Retail cost optimization, strategy and information technology

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RETAIL COST OPTIMIZATION, STRATEGY AND INFORMATION TECHNOLOGY

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ABSTRACT
Today retailers need more integrated and reliable strategies and solutions in order to remain competitive and one of the important sources of enjoying a competitive advantage can be optimizing the Retail cost of operation. Information technology as a domain, with its tools for modern retailing can improve retailer, supplier, and customer activities and experiences and provide an opportunity for retailers to control their operations resulting in cost optimization. This paper brings out the strategic benefits of using IT solutions to optimize retail cost and addresses the challenges that could be faced by retailers in implementing them and suggests methods to overcome the same.

1. INTRODUCTION
During the past decade retailing industry experienced significant continuous and discontinuous changes in different areas such as retail environment, technology, competition, fluctuations in Global Economy, retailing mix like location and format brought by globalization and an unprecedented change in customer expectations. Information technology brought revolution in the retail industry and resulted in new retailing formats and is still continuing to challenge traditional ways of customer management. Customers have moved from taking retail visits for shopping to expecting retail visits as an experience and entertainment and retailers have to meet the market demand. (Swinyard.R.W ,1997)

The role of IT in retailing is now inclined more to customer acquisition and retention programmes and using data resources to improve customer experiences in retailing. In this context, the most important question that remains to be answered is the implication on cost of retailing in the face of new innovations, new retail models, changing consumer behaviour and retailers adjusting to the same. A more relevant question to be answered at this juncture would be: Does IT as a crucial technological support result in optimization of retail cost and serve as a source of competitive advantage? Information Technology along with globalization of retailing play a significant role to retailing revolution and the impact on the retail cost structure is valuable to achieve the retailer its business objectives in an integrated manner.

Environmental pressure, globalization and advancement in technologies, along with customer attitude towards these changes, resulted in breaking the polarization of traditional retailing style which was started from 1980, where small shops started to lose customers and retailers have to improve and upgrade their traditional ways of retailing and the role of it has become a strategic tool to understand customer needs, customer communication to individual customers, planning for promotional campaigns and integrating the entire retail supply chain.(Mehta et al., 1994). However, retailers are still dealing with challenges involved in implementing such IT solutions, which can help cope with market expectations and remain competitive.
2. LITERATURE REVIEW
According to Michael Porter, as long as a firm performs a set of different activities compared with rivals, to take unique and valuable positions they cannot stay competitive. All retailers have a common aim which is maximizing their profit. This can be achieved by retail activities delivering greater value to the customer, which might result in higher cost to the customer, or deliver comparative value with lower cost or both of them. Therefore retail activities is the basic unit of competitive advantages which generates cost and the solution is increasing productivity and efficiency during a set of different activities to achieve lower unit cost in order to be in the frontier.

Cutting the retail cost is one of the most important objectives served better by emerging technologies. In 1992, Sears, the US retailer informed “every day low price” to stay competitive with Wal-Mart and Target. However, this strategy failed because of forgetting total retail cost reduction. In 1992 Sears operating expense was approximately 28% while Wal-Mart’s 17% and Kmart’s 19% and started to change the strategy to cut its total retail costs. Today, technology has a significant role to improve productivity, optimization, standardized, reduce processes and finally cut total retail costs (Swinyard. R. W, 1997).

In the past, the retail Industry followed several strategies to reduce the total cost of retailing. The strategies include down-sizing, city center locating, one-step shopping and adopting different retailing variables like different retail formats, sizes, locations, services, assortment of products, processes and management, to innovations in various forms in order to be competitive, achieve retail power in the market and reduce the total cost of retailing thereby maximising their profit. Hence, total retail cost reduction has been a strategic retail decision until now and has various emerging dimensions to it.

2.1 COST OF LOCATION IN TERMS OF SIZE OF SPACE
Location, in terms of the size of space is one of retailing variables which experienced deep changes, where stores with selling space less than 2,000 sq.ft in 1990s, opened space near 25,000 sq.ft, some stores like Zara’s UK still are expanding selling space. In addition, In UK the out-of-town policy leaded to up-sizing location and large-scale operation. However the aim of achieving more efficiency caused retailers such as Mother Care and Debenhams think about downsizing. Others by re-entering in city center caused smaller format like Tesco’s Metro. And some retailers try to standardize the scale while others believe that large store will attract more consumer.(Reynolds .J. et al, 2007).

