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CRM for retailers: Business intelligence in retail CRM

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Abstract

In the current era it is very important to develop a direct contact with the customers because customers are the definitive determinants and the success of the company depends on customer happiness. So companies are using different techniques to provide information about the product to the customers like e-commerce, call center, on-line shopping etc.

Nowadays, in Indian business an effectual way of integrating enterprise applications in real time is introduced. This is done to create the competitive advantage. For this purpose companies are implementing business intelligence tool (BI). The paper explores the theoretical concepts of BI, its components, benefits of BI. Through business intelligence tools, companies can achieve the strategic goal which leads to success. In this highly competitive environment retailers are emphasizing on customer intelligence so that it can also reduce the cost. Business Intelligence techniques are used by the companies to improve the skills, knowledge and wakefulness of customers and it is also helpful in increasing the turnover of the company. It is also helpful in improving customer preservation. The improved business intelligence system helps the companies to predict customer demand. It helps in pleasing customers and building strong relationship and also helps in turning one-time purchasers into long term customers. As more retailers evolve into customer-centric and segment-based business, business intelligence (BI) and customer relationship management (CRM) systems are playing a key role in achieving and maintaining competitive advantage. For the past ten years, the authors have had the unusual opportunity of observing and interviewing employees and managers of three different management teams at three separate Fingerhut companies as they experimented with various ITs for their companies. When the first Fingerhut Company peaked in 1998, as many as 200 analysts and 40 statisticians mined the database for insights that helped predict consumer shopping patterns and credit behavior. Data mining and BI helped Fingerhut spot shopping patterns, bring product offerings to the right customers, and nurture customer relationships. By 1998, Fingerhut was the second largest catalogue retailer in the U.S. with revenues nearing \$2 billion. However, after Federated acquired Fingerhut in 1999 and made it a subsidiary, Fingerhut Net, it suffered great losses and was eventually liquidated. Finally, a new company, Fingerhut Direct Marketing, was resurrected in 2002 under a new management team, and it once again became successful. What went right? What went wrong? The paper concludes with CRM and BI systems success factors and a conversation of lessons learned.

Objectives: To study the concepts of BI in CRM and its benefits.

To understand successful implementation of BI in retailing.

Research Methodology: Secondary data has been used in the study. The data has been collected through internet, magazines, journals, and other sources.

Keywords: Business Intelligence, Competitive Intelligence, Retail Industry, and Customer Relationship Management.

1. Introduction

Business intelligence (BI) is a technology-driven process for analyzing data and presenting actionable information to help corporate executives, business managers and other end users make more informed business decisions. BI encompasses a variety of tools, applications and methodologies that facilitate organizations to collect data from internal systems and external sources, prepare it for analysis, build up and run queries against the data, and create reports, dashboards and data visualizations to make the analytical results available to corporate decision makers as well as operational workers.

Business intelligence (BI) can be defined as the human intelligence capability which can be useful in business activities. It is measured as the new area of study, which focuses on the function of human cognitive faculties and artificial technologies in management decision making for business problems.

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Business Intelligence can also be defined as how the intelligently used information can be used in growing the business. Knowledge and technology both play a very important role in business now days. Therefore, business intelligence can be defined as the applications and tools for collecting the data, analyzing data and providing useful information to the customers as well as business which is helpful for taking better planned decision. On the other hand it relates to well-known knowledge of all those issues that affect the business directly or indirectly. It is necessary that firms obtain a great knowledge about external factors, i.e., customers, competitors, government rules and regulations, political environment and internal factors i.e., employees, management etc. so that it is helpful in taking good quality decisions. A competitive intelligence, an individual field of BI focuses on external factor. Information is gathered on the actions of competitors and decisions are made based on this information.

Business intelligence is helpful in simplifying the complex data and provides the necessary information to the top level management, which will be helpful for planning purpose and taking various types of decisions related to business. The objective is to improve the quality of information (output) that depends on quality of data (input). Business Intelligence is used to scrutinize the ability of the company, the competitive environment in which a firm competes and it provides the useful solution for those actions which takes by the competitors.

2. Why to Adopt Business Intelligence?

For taking quality business decision, Business Intelligence plays an important role in decision making activities. The organization's success depends on the perfect information, so BI is helpful in collecting the raw data from the external environment and after analyzing that raw data, it provides the useful information by which future trend of business can be easily analyzed. This is mainly required where the firms are able to extrapolate information from the external environment and make accurate forecasts about future trends or economic conditions. Once business intelligence is gathered the data from the outsiders, it efficiently used the data and take necessary measures regarding business. The main purpose of the BI is to develop the quality of information which depends on data taken by external constituencies. Business intelligence reveals the position of the firm as in comparison to its competitors, changes in customer behavior and spending patterns, the capabilities of the firm, market conditions, future trends, demographic and economic information, and the social, regulatory, and political environment and also what the other firms in the market are doing. Thus we can say that, BI system is a combination of data warehousing and decision support systems. The primary activities of BI include gathering, preparing and analyzing data; the data used should be of high quality. The various sources of data is collected, altered, cleansed, loaded and stored in a warehouse. The relevant data is for a specific business area that is extracted from the data warehouse. BI facilitates the different business to instill the solutions that depend on the information and react accordingly.

