

Roles of Customer Databases and Database Marketing in Customer Relationship Management

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ABSTRACT

Development in information technology helps companies to build customer databases, perform database marketing, and do relationship management. The study discusses the various aspects of customer databases and database marketing and their roles in relationship management. It discusses the ways in which a customer database can be used to achieve best results. The study discusses the various issues of database marketing, ways of overcoming the issues, internal changes in an organization which should be made for implementing database marketing, and emphasizes that database marketing is not the solution to every issue. Organizations should analyze all these issues during CRM implementation. It also provides a direction for achieving the goals in relationship management. Organizations should be aware of and should consider all these aspects of customer databases and database marketing to develop customer relationships, to do CRM implementation, to achieve business excellence, and to succeed in the long run.

KEYWORDS

Customer Churn, Customer Loyalty, Customer Touch Points, Data Analysis, Data Mining, Data Warehousing, Transaction Marketing

1. INTRODUCTION

Marketers should know about their customers well in today's competitive business scenario (Röding, Steinmann, Schmitz, & Schramm-Klein, 2022). Marketers should understand customer requirements and preferences well to be able to serve them properly. They should build fruitful relationships with their customers. A shift in two dimensions is needed to revitalize relationship marketing: from "share of wallet" to "share of heart" as the relationship marketing objective and from "managing customer relationships" to "managing contractual or virtual joint ventures with customers" as the process of relationship marketing (Sheth, 2017). Research has also shown that organizations should be oriented towards providing superior customer services and should have a customer service perspective to succeed in the competitive business environment. An organization and its leadership must adopt a customer orientation and show more attention to its demands (Palazón, López, Sicilia, & López, 2022). Companies also need to understand the key antecedents and consequences of relationship marketing across different industries (Verma, Sharma, & Sheth,

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2016). Companies will not be able to understand what the customers want and what will keep them satisfied unless they have knowledge about their customers. Wants, needs, and expectations of customers change quickly. Therefore, what would have delighted and surprised them a short while back might not satisfy them at present (Carmen & Marius, 2016). Companies may not be able to provide superior services to their customers and may not be able to build relationships with them unless customer expectations are known. To provide better service to their customers, companies need to collect relevant and up-to-date information about their customers (Micheaux & Bosio, 2019). Companies collect data about customers and store them in databases from which they can retrieve the data as and when required to conduct database marketing. Companies utilize the data stored in such databases to generate relevant information and customer insights. Such insights help companies to develop and to maintain long-term customer relationships.

Development and maintenance of customer databases, database marketing, and customer relationship management are imperative for companies to succeed in the competition. It is imperative for companies to understand the connections and inter-connections among these three aspects. However, few studies focus on the connections and inter-connections among these aspects. A thorough analysis is required to understand these connections and inter-connections. The present study aims to address this research gap.

The objective of the study is to conduct a conceptual analysis of the connections among customer databases, database marketing, and customer relationship management. Research papers published in reputed academic journals on the topics and containing the latest literature on the topics are referred to conduct the analysis. The research question is: What are the roles of customer databases and database marketing in customer relationship management?

The methodology adopted is a conceptual analysis of the literature related to customer databases, database marketing, and customer relationship management. Literature available in research papers which are published in reputed academic journals related to the topic are analyzed. Conceptual analysis may provide deeper insights about how customer databases and database marketing play roles in customer relationship management. Primary data is not collected and empirical analysis is not done. The limitation of the method is that only conceptual analysis is done and empirical analysis is not done.

The contributions and the novelty of the study lie in the fact that a conceptual analysis of the connections among customer databases, database marketing, and customer relationship management is done. The discussions done in the study will sensitize both academicians and practicing managers about the importance of maintaining customer databases, practicing database marketing, and developing customer relationships. The discussions will help academicians and managers to appreciate the various issues in customer databases, database marketing, and customer relationship management. The discussions will also help them realize that maintenance of customer databases, performing database marketing, and developing customer relationships are not the solutions for all issues related to customers.

The study is structured as follows.