After sometime, expanding the location and size of space became one of the big challenges which generate huge cost for retailer. Today supercenters (150,000-220,000 Sq.ft) and hypermarkets (100,000-300,000) are the fastest growing retail category, but they are facing a crucial challenge in finding location which in many countries like Japan is expensive and limited (Levy .M and Weitz.A.B, 2007).

In contrast, door to door, catalogue and TV shopping provide an opportunity for the retailers who thought about reducing the cost of space. And the way of retailing, is shifting in-store (brick and mortar) format to none-store format.(Dholakia.R.R, and Uusitalo,O 2002).

In this context, Information Technology has helped in location becoming less important for consumer; the Internet and direct mail provide opportunity for shopper to purchase virtually any time. E-retailing, the newest one of none-store retailing became a big threat for door to door and catalog retailing (Dholakia.R.R and Uusitalo,O, 2002 ).Therefore, it’s predicted that shopping malls, big box supermarkets like Kmart will be victim of the e-tailing very soon. (Swinyard .R.W, 1997), and we are seeing that even grocery products that are available
mostly in supercenters like Kmart, WalMart even has started going online (Carpenter .M.J and Moore.M, 2006).

2.2 COST OF RETAIL FORMAT
The Retail Format also have undergone changes, where retail grocery business like bakery stores started to be hided from 1950s and 1960s in US and now replaced by big time bakery stores in metropolitan areas. As a result, Format, location, operation, merchandise assortment, pricing and promotion needed to focus the target market and experienced observable changes (Swinyard .R.W, 1997).

Where, supercenters and warehouse clubs attract traditional supermarkets consumer with offering more variety of grocery products in low price with one stop shopping. (Carpenter M.J and Moore.M, 2006) the low-cost, low-margin, low-ambience operation policy with variety of foods and other products such as households goods, sport and home furnishing started to expand. In 1990, Wal-Mart managed four supercenters and in 1995 it expanded to 230 and combined large supermarkets with discount stores and operates more than 2000 supercenters.(Morganosky.M,1997).

But Today websites cover a variety of product offering to the customer by adapting itself with IT solution as a Technological innovation to improve productivity by offering more facilities such as inventory management, payment facilities, self-service and on-line shopping, logistics, marketing thereby delivering value to the customer with competitive price.

2.3 COST OF PROCESS AND MANAGEMENT
Retailing industry like other industry have suffered a high cost of operation because of the inefficient and poor performance in management, repeated processes, inaccurate operations and transactions and mostly because of the poor decision making as a result of the lack of accurate, on-time and right information during the history. Traditional ways like ‘six Rs of the location mix’, finger in the air’ and ‘gut-feel’ methods are mostly replaced by powerful GIS (Global Information Systems), availability of accurate Data from POS, loyalty card, DSS (Decision support system) which provide a new technique as a combination of art and science to help outlet decision makers to choose the best alternatives and finalize decision to operate a specific format.(Byrom .W.J, 2005). However, Technological innovation, in terms of IT solution has contributed significantly on optimizing the total cost of operations, transactions and management.

Supply chain, because of the combination of different activities is a very touchable example of role played by IT solution. Historically, each activity in a supply chain was managed as an individual and single entity and as a result of the lack of integration in terms of data, information and processes, the effect of each chain to each other was lost and unfortunately resulted in unsatisfied customer, finally making the retailer lose the market and profitability. Then, during 1980s, some American business like Tektronix, tried to access better information for making decision via ABM, which introduced the firm as a set of interrelated activities and processes to control activity cost to improve the profit and deliver greater value to customer. (Lockamy III.A and Smith.I.W, 2000). Thus, IT solutions provide an integrated environment between every chain of supply chain to remove costly transactions and control optimized processes by availability of accurate information and hence an important ingredient for reducing the total cost of retailing.
The period that followed 1960 witnessed dramatic changes in IT and its role in retailing, when the available retail models became mature and saturated. Whereas computer and information technology were mostly used in the past for data handling like recording physical movements of products or may be processes, wages and salaries control, monitoring the transit progress, purchase orders, today the retail Industry is using Information technology to manage inventory, better planning, point-of-sales data monitoring, decision making, and data modeling in retailing (Walters, D and Rands, C. A 1999). Innovation in technology in food retailing industry like loyalty solutions introduced in 1990s, scanning and POS technology in mid-1980s, 1985 , EDI used by IGD (Institute of Grocery Distribution) in 1990, data-ware housing and data mining in 1999 all had a significant impact to provide efficient CRM and supply chain in retailing (Cox .H and Mowatt. S, 2004).