3. BI and CRM Together

The CRM strategy should include

- a. Operational CRM: Automating interface with the customers and sales force, and

- b. Analytical CRM: complicated analysis of the customer data generated by operational CRM and other sources like POS transactions, web site transactions, and third-party data providers. In retail business there are huge numbers of customers but every customer differ from one another. To maintain good customer relationship companies introduced Analytical CRM. Analytical CRM depends upon marketing and sales functions of the organization as they are the basis through which companies get insights gained about the customer. The different BI tools used by Analytical CRM are data warehousing, data mining, and OLAP to present a unified view of the customer.

4. Advantages of Analytical CRM

(a) Customer Segmentation

Customer segmentation is an core of retail marketing. It explains how different segments react to different demographics, fashions and trends factors. For example customers can be segmented on the following basis.

- Customers reaction towards new product launches
- Customers reaction towards new promotional strategies
- Customers reaction towards different offers, discounts etc.
- Customers tendency to purchase specific product

(b) Promotion Effectiveness Analysis

As a marketer it is important to study and analyze the right promotion mixture, and it helps in understanding the communication force on sales impact. Promotion effectiveness depends upon the following factors:

- Choosing the effective advertising message.
- Deciding on reach, frequency, and impact on the basis of past campaigns.
- Deciding on geographical location.
- Evaluating advertising efficacy Business Intelligence here works as a real-time tool which efficiently utilizes this raw data and converts it into meaningful information that in turn helps in taking business decisions. Analytical CRM uses historical data with sprognostic science to produce forward-looking views of customer behavior.

5. Three Ways Retail BI Makes Your CRM Even More Customer Centric

Your sales connections are responsible for engaging your customers, providing top customer service and understanding how customers shop with you. Right where all your transactions occur, store managers and sales associates have a good idea of who is shopping with them, what customers are shopping for and what they decide to purchase.



For example, if you're a sales rep for a women's apparel store and you notice a handful of your clients purchase a specific silk blouse with a pair of trousers, you're probably going to integrate that knowledge into your selling strategy. The same can be true for retail executives in the merchandising and marketing departments. This type of knowledge could have a real impact on what merchants and marketers emphasize on retail websites, in advertising, and how they style product in a list or look book and messaging for segmented email campaigns.

But, traditionally, the data marketers can access within customer relationship management (CRM) systems is limited. Basic CRM data usually includes who your customers are, what they are spending and how often they shop with you, but it doesn't let you see how customers actually shop by segment and location. Additionally, CRM systems are often isolated within the marketing department, making it tough for personnel in other departments to pinpoint and agree on precisely who your customers are and how they are reacting to products chain-wide and at the local level.

By combining traditional CRM systems with retail business intelligence tools, you can get more analytical data about your customers based on actual shopping. Here are three ways retail BI works with CRMs to create actionable insight for retailers:

i.) Retail BI Helps Merchandisers and Marketers Communicate

In many retail organizations, the marketing department relies on data from the CRM system to make decisions, and merchandisers use high-level record and sales data to make collection and allocation decisions. Departments don't have visibility into decision-making processes across the company because the CRM and merchandising systems don't have a way to communicate. CRM data combined with merchant data creates customer-centric analytics you can use to make data-driven decisions across the business. A retail BI solution like Quantisense's enables CRM and merchandising systems to communicate and work together to provide analytics based on both sets of data. This helps marketers and merchandisers see which customers were targeted with a purchase order, view sales data by customer segment and view variety performance by location.

ii.) Retail BI Creates Trust Internally

If your CRM is limited to raw customer data, the actionable insights about your customers will be limited, too. And because your marketing department or CRM analysts are the only parties with access to the CRM, other departments may become doubtful about the data's applicability to solving their challenges. Integrating your CRM with retail BI tools gives you and the entire organization better visibility to data you can trust. It creates one description of true business performance and customer insight so you can be convinced in the information you're getting (and sharing) and use it to make analytics-based decisions.

