanded to developing countries in 90's and has been capitalized by the large retailing companies. Gradually, previous retailing transformations have unfolded to shed light on how retailing may evolve in the Internet era. Application of information and communication technologies in large retail networks spread across countries has established direct relationship with customers and succeeded to the retailing philosophy of "disintermediation," in which service providing company bypasses agents or promoters and connect directly with their customers. New in-store technologies promise managers and customers increased efficiency and more knowledgeable service. However, the performance of retailing technology depends on various organizational factors. Many retailing firms have built websites to disseminate information and attract customers. Financial aggregation presents an opportunity by which they can build stronger relationships with customers. Information technology affects retailing in reducing the costs by replacing physical and paper-based process for buying goods and services and helps to modify the ways in which consumers have access to retail products and services which enhances the contestability of retail firms in the market.

Technology applications in retailing are a recent phenomenon and not many contributions have been made in context to consumer products and services. Along with the internet bubble burst, the technology industry was left facing a host of unrealized opportunities, from e-commerce, retailing, mobile commerce and direct marketing. A large number of customers use the Internet, as a medium of business (electroniccommerce). Self service technologies like automatic vending machines for consumer goods, loyalty cards launched by the retailers, convergence of electronic ordering and physical delivery of goods and services to destination customers, e-banking, mobile shopping and virtual promotions in retailing sector have the ability to function as a secured business medium. Self service technologies offer customers six distinguished benefits to shop goods and services on Internet including perceived convenience and financial benefits, low risk, access to information, self-efficacy, and time management, which play a significant role in the performance of retail operations. Advances in technologies have allowed retailing firms to incorporate many different technologies into the delivery of their services. These technologies have been implemented in the services sector to encourage customers to acquire satisfaction at different levels of buying process.

In the process of enhancing the customer value for the new products, a retailing firm may simultaneously use intensive customer value for technology based retail services and intensive customer relationship management (CRM) strategies to the competitive sales and marketing strategies. The integrated impact of CRM, sales and marketing strategies at different stages of service attractiveness would contribute to the customer value and influence the aggregate returns on the customer value derived at various stages of service attractiveness of the retailing firms. However, a financial institution may need to compute the trend of customer value for all the services in its product line, and measure the variability in the customer values perceived for its new services. The customer values are broadly reflected in the competitive gains, perceived values, and extent of association with the retailing services and level of quintessence with the customer relationship management services of the organization.

Principal thrust of this book is on analyzing the role of ICT in retailing industry in increasing functional performance, customer value and optimizing profit. Retailing technology has emerged as an efficient tool to measure accuracy in forecasting, sales data analysis, and preventing stock outs that will help retailers to determine when to tweak their supply chain processes to get the right products to stores at just the right time. An intriguing map of technology drivers, performance of retailing companies and consumer has been discussed in this book which opens a new window on competitive edge endorsed by proven research studies published by the author in refereed international journals. The discussions in the book critically examine the synergy of technology use and conventional wisdom in retailing and explore contemporary

changes determining higher customer value. Discussions in this book also encompass strategy implications for managers to optimize the advantage in retailing through the application of ICT and bridging customer-technology gap. The bottom line of the book is to redefine technology led retailing strategy frameworks and building sustainable customer value for mutual (customer-company) success. Whether it is a physical store, a catalog business, an E-commerce site, or a combination of the three, customers need superior solutions to their needs and ICT retailing connects with them on an emotional level. The complex interplay between consumer and application of self service technology in retailing services determines the success of every product in the competitive environment.