If retailing industry experienced six or eight month between placing the order and delivery, now technology has reduced the time in any processes like delivery earlier, distribution, logistics finally responding to customer’s need. Hence retailers enjoy cash flow in supply chain and cost reduction in inventory-financing, also customers benefit by the shorter time taken between placing the order and receiving the goods (Hofmann. E, 2009).

2.4 COST OF SAVVY CUSTOMERS

Researches in the UK retailing Industry show that the policy of price for real-value or quality is increasing significantly and is leading to “value” formats. In other words, customers tend to pay for brand value which involves reliable quality. Thanks to Information Technology that brought awareness to customers about low-price, real value retail products, and productivity for retailers to cutting the cost of processes like logistics, delivery, inventory and provide competitive advantages.

Savvy customers, during the history of retailing, always enforce retailer to access lower price and better quality, and more educated customers are changing retailer policy day by day. Of course one of the useful barriers for new entrance and rivals in this industry is keeping the customer by performing different activity like using loyalty solution and increasing the cost of customer switching.

Today retailers must meet the dynamically changing needs which come from consumers in terms of their retail purchasing decisions, perception on POP promotions, increasing expectations. Furthermore, shoppers today, appreciate something more than product. Service level, confidence and image are getting shoppers, their money’s worth. (Swinyard. R.W, 1997).

Globalization as a significant revolution in retailing industry, provide an integrated market for retailer to offer products and services anywhere in the globe. Wal-Mart opened outlets in China and Mexico to access an expanding market and McDonald’s made it a point to be available wherever people live, work, sleep, play or gather.

In these global expansions, operational economies as a result of the opportunity of accessing the advanced technology like computer and communication, caused retailers enjoy of low-cost of operation in delivering customers what they wanted.

There is only one way for retailers to stay competitive in this fast shifting market and that is to respond and provide harmony between various retailing variables like size, format and Merchandise provided to the customer. Using Information Technology as a unique and strong tool to optimize the costs will support in giving the retailers, a competitive advantage.

3. ROLE OF IT SOLUTIONS IN RETAILING
Information Technology has a crucial role to play at two different levels of retailing Industry, operational and strategic (Moore.M.C, 1996). It provides an integrated environment which finally resulted in cost reduction and achieving competitive advantages to the retailers.

3.1 OPERATIONAL –FUNCTIONAL LEVEL

Information technology in operational level mostly focuses on single, special software. Functional activities like marketing, finance, HR are organized by TPS (Transaction Process System). Based on specific data given, it processes and generates suitable output. In addition to TPS, special type of service based solutions offer a combination of software and hardware support which deliver value added solutions in both sides of retailing industry, customer and retailer. Solutions, such as Kiosk, loyalty, self check out, POS, digital signature RFID.

Kiosk as a public access IT solution, support both the customer and retailer thereby capability to inform, educate, train the customers by performing e-transaction with the possibility of providing communication environment to reinforce retailer message (Rowley. J,1995). It can be used in public environment like airport, petrol station, railway stations, supermarkets and shopping malls as an in-store solution for delivering services to the customer on the one hand and on the other hand, for reducing the cost of personnel of the retailers. Mall kiosks offer a cost effective alternative to expensive store leases (Krished.S.A et al., 2010). Argos have used kiosks that provide access to an electronic catalogue to reduce queuing; Marks & Spencer’s use them to test a recipe. Daewoo, Debenhams, IKEA are some of the known retailers which are using this solution (Rowley. J and Slack. F, 2003).

Loyalty solution is another service based solution which can be offered in combination with other IT solution like POS, kiosk and credit card payment. In addition to providing customer’s behavior information, loyalty solutions provide customers’ shopping and segmented data, and motivate loyal customer by offering rewards, (Miranda. J. M and Konya. L, 2008). Furthermore these types of solutions, increase the barrier of customer switching which result in reduction of cost of finding a new customer (acquisition cost). Recently, the inclusion of Self check-out solutions have become a tool for providing better personalized service for customers while increasing labor productivity.