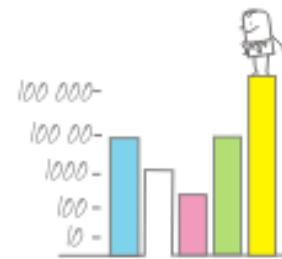
iii.) Retail BI Creates a Single Version of the Customer

When combined with the Customer Centricity Playbook, the Quanti Sense analytics solution lets you see how your customers shop and how they respond to your assortment by customer segment. Your CRM data is leveraged by the Quanti Sense Customer Centricity Playbook to help you

understand your customer segments and how they're performing, giving you one consistent version of your customer that can be broken out by customer segment, location and customer value. The QuantiSense Customer Centricity Playbook joint with your CRM system helps you understand your customer segments better and make data-driven business decisions.

6-CRM Solutions in Retail can help to Derive Business Intelligence, Market Basket Analysis and Demand Forecasting

The retail sector in India is witnessing exponential development with the rise of modern retail stores which are taking over the traditional neighborhood stores. According to research firm Nielsen, sales at modern stores are increasing at a much higher rate than those of traditional stores; 29.3% versus 6.2% in 2010. The Boston Consulting Group has estimated the size of organized retail market in the country at \$28 billion and projected growth of nine times over the next 10 years. With the Indian retail market finally opening to Foreign Direct Investment from global chains such as Wal-Mart and Carrefour, the sector is all set to experience a makeover in which business functions such as CRM will play a major role. Customer Relationship Management is already a core business strategy for such multinational brands, with loyalty programs and data mining playing a crucial role in acquiring and retaining customers.



- ✓ Customer lifetime analysis
- ✓ Optimization for pricing & promotions
- ✓ Integration with loyalty engine
- ✓ Segmentation of members
- ✓ Store revenue & profitability analysis

7. Business Intelligence in Retail CRM

CRM strategies can help provide vital business intelligence. CRM provides the necessary customer data which gives businesses the sharpness required to make informed decisions. When a company understands what the customer wants, it can make straight its business goals and strategies to fulfill these wants. This is the function of business intelligence. Businesses across the globe are increasingly using BI software to aid business functions. Business intelligence goes a long way in helping managers gain critical on the way about their business and customer to take efficient and actionable decisions. Managers in the retail sector can use business analytics to get insights about store operations, product demands and trends, customer's purchase behavior, stock and inventory to make strategic decisions about product placements, loyalty programs, promotions,

marketing and much more. For a sector where competition is on the rise and customers tend to be highly price-conscious, customer insights help retailers to provide the right mix of product, place and promotions to increase store revenues. It can help improve the overall shopping experience to keep the customers coming back.

i) Understanding Market Basket Analysis

As most purchases from retailers tends to take place on desire, the concept of Market Basket Analysis helps retailers understand buying behavior and utilize this to make strategic decisions. Market Basket Analysis seeks to understand customers' buying behavior by linking together types of purchases. Often customers are more likely to buy item A if they have already bought item B. With the use of this technique, companies can guess sales and forecast demand for their products. Software used in market basket analysis are highly complex and are thus able to provide complete information on customer's shopping behavior, covering a variety of permutations and combinations. One of the key advantages here is the ability for retailers to cross-sell their products. Furthermore, they can place products and promotions within the store in such a way as to make possible purchase from customers. Retailers can also compare purchase habits between demographic groups, different stores, at different times of the week or during different seasons to further optimize their sales and marketing strategies.

ii) Demand Forecasting

With a combination of business intelligence and market basket analysis, retailers are able to forecast demands across stores, different time periods and demographic profiles. Information from various customer relations and connections is integrated to conduct real-world retail forecasting. Demand forecasting is essential in the retail world to manage stocks, handle large volumes, highlight potential areas of anxiety and take actionable decisions to appoint in falling sales. Furthermore, retailers can avoid wastage, remaining stock and stock-outs caused by incompetent forecasting. Using this technique in retail enables efficient stock replenishment and equips retailers with the ability to respond efficiently to sudden changes in the market or environment that may root a boost or decline in demand. It also prevents inaccuracies in holding stock to make the overall operations more efficient, leading to increased profitability. Daily forecasts of demand help retailers take the right strategic decisions for their business and keep customers satisfied. Retail is all set to witness a drastic surge in the coming decade. The way forward in this regard is to utilize essential business intelligence in understanding customer needs and forecasting demands to improve operations. Retail CRM solutions are designed to enable opportunity recognition, manage sales processes, track business activities and sales. They also provide cross-functionality between different stores and departments. With such capabilities, there is no doubt that CRM solutions for retailers will be a vital link for business strategies in times to come.

8. Business Intelligence Solutions

Business Intelligence (BI) refers to the ability to collect and analyze huge amount of data pertaining to the customers, vendors, markets, internal processes, and the business environment. A data warehouse is the corner stone of -wide

business intelligence solution; various analytical (OLAP) and data mining tools are used to turn data -stored in the data warehouse - into actionable information. Customer Relationship Management (CRM) forms the focal point from where the vital insights gained about the customers - using BI tools -- are absorbed in the entire organization. BI also plays a critical role in all the other retail functions like supply chain management, storefront operations, and channel management.