Section 2 focuses on the basic concepts and the importance of customer databases and database marketing. Section 3 focuses on the importance of data warehousing and data mining. Section 4 discusses about the usages of customer databases in identification of prospects (sub-section 4.1), decision about customers to be targeted with a specific offer (sub-section 4.2), building customer loyalty (sub-section 4.3), reactivation of customer purchases (sub-section 4.4), and avoidance of customer mistakes (sub-section 4.5). Applications of customer databases and database marketing are discussed in section 5 while section 6 deals with the downside of database marketing and customer relationship management. Section 7 focuses on the salient points of the discussions done in the study with sub-sections 7.1 and 7.2 focusing on the theoretical implications and the managerial implications of the study respectively. Section 8 concludes the discussions with sub-sections 8.1 and 8.2 focusing on the limitations of the study and the avenues of future research respectively.

2. CUSTOMER DATABASES AND DATABASE MARKETING

A customer database is an organized collection of comprehensive information about individual customers or prospects that is current, accessible, and actionable for such marketing purposes as lead generation, lead qualification, sale of a product or service, or maintenance of customer relationships. Database marketing is the process of building, maintaining, and using customer databases and other databases (products, suppliers, resellers) to conduct, transact, and to build customer relationships (Chalmeta, 2006).

Many companies feel that customer database is only the maintenance of a customer mailing list. Customer database is much more than a customer mailing list. A customer mailing list is simply a set of names, addresses, and telephone numbers (Micheaux & Bosio, 2019). A customer database contains much more information than that. It contains such information which provides insights into the needs and preferences and the purchasing behavior and patterns of customers. A customer database contains information accumulated through customer transactions, registration information, telephone queries, cookies, every customer contact, and several other things which might provide insights about a customer (Mandal, 2020).

A customer database will contain anything and everything which helps a company to identify a specific customer and also to understand the attitude and buying behavior of the customer (Micheaux & Bosio, 2019). For this, a customer database may contain a lot of information about customers. These may include the past purchases of customers, demographics (age, income, family members, birthdays), psychographics (activities, interests, and opinions), mediagraphics (preferred media), and other useful information (Akhter, Rahman, & Ullah, 2019).

A business database will contain past purchases of business customers, past volumes, prices, profits, buyer team member names, status of current contracts, an estimate of the supplier's share of the customer's business, competitive suppliers, assessment of competitive strengths and weaknesses in selling and servicing the account, and relevant buying practices, patterns, and policies (Linoff & Berry, 2011). All the above information will allow a company to understand its business customers better. The database will also help in the selection of business customers based on the criteria determined by the company (Micheaux & Bosio, 2019).

Companies recognize that creating databases and getting creative in collecting information of customers is one of the most important and useful tools in firms and it has a powerful impact on industry (Mousavy, Rad, Bujarpor, & Mashali, 2012). Targeting selected customers by means of more convenient approaches is initiated by performing a portfolio of direct marketing methods such as telemarketing, direct mail, questionnaire forms, and when the nature of the product is suitable, using direct sales (Jhamtani, Mehta, & Singh, 2021). The goal of relationship programs is to deliver a higher level of customer satisfaction than competing firms can deliver. Research shows that there is a strong and positive relationship between customer satisfaction and profits (Drosos, Skordoulis, & Chalikias, 2019). All the above will be possible only when companies develop and maintain a customer database.

3. DATA WAREHOUSES AND DATA MINING

Companies which excel in customer services understand the importance of maintaining relevant information about their customers in order to serve them better (Al-Weshah, 2019). So, companies capture information from their customers each time a customer comes in direct contact with any of the departments of the company (Alshourah, Alassaf, & Altawalbeh, 2018). These are called customer touch points. A company may have numerous customer touch points. Touch points may include a customer purchase, a customer-requested service call, or an online query. Many companies have a great deal of information about their customers, including not only addresses and phone numbers, but also transactions and enhanced data on age, family size, income, and other demographic information (Micheaux & Bosio, 2019).