RFID technology has now become an integral part of IT solution for identification of retail goods, operating and sharing of specific information during different processes. Radio Frequency Identification (RFID) as an IT based device, provide accurate, real-time data which will be an input for other processes like supply chain and has an important role in reducing the cost of storage and distribution (Li.S et al, 2006). While improving inventory management and supply chain management. Today information technology in its new shape, tries to provide more integrated environment between different business entities, with facilities like the Internet, EDI, XML, protocols, enterprise solutions such as ERP and suffice it to say that they have started becoming a value-added inclusion in a retailer’s resource portfolio.

Electronic Data Interchange, for example, provides an integrated environment for retailer to communicate with customers. In addition, it reduces the cost of availability of accurate information, easier invoice handling, improvement in stock positions (Bamfield.J,1994) and ERP or Enterprise resources planning, a type of Information systems that offer a software package to the market and integrate all operation , transaction and processes at all levels of functional, manufacturing and management and manage all resources by using shared data flows which come from firm’s data warehouse, while managers can use specific information
to formulate plans and forecast. As much as processes and operations of retailing become integrated under this enterprise software, cost of them reduce (Ekanayaka.Y et al., 2002). However the lack of the compatibility between packages such as ERP, and business processes become a major challenge. Moreover the retailer is faced with a huge investment for customization. (Law. H. C. C and Ngai. T. W. E, 2007).

3.2 MANAGEMENT AND STRATEGIC LEVEL
At the management level, data and information are shaped as a mechanism which provides organized reports, alternatives, choices in order to help decision making and forecasting.

IT solutions help a retailer in terms of locating the availability of the product, shelving at the right place and right time, retail forecasting and decision making, Asset Management, Inventory turnover, managing the delivery time and distribution. Apart from the above, MIS (Management Information System), MRS (Market Research System) and DSS (Decision support System) are some of the integrated component of a MKIS (Market Information system) helping to improve strategic decision making, forecasting and planning at the retailing management level.

How the retailer can be informed about availability of a product? How the retailer can make sure right product is available on the shelves at the right place, at the right time? How the retailer can access the right information in order to have accruable forecasting and decision making? Is there any addition solution to improve ERP and CRM? How the manager (retailer, vendors) can manage their assets and inventory turnover more efficient? What is the effective solution to manage delivery time and distribution? These are some questions which needed to be answered by accurate information in strategic and management level. MIS (management information system), MRS (management report system), DSS (Decision support system) are some of the solutions that help to answer these questions and support in strategic decision making, forecasting and planning at the management level in retailing.

Finally, collecting different data by different tools provides a valuable asset for the firms to have a repository of data, the data warehouse (Payton. C. F and Zahay. D, 2005). The data warehouse through the usage of filtering technique for analyzing retail data, DSS, visualization and producing suitable Data Marts for forecasting. Strong data warehouse make retailer rich in terms of having enough input for decision making. Thus investment in IT solutions brings tangible and intangible retail cost optimization benefits. However, the implementation of IT solutions have to overcome a myriad of challenges.

4. CHALLENGES IN IMPLEMENTING IT SOLUTIONS IN THE RETAIL INDUSTRY
Successful IT solution implementation should consider Shifts in consumer culture, changing processes and the trends of management, styles of thinking and dealing with these challenges are a part of implementation The major challenges to be considered for implementing IT solutions in retailing include:

4.1 INVESTMENT
Implementing IT solutions in retailing involves costly decisions to be made by the retailers. Not only hardware facilities, and the system operations are expensive, but also firms producing them charge for training, support, maintenance, updates and upgrades services
offered by them (Moon. L. K and Ngai. T. W. E, 2008). Change in current methods, workflows and process some times are called for that may entail huge expenses for the retailer. SAP installation for a Fortune 500 company costs about $30 million in license fees and $200 million in professional services” (Ekanayaka. Y et al., 2002).

4.2 STATE OF ECONOMIC DEVELOPMENT OF THE COUNTRY IN WHICH THE RETAILER OPERATES
Using IT solution as a factor of obtaining competitive advantage for itself and its Industry is supported by fast-growing nations (Huang. Z and Palvia. P, 2001) where the corporate belief is: technology increases productivity, decreases the cost and results in the growth of economy.

In addition, availability of advanced technology in an industry like retailing is one of the major factors to identify developed and developing nations. Infrastructure including the availability of networking, percentage of people using personal computers in a country, software and hardware, or even lack of skilled individuals and knowledge in organization, services like IT consultancy, are some facilities which only developed countries are able to witness in their respective countries. Currently, 45 per cent of US families have computers while In China, the figure is only 1 percent Hence some developed countries like Japan which perform its manufactures in Asian nations, lost the chance of using advanced IT technology like implementing ERP. (Huang.Z and Palvia.P, 2001). Accordingly, the state of Economic development in a country, where a retailer operates can become a major consideration for implementing IT Solutions.