9. IBM's consumer products framework

IBM (NYSE: IBM) unveiled a new Consumer Products Industry Framework that Big Blue says can help clients reduce costs and increase revenue through improved customer relationships, supply chain analytics and e-commerce capabilities. IBM cited Crocs and Pepsi Beverages Company as customers.

IBM has added a number of analytics capabilities to the framework from the acquisitions of Core metrics, Sterling Commerce, Unica and Netezza. The new features allow for real-time product recommendations, accuracy marketing and improved distribution, transportation and inventory planning, IBM said.

CRM for retail and retailer brand loyalty is the corner stone of any retail marketing strategy. Loyalty in any market or sector is about delivering on a brand promise again and again. This could not be truer in the retail sector. Marketers are relentlessly looking for new ways to make it easy for people to fall in love with their brand. Loyalty schemes, campaigns and discount cards are among a few of the approaches, but you don't build a long term relationship with a 10 per cent discount. Building relationships and loyalty is all about getting to know each other better.

The new breeds of CRM for retail solutions do just that. The systems and packaged solutions available on the market today give you a true 360 degree view of your customers. Just imagine how beneficial it would be to be able to track connections across multiple channels and touch points, analyze customer spend and profitability and uncover your best shoppers and advocates all accessible from any device, anywhere. What's more, your customers will love the pampering the systems will empower you to deliver.

The 360 degree analysis, which is a core component of the new breed of SMART CRM for retail systems, ensures you are delivering relevance and in a timely fashion. The messages are spot on target, special offers and suggestions for add on or up selling to other levels are actually things the customer wants, but may not have realized. This has added benefits to your business. Your marketing budget will produce more campaigns and give you better ROI. Your online campaigns will have more relevance and receive a higher open rate, click through rates will be better and social media conversion rates will be abundant with more people spending more money, more of the time.

The CRM for retail systems drive client ling strategy, empowering staff to build closer customer relationships that boast more profit on the bottom line, as a result. For those of you that are not familiar, client ling increases customer happiness and improves productivity. The CRM system does this by pulling data from across the enterprise and presenting that data to you in a meaningful way. For example it can give you access to historical customer behaviour enabling you to make recommendations on the spot or keeping customers up to date with new products that may be relevant to them.

Having this data delivered to a hand held device while you are talking with the customer, empowers you to focus on the relationship and preservation, account reactivation, up selling to higher levels or cross-selling. Putting it another way, you will keep the customers coming, encourage them to come more often, cross sell and up sell to them at every opportunity and turn them into loyal advocates who will spread the word across their peer groups and amongst their friends.

The important thing to remember is that the new breed of CRM for retail systems link seamlessly into your retail management system. This ensures you have the maximum insight and analysis of your customers, in real time. It will help you expose where sales are coming from and why there is a particular trend. Seriously it will give management information you can act on. The 360 degree view of the data that these systems gives you, reveals the true picture of your sales telling you exactly which customers are shopping every time, the segments that are buying high margin products and who is most loyal.

10. Conclusion

Company's success highly depends on its customers. Without them a company cannot exist. So it is very important that firms have information on their preferences. Firms must quickly adapt to their changing demands. Business Intelligence facilitates a company to collect the data related to current trends and come up with innovative products or services so that it helps to adopt elastic approach regarding customer demand. Retailers are known for innovation. Nowadays, the most innovative companies are those who are using Business Intelligence techniques to meet out the demand customers and survive in this competitive environment.

The retailers also become aware that Business Intelligence can be used properly only when it is applied with care and complete support from the top management. With BI superior tools, now employees can also easily convert their business knowledge via the analytical intelligence to solve many business issues, like increased response rates from direct mail, telephone, e-mail, and Internet delivered marketing campaigns. With the help of Business Intelligence, firms can identify their most profitable customers and the underlying reasons for those Customers' loyalty, as well as identify future customers with equivalent if not greater prospective

Retailers are known for innovation. The most innovative retailers of today are those who are using business intelligence to gain sustained competitive advantage. The wisdom, gathered by analyzing huge amount of data, and should reach every corner of the organization. This paper reviews is based on a literature on a business intelligence approaches. Relates articles appearing in the international journal and IEEE conference from 2000 to 2011 are gathered. It was found 46.67% research is in single approach Business Intelligence System, Integrated between BI and CRM System is the most popular evaluating criteria with 6.67%. Integrated between BI, AI and Data Mining 5%. The end objective is to convert this wisdom into effective action. And for this the entire organization should be able to leverage the business intelligence network.

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