This book carries 14 distinguished chapters contributed by core academics across countries. Discussions in the chapters are based on empirical and conceptual research on the broad theme of convergence of technology and retailing activities. Rajagopal presents a general discussion about contemporary developments in retailing with reference to globalization and technology in **Chapter I**. The growing internationalization of business induces changes in the positioning of competitors and technology led competitive strategies by augmenting customer value. The discussion in the chapter argues that there has been a growing recognition that it is through an effective management of the technology the cost of retailing can be reduced as well as retailing services can be enhanced. Rajagopal and Ananya Rajagopal have emphasized the role of self service technologies in retail banking services in **Chapter II**. The discussion draws conceptual impetus from new technologies in banking services through self service technologies in banking as a tool for optimizing profit **and** analyzes the criteria for successful internet-banking strategy to derive benefits of e-**banking** for banks and their customers.

Customer value and new product retailing dynamics has been discussed in **Chapter III** by Rajagopal, in reference to maximizing total customer value and customer satisfaction which are inter-dependent in the decision making process towards buying new products. This chapter, as a part of emerging literature on customer value management, extends the existing knowledge of the relationship between launch of new products in the market and creating customer value by introducing the framework of a mathematical model. Enrique Portillo along with Rajagopal further carries the discussion on self services technologies and customer value together with focus on measuring customer attitude in **Chapter IV** through a comprehensive empirical research. They argue that customers have more options of buying today and are looking for convenient relationships. Hence self service technologies should be responsive, customer friendly and followed by personal care to the customers. Authors of this chapter suggest that we must think about the importance of the pillars of techno readiness including managerial vision, infrastructure for error free service and testing technology led retailing services.

Variability factors in customer values, technology convergence and profit optimization in a retailing firm has been measured using structural equations by Rajagopal in **Chapter V**. Discussions in the chapter are woven around the framework for measuring the consumer values in reference to establishing the long run relationship by the firm and optimizing its profit levels and arguments endure the core issues of consumer values in retailing the products and services as how to conceptualize consumer values, how to measure it, and how to manage it. Ankush Sharma and Preeta Vyas argue in Chapter VI that retailing is in a rapid state of change due to speedy technological developments, changing competitive positions, varying consumer behavior as well as their expectations and liberalized regulatory environment. This chapter discusses the role of Decision Support System (DSS) in managing performance, data and modeling decision in retailing firms. The proposed study aims at understanding DSS, its application in grocery sector and issues arising out of implementation of DSS in Indian retail grocery sector. Dynamics of buyersupplier co-dependency in optimizing functional efficiency has been discussed in reference to business to business environment by Rajagopal and Amritanshu Rajagopal in reference to Mexico in the following Chapter VII of the book. The study analyzes the impact of channel function performance on relationship quality which is moderated by the extent dependence structure of the relationship. In this process, the impact of supplier function performance on different dimensions of relationship quality in reference to satisfaction, trust, commitment and conflict under various dependence structures have also been diagnosed and analyzed. Also, the core areas such as quality management and "interface" disciplines such as networks and buyersupplier relationships has been the centre of discussion in this chapter.

Rajagopal takes up a new emerging perspective of loyalty cards as tool of acquiring and retaining customers by retailing firms in present global competitive situation, in Chapter VIII. This chapter attempts to analyze drivers of compulsive buying behavior induced by store based promotion through empirical investigation in Mexico. The role of point of sales promotions in stimulating arousal and satisfaction among customer and customer relationship management for building store loyalty have been analyzed in the chapter. This study builds arguments towards convergence of attractiveness of point of sales promotions and effectiveness of customer services as a tool for gaining competitive advantage in the retail business environment. Internet, reengineering and technology applications in retailing have been discussed chronologically from the period of its evolution to the present state-of-art experience in Chapter IX by Rajagopal. Discussions in this chapter argue that shopping behavior of consumers has shifted with the increasing applications of Internet forcing retailers to redefine their roles to ensure their place in the Internet age and a successful retail store must build upon what the Internet cannot offer and add value to its customer's shopping experience by giving them that

'something extra' to ensure continued patronage. Author also discusses the case of a multinational insurance company which is practicing virtual sales office for increasing client support in Mexico. The discussion on management practices are further methodically carried forward by Amritanshu Rajagopal explaining the role of Six Sigma in enhancing performance of team retailing in **Chapter X**. The team selling approach is followed by many multinational companies for various products and services, which the customer faces as a first-time buy and salespeople need to support such negotiations with comprehensive information needs. The discussion is supported by a shore case analysis of Domino's Pizza towards improving its retailing services.