4.3 THE NATURE OF INNOVATION AND ASSOCIATED PROBLEMS
There are problems along with the nature of innovation, generally. For example, online retailing are facing quality challenges with different dimensions such as site design and content, delivery terms like the accuracy and reliability, customer service and security and privacy of credit card details and personal information (Francis. E. J, 2007).

4.4 MATURITY OF INNOVATION
While IT is one of the most important technological innovations, implementing them in the retailing industry needs continuous adaptation in terms of infrastructure and materials. Changes in net-work technology, cash exchange, product delivery, protocols, browsers, home equipment for B2C, resources and financial strategy in B2B, are part of adoption needed for implementing IT solutions in retailing (March. L and Ngai. T.W.E ,2006).

4.5 CULTURAL CHALLENGES
The level of maturity, attitude and knowledge on both sides, customers and organization as a retailer are crucial for implementing IT solutions in retailing. How IT solution is familiar with different generations of customers? What is their attitude towards them? It should be understood by all entities who are involved that using IT solutions to optimize retail cost should be a win-win transition.

4.6 PRACTICAL CHALLENGES
Weak team working, weak management and strategy, weak knowledge in each level of a retail organization has resulted in practical challenges in implementation. Team work is a necessary pre-requisite for the success of implementation, in trying to use IT solutions for reducing retail cost.
4.7 ATTITUDE CHALLENGES
Management attitude and personnel acceptance (Moon. L. K and Ngai. T. W. E, 2008), are a type of organizational challenges. Worries of replacing individuals with technology, lack of knowledge in different level in organization such as managerial level and operational, will cause people in organization to resist changes.

4.8 PERSONALIZATION AND CUSTOMIZATION
One of the most important and expensive problems in implementing IT solutions is customization and personalization of IT solutions to the specific needs of the retailers keeping in mind his market, products and specific metrics needed to control retail operations. Since a retail organisation’s needs change according to market dynamics, continuous upgrading and adaptation of the IT infrastructure is needed to stay competitive. Customization and personalization in IT related solutions is expensive and needs strong infrastructure for continues implementation. Optimization challenges (Changing workflows) needs to be reengineered step by step and reevaluated constantly.

4.9 STANDARDIZATION
Providing IT solution including software and hardware solution to retail house should be followed by IT standards. Otherwise, non-standardised IT solution would result in poor outcome. So the life time of the solution will be short and will not be as strong and flexible as it should be to adapt to organizational changes, resulting in a retail firm being charged with a higher cost.

4.10 COMPATABILITY WITH CURRENT SYSTEMS
If IT solution support is standardized, however is not compatible with other systems, customization and privatization will not helpful. Hence, compatibility with current IT systems of the retailer is essential (Moon. L. K and Ngai. T. W. E, 2008)

4.11 DATA ACCURACY (Moon. L. K and Ngai. T. W. E, 2008)
Poor data accuracy, ineffective algorithms, long forecasting cycle and inefficient report policies can result in poor store forecasting, management errors, inefficient ordering policies which lead to failure in retailing (Levy .M and Weitz. A.B, 2007) Hence, the secondary and primary data used for implementing IT solutions should be accurate.

4.12 TIME
Many retailers are not happy with long time frames needed for implementation, since long implementation phases may fail to accommodate changes in data flows, retail processes. Another reason is the lack of strong and professional operational teams on both sides – retailer and IT solution provider.

4.13 SECURITY CHALLENGES
One of the greatest challenges by using electronic environment in retail industry is security of information. Unauthorized access including editing and even deleting information, worms, viruses are some security challenges which can make a business failure.