All the above types of data are collected by the company or by personnel appointed by the company for the purpose. This repository forms the data warehouse of customers for the company. In the data warehouse, the company can capture, query, and analyze it to draw inferences about the needs and preferences an individual customer. Marketers can contact customers and respond to customers based on the information stored in data warehouses (Ranjbarfard & Ahmadi, 2020). Companies can get a complete picture about the relationship of a customer with the company (Al Atif, Shakir, Al Nussairi, Mohammed, & Almusawi, 2022). It will also help a company to understand which customers should be targeted with specific products and services. Companies can also take help of data warehouses to customize their marketing activities directed to individual customers. Data warehouse ensures that valuable data is available with the company. It also needs to be ensured that the available data can be converted into useful information as and when required with the help of data mining. Through data mining, marketing statisticians can extract useful information about individuals, trends, and segments from the mass of data. Data mining uses sophisticated statistical and mathematical techniques such as cluster analysis, predictive modeling, and neural networking (Buttle & Maklan, 2015). A proper customer database can provide a company with significant competitive advantage over those companies who do not have it.

A customer database will contain a lot of information about customers (Valdez Mendia & Flores-Cuautle, 2022). Marketers need to extract and analyze useful information about individuals, trends, and segments. Companies perform this with the help of data mining. Companies may use sophisticated statistical and other tools and techniques employed for data analysis. These may include cluster analysis, discriminant analysis, regression, predictive modeling, and neural networking. Data warehouses and data mining techniques provide a company with a significant competitive advantage over others (Jinjin, 2022).

4. USAGE OF CUSTOMER DATABASES

A company may use its customer database in different ways for extraction of information about customers. Some of the uses are mentioned below.

4.1 Identification of Prospects

A company needs to identify its prospective customers to whom its products and services might be sold in future (Johanesová & Vaňová, 2020). For this, the company needs to generate sales leads. Companies generate sales leads by advertising their products or services. The advertisements contain an appeal to the prospective customer to go for the product. The company may provide a business reply card or a toll-free number through which interested people may contact the company. The company builds its customer database based on the responses received. Later, the company may apply certain data analytics tools to sort through the database to identify the best prospects. The company then contacts them by postal mails, phone calls, emails, or personal calls to try to convert them into customers (Peltier, Zahay, & Lehmann, 2013). For example, Flipkart attracts customers by adopting a customer-centric approach, by analyzing their requirements and preferences, and by developing offerings tailored to the needs of its customers (Chakraborty, Kumar, Kaur, Kathuria, & Chakraborty, 2022).

4.2 Decision about Customers to be Targeted With a Specific Offer

All customers cannot be satisfied with a single offer. The needs and preferences of each customer are different from that of others. Companies are interested in selling, upselling, and cross-selling their products and services. Companies must decide which customers to target for a particular offer (Chiang, 2019). For this, the company needs to know not only the needs and preferences of customers, but also the past purchasing behavior of the customers. Companies need to set some criteria based on which the customers might be targeted for a particular offer. For example, once the customer

database is available, the company may sort the customers based on Recency-Frequency-Monetary Value (RFM) of their purchases and select those customers with the highest RFM value for targeting (Wamsler, Vuckovac, Natter, & Ilic, 2022). Direct marketers apply RFM model extensively to target individuals. After the sales, the company may undertake a number of activities to develop and to build relationships with the customers. The company may send the customers a *thank-you* note after the purchase, may send a new offer after some time, and if the customer does not respond to the offer, then the company can call the customer and offer a special discount.

4.3 Building Customer Loyalty

A customer database will provide information to the company about all customers and specifically, about those customers who are buying their products and services most frequently, and also about those who are generating maximum revenue and profits for the company (Mandal, 2017). For these customers, companies can build further interest and enthusiasm by remembering customer preferences and by sending appropriate gifts, discount coupons, and special offers (Verhoef & Lemon, 2013). Companies can offer customer loyalty programs for its loyal customers. Two customer loyalty programs that companies can offer are frequency programs and club marketing programs. Frequency programs are designed to provide rewards for those customers who buy frequently and in substantial amounts (Sun & Zhang, 2019). Customer loyalty should also be built with customers having high customer lifetime value. Cross-selling opportunities may be created with those customers (Nauen & Enke, 2022).

Companies may create club membership programs. Club membership can be given to the most loyal customers. As a result, the clubs will attract and keep those customers who are responsible for the largest portion of business (Kocev, 2022).

Companies may personalize offers for its loyal customers. There are a number of examples where companies could build relationships with their loyal customers because of an efficient customer database. For example, GE Plastics could not target its emails efficiently to different customers if it were not for advances in its customer database. E-commerce companies are retaining their customers by creating personalization based on customized information about their customers (Anshori, Karya, & Gita, 2022).