Ernesto Fierros and Rajagopal present empirical research results on consumer response to high technology mobile phones in emerging markets in reference to Mexico in Chapter XI. Authors state that the new information technology is becoming an important factor in the future development of financial services industry, and especially **banking** industry. This study suggests developing a high performing customer-centric marketing plan to guide the mobile telecommunication companies to gain competitive advantage in the market. In the following Chapter XII, Rajagopal observes that customer centered companies are increasingly engaged in direct marketing activities by outsourcing sales people to enhance the market coverage and augment volume of sales in the competitive business environment. This study attempts to analyze behavioral drivers which influence consumers' leisure shopping behavior and measure customers' value through empirical investigation in Mexico. Also, customer prospecting as direct marketing strategy through outsourced salespeople in swaying the leisure shopping and driving brand loyalty is discussed in the study. Marketing strategy, technology and modes of entry in global retailing are the core issues affecting competitive advantages to retailing firms which are addressed by Rajagopal in Chapter XIII delineating the modes of entry of retailing firms in global market place. Contemporary strategy as how a firm would like to involve itself in the international business, may look for its entry into international marketing in many possible ways including exporting, licensing, franchising, or as a production firm with multi-national plant locations have been discussed in the chapter.

Important guidelines that help in improving the planning and management of firms are addressed by Rajagopal and Amritanshu Rajagopal in the **Chapter XIV** meticulously by explaining the Profit Impact of Market Strategy (PIMS) and concepts of brand architecture. Authors argue that each business is a division, product line, or profit centre within its parent company, selling a distinct set of products and/or services to an identifiable group of customers, in competition with a well defined set of competitors, for which meaningful separation can be made of revenue, operating costs, investment, and strategic plans. Finally, challenges ahead in the application of

technology in retailing industry have been addressed by Rajagopal in **Chapter XV** which argues that the escalating globalization and competitiveness in the retail environment is thrusting retail firms to meticulously manage store ambiance, inventory, product information, multi-channel retailing opportunities and customer relations through consistent experimentation of new technology. This chapter as concluding remarks to the discussion in the previous chapters delineates that as technology grows sophisticated, the consumer's expectations also swell exponentially and firms should considering converging key technologies with retail management strategies to optimize the win-win situation for both the retailing firms and customers.

Retailing technology is taking over "front office" roles in customer prospecting and relationship management which has brought sparking revolution in how retailing firms prospect, serve and retain customers and compete with rivals. There has been adequate research available on managing technology as well as on developing retailing strategies but these contributions are independent of each other. In particular, there are a few books addressing retailing technology whereas much work has been contributed on e-commerce, mobile commerce and supply chain technologies. This book ponders over specific issues in retailing technology which include self service technologies, point of sales technologies and customer relationship management integrating with the customer value. The contributions made in this volume serve as a think tank for strategists and researchers to hook new thoughts and link to the future business research. Some chapters in this book are based on empirical research which open-up new hypotheses to work in the following course. This book discusses substantially the best practices followed by the companies experiencing win-win strategy with customers in leading competition to achieve success using innovative technologies. Many corporate houses realized that technology sensitive retailing strategies generate customer pull effect which is more powerful than profit driven push approach. This book analyzes the above rationale and puts forth arguments on contribution of technology in retailing.

The book offers enormous potential for developing appropriate strategies to enable collaboration with customers, suppliers, and partners using new technologies. In addition, the readers of the book may acquaint skills to develop effective talent management and customer-relationship building, fast and flexible decision making, and open, credible communications among all partners though discussion portraying various technology-led best retailing practices. Setting the new agenda for managerial success, this insightful book will help managers anticipate and maneuver the technology driven challenges ahead in retailing industry.

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