4.14 POPULATION
Many of the developing nations with a growing population ratio have exhibited a trend of preferring to have more manpower instead of replacing it with technology (Huang. Z and Palvia. P, 2001). This is one of the reasons of automation and implementation of IT solutions in the retail Industry of developing nations to be low and done more by traditional ways, resulting in a higher retail cost and lower profits.
5. **FIGURE 1 – METHODS OF OVERCOMING THE CHALLENGES**

![Diagram showing methods of overcoming challenges](image)

1. Clarifying the goals of IT implementation
2. Assessing the scope of retail problem and the need for IT solutions
3. Prioritizing problems and delivering them for IT solutions
4. Identifying the amount of investment
5. Providing the Road Map
6. Cross-function multi-level team to lead the changes
7. Breaking down and reengineering
8. Documentation of IT solutions implementation strategies and success stories
9. Modelling and pilot
10. Training Employees
11. Security Policies
12. Customization and localization of solutions
13. Outsourcing
14. Using internal / External advice

### 5.1 CLARIFYING THE GOALS OF IT IMPLEMENTATION

The first step is identifying the goals of implementation. Is the IT solution intended to achieve strategic aims like cutting the costs or to deal with intensive competition in the market? In both the situations, value addition in terms of saving in time, money, assets and maximizing productivity and finally profit can be achieved. The benefits of the IT solutions can be repeated based on the strategic and operational plans drawn for implementing IT solutions and how the challenges with them are dealt with. The difference is how the retailer must provide a strategic and operational plan for implementation and how deal with the challenges involved with that (Man. J, 2001).
5.2 ASSESSING THE SCOPE OF RETAIL PROBLEM AND THE NEED FOR IT SOLUTIONS
The IT solutions chosen by the retailer should be objectively connected to the organization’s goals, well aligned and controlled with appropriate tools. The effects of implementing the IT solutions in terms of investment, implications, challenges need to be studied and documented for future reference. Identifying the scope of the problem and deciding on the need for IT solutions and necessary investment can help the team to search and select suitable IT solutions and then supporting the implementation by a suitably motivated team within the retail house, an essential factor for success and facilitating changes to set in.

5.3 PRIORATIZING PROBLEMS AND DELIVERING THEM FOR IT SOLUTIONS
The classification and prioritizing of problems is very crucial and helpful in implementing IT solutions. Major questions to ask would include: Which problems should be solved urgently? Is the level of priority compatible with business objectives? Which of them should be observed in short-term and which of them can be recognized in long-term plans?

5.4 IDENTIFYING THE AMOUNT OF INVESTMENT
In order to avoid a major drain being brought to the financial stability of the retailer, the firm should identify amount of investment which is needed for implementation very accurately using suitable scientific tools. In this step, risk analysis is strongly recommended.

5.5 PROVIDING THE ROAD MAP
How this solution must be implemented? What is needed? Which level of organization should be involved? What are the operational steps? The road map will be helpful to optimizing and reengineering the processes, removing unnecessary workflows and optimizing them. The new work flows should be done step by step while reviewing and reevaluating them at each level.

5.6 CROSS-FUNCTION, MULTI-LEVEL TEAM TO LEAD THE CHANGE PROCESS
All the employees should be aware and involved in this plan and support it, upgrading the knowledge of people is necessary. Training should be imparted in order to achieve the best result of execution. Explaining the rationale behind introducing IT solutions in a retail house and building motivation among the personnel can have the advantage of winning their cooperation for the implementation to succeed.

5.7 BREAKING DOWN AND REENGINEERING
Successful Implementation is not achievable in one step. The Big picture should be broken down to small pieces to be evaluated and reengineered well before starting the next step. During all steps of execution, the implementation process should be systematic and each of the steps be thoroughly checked before proceeding to the next one.

5.8 DOCUMENTATION OF IT SOLUTIONS IMPLEMENTATION STRATEGIES AND SUCCESS STORIES
Documentation and verification of success stories of IT implementation help organizations to review common problems and follow the best practice. Documentation should be a continuous and not an ad-hoc process to deliver positive results on an ongoing basis.

5.9 MODELING AND PILOT RUN
Modeling or having a pilot run, is very good idea to provide an opportunity specially for the operational team who will be involved, to have better understanding and interpretation in the
execution of project. Scenario development and discussion are crucial to conceive of the real-time retail requirements and integrating IT environment into the retail fabric.

5.10 TRAINING EMPLOYEES
In implementing IT solutions, post-implementation training becomes essential to register success. The firm should elicit participation of the relevant departmental levels and employees in each level of implementation of the IT solution, to guarantee support and success in getting the integrated IT environment work for achieving the retail goals in a cost efficient manner.

5.11 SECURITY POLICIES
In order to secure information and transaction in retail industry, vendors and retailers set security rules and policies in their organization to provide security for their business. Using antivirus software, training employees, using authentication and authorization to access the hardware and software, audit trial, data integrity and coding and decoding solutions are some rules which are essential to have a secured IT implementation process in retailing. A security manager is an essential addition to be done as a part of the implementation process.