4.4 Reactivation of Customer Purchases

Companies may try to reactivate those customers who have stopped buying from the company. Based on the information available in customer databases, companies can install automatic mailing programs that send out birthday or anniversary cards (Mousavy, Rad, Bujarpor, & Mashali, 2012). Companies may remind customers to buy products on special occasions and festivals e.g. birthdays, anniversaries, and Christmas. Databases can help companies make attractive and timely offers. At the same time, companies need to make sure that attempts to reactivate purchases or building customer relationships do not backfire (Chiang, 2019). Due to computer-generated information and recommendations, customers start receiving offers which no longer seem to be personalized. E-tailors need to recognize the limitations of online personalization at the same time that they try harder to find technology and processes that really work (Lv, Wan, & Wu, 2017).

4.5 Avoidance of Customer Mistakes

Customer databases try to ensure that uniform and real-time data are available to all the employees of the company (Kalaivani & Sumathi, 2019). Customer transactions will get updated immediately in the centralized customer database once the transaction is complete and any employee can view the updates. Since the customer information gets updated as and when transactions take place and as and when some changes are made in the data, uniform information will be available to all the employees. This will help the employees in reducing and in avoiding customer mistakes (Tassew, 2019). For example, Delta aims to avoid customer mistakes by applying customer databases. Customer databases are also applied to leverage customer loyalty to personalize the service experience (Mulder, 2016).

5. APPLICATIONS OF CUSTOMER DATABASES AND DATABASE MARKETING

Customer databases and database marketing are primarily used by those companies which handle a lot of customers. They are applied in such situations where it becomes unmanageable to process customer data without a proper customer database in place. This is especially true for hotels, banks, airlines, insurance, credit card, and telephone companies. These companies need to collect and manage a huge amount of customer data. Database marketing also becomes important for companies which do a lot of cross-selling and up-selling or whose customers have highly differentiated needs and preferences, and are of highly differentiated value to the company. Database marketing may not be suitable for companies with low customer lifetime value (CLV), high churn, and no direct contact between the seller and the ultimate buyer (Kumar & Reinartz, 2018).

Research shows that if customer databases and database marketing are not properly understood and utilized, then there may be little or no improvement through customer relationship management (Linoff & Berry, 2011). The reasons might be that the database marketing system was poorly designed, it became too expensive, and users did not make much use of it or report much benefit.

Application of customer databases and database marketing might be difficult in the following cases:

1. Implementation of CRM before creating a customer strategy.
2. Rolling out CRM before changing the organization to match.
3. Assuming that more CRM technology is better.
4. A company needs to have a proper customer strategy in place before implementing CRM through customer databases and database marketing (Nicolescu, 2022). If the customer strategy is not in place, customer databases and database marketing will not help even when properly maintained because the company will not know how to use the data stored in customer databases (Choi et al., 2013).
5. Every employee in the organization needs to understand that database marketing and CRM are done to build and to maintain proper relationships with the customers and this will benefit the organization in the long run (Mahafzah, Aljawarneh, Alomari, Altahat, & Alomari, 2020). Also, the employees need to understand that database marketing and CRM will not perhaps bring results in the short run. It is a long-term process and the organization needs to have patience for the results to come.
6. Technology may not always help (Wynn, 2020). In the previous section, examples of some instances are given where technology of building customer database for maintaining customer relationships might not work. So, in such cases it might be a wastage of company resources to invest in technology.

One of the main reasons for failures in database marketing and customer relationship is that companies only concentrate on customer contact processes without making corresponding changes in internal structures and systems (Soltani, Zareie, Milani, & Navimipour, 2018). The configuration needs to be modified and changed before installing databases for customer relationship management. Survey results confirm that a superior relationship with customers is decided mainly based on how a business builds and manages its organization (Hanady, Ahmed, Sheta, & Adrees, 2022). CRM tools and techniques like customer databases and database marketing are only to support the business-building process. All these point to the need for each company to determine how much (and where) to invest in building and in using database marketing to conduct its customer relationships.

6. DOWNSIDE OF DATABASE MARKETING AND CUSTOMER RELATIONSHIP MANAGEMENT

The previous discussions emphasize the importance of customer databases and database marketing. There might be some issues which may prevent a company from effectively using customer databases and building relationships with customers.