5.12 CUSTOMIZATION AND LOCALIZATION OF SOLUTIONS
For multinational company or nations, localizing the solution is a significant factor to deliver the right service for customers. For example in a multinational country like UAE, an IT solution like kiosk in retailing should be localized by culture and common language for customer. User friendly software which is used in kiosk should be multi lingual. In addition, some times customization is done in order to localize the facilities of the solution and it’s very costly. But in the process of localizing and customizing the IT solution, standardization should not be forgotten.

5.13 OUTSOURCING
Outsourcing the whole project of implementing the IT solutions in a retail location is a good alternative which can be very helpful for organisations who are not exposed to the technicalities of the project in terms of implementation, training and maintenance. It can be a good solution to deal with high cost and achieving better quality in efficient manner.

5.14 USING INTERNAL/EXTERNAL ADVICE
Customers are the most important external advice for the implementation; retailers can solicit the support of Universities, business schools and industry associations as consultants to help them in implementing IT solutions at the planning and operational level (Power. J. D and Sohal. S. A, 2002).

6. STRATEGIC BENEFITS ARISING FROM IMPLEMENTING IT SOLUTIONS FOR OPTIMIZING THE RETAIL COST STRUCTURE

6.1 STAYING COMPETITIVE WITH TECHNOLOGY
Attempting to integrate and achieve retail objectives with the support of advanced IT solutions, can bring about reduction in cost of production (private label brands) and operation, increase productivity and finally keep firm, competitive in market.

6.2 CRM PERSPECTIVE
Reengineering and customizing relationships between the retail house and customers instead of trying to sell by hard pressure selling techniques is a major gift of e-CRM. In fact
managing customer relationship through an integrated IT environment of business process can increase customer satisfaction and retail profits effectively (Kimiloglu. H and Zarali. H, 2009).

6.3 ERP PERSPECTIVE
By sharing and managing data repository through process-oriented transactions, all day-to-day activities (Saatioglu.Y.O, 2009) and resources are manageable in an efficient way in order to position the best strategic planning for retail houses.

6.4 MULTI-CHANNEL MARKETING
IT solution provides new opportunity as a cost effective integrated channel of online and offline (Wehmeye.K et al., 2009) modes of transactions to meet customers’ need (Hughes.T,2006) to build strong loyalty based on close relationship between the E-channel and the customer.

6.5 ACHIEVING SUPPLY CHAIN EXCELLENCE
IT solution provides collaboration between all internal (Purchasing, manufacturing, marketing) and external activities in a supply chain causing improvement in inventory, distribution and logistics (Barratt. M, 2004). In addition, it results in increase in higher visibility of product demand situations leading to the analysis of market demand effectively.

6.6 FORECASTING PLANNING AND REPLENISHMENT IS MORE ACCURATE
Accurate product tracking and report system provide better opportunity for retail managers to, check product availability, current sales, the backup stock needed, product demanded and finally forecast more accurately, minimizing errors, reducing stockouts and appropriate decision making (Levy. M and Weitz. A. B, 2007).

6.7 INCREASING THE CUSTOMER COST SWITCHING
Customer switching or Churn rate is a major disturbing trend in maintaining retail profitability. If customer switching cost becomes high, retail firms may not lose their customers. This strategy can be made possible by providing high quality services like Loyalty solutions in order to deliver more value addition to the customer. This strategy can also minimize the retention cost, thereby contributing to the profit line of the retailer.

7. CONCLUSION
New technology in retailing industry brings new problems, but it challenges traditional retailing and tides over many ills of traditional retailing. The cost of implementation of new technology in modern retailing is high, but it brings new ways to integrate processes including distribution, logistics, more flexible transportation and make them more standardized in an efficient manner and decreases high operational and costly activities by lowering risk handling involved in traditional ways. If modern retailing integrated with IT solutions, needs much more investment, it has the benefits of improving strategic retail management and cost effectively and efficiently. However, retailers achieving operational and strategic advantages out of using IT solutions in retail processes for retail cost optimization depends on how the whole integration process was carried out and monitored on a continuous basis. A potential area of research in this direction would be on the study of existing IT solutions and processes employed by the retail industry in different countries and its impact on cost optimization, to develop a knowledge base of practices across various countries.
REFERENCES