The development and the maintenance of a customer database require a huge amount of investment in computer hardware, database software, analytical programs, communication links, and skilled personnel (Saputra & Rahmania, 2022). Sometimes, it is difficult to understand what data should be collected about customers. If the right and relevant data are not collected in the first instance, there is no point in storing and in analyzing the data. Analysis of a wrong set of data will generate incorrect predictions however good that data might be. Again, it is difficult to capture all the occasions of company interactions with individual customers. So, sometimes it is not beneficial to develop and to maintain databases.

There are instances where development of a customer database may not be cost-effective. Development of a customer database might not help when the product is a once-in-a-lifetime purchase e.g. a house. It is highly unlikely that a customer who has bought a house recently will again buy a house in the near future (Reinartz & Kumar, 2002). In such cases, building and maintaining a customer database might not be helpful and cost-effective for the company.

Development of a customer database might not also help when customers show little loyalty to a specific brand and there is lots of customer churn (Stroburg, 2016). Since customer loyalty is very low, chances are minimal that a customer will do repeat buying from the company. So, maintaining a customer database may be irrelevant in such cases.

Customer databases might be costly to maintain when the unit sale is very small or when the monetary value of the product purchased is very less (Reinartz & Kumar, 2002). This is true for most of the FMCG (fast moving consumer goods) products (Peltier, Zahay, & Lehmann, 2013).

Sometimes, a company has to invest a lot of resources in collecting data about customers. For example, companies purchase secondary data about their newly-acquired customers from the companies where they were customers before. In such cases, a lot of money might be involved. Also, the purchasing behavior of a customer in a previous company may not be relevant for the present company (Rafaeli et al., 2012).

The second problem which companies face with respect to developing and maintaining a customer database is to convince their employees about the importance of customer relationship management (Mandal, 2017). Usually, employees in any company treat the customer on a per transaction basis and do not think from the broader perspective of building and maintaining relationships with customers. Employees find it far easier to carry on traditional transactional marketing than to practice customer relationship marketing (Zdravković & Gašević, 2022). It is important for the companies to train and to educate their employees about the importance of customer relationship management and consequently, of maintaining customer databases and database marketing.

The third major problem in database marketing is that although companies may feel that maintaining and developing a customer database for building relationships with customers is great, not all customers want a relationship with the company (Kumar, Venkatesan, & Reinartz, 2006). Customers are worried now-a-days about the extent of personal information that companies collect about them. The customers may resent knowing that the company has collected that much personal information about them. Customers worry about their own privacy and security (Alshurideh, 2022). They worry that in the pretext of building customer relationships, companies might collect and misuse the information which the customers may not want to disclose. Sometimes, companies do this without even informing or taking permission from the customers (Rainer, Prince, Spletstoesser-Hogeterp, Sanchez-Rodriguez, & Ebrahimi, 2020).

Marketers need to be concerned about customer attitudes towards customer privacy and security (Anshu, Gaur, & Singh, 2022). Companies need to explain their privacy policies and these policies should be made available to the general public. Companies should provide their customers with the right of not to disclose their information and not to have their information stored in a database. The companies also need to take permission from the customers before using and disclosing their private information. European countries do not look favorably upon database marketing and are more protective of private information of customers. The European Union passed a law stating that

private information about customers cannot be collected, stored, and used without the permission of the concerned customers. The implementation of the law affected the growth of database marketing in its 15 member countries. The Telecom Authority of India (TRAI) developed a no-call registry for those people who do not want to be contacted for promotional offers. TRAI issued a circular stating that promotional calls can be made and messages can be sent to the interested people on their mobile phones only between nine o'clock in the morning and nine o'clock at night. It also provides the option to mobile phone users to block and to report about unwanted telemarketing calls.

A fourth problem is the assumption that maintaining customer databases will ensure better customer relationship management which may not always hold true (Mandal, 2017). It may not always cost less to serve loyal customers. Loyal customers have high expectations and have the feeling that since they are generating the maximum amounts of revenues and profits, they should always receive premium treatment from the company. Sometimes, it becomes impossible for the company to meet these high expectations. So, it may not always cost less for a company to serve more loyal customers (Carmen & Marius, 2016). High-volume customers often know their value to a company and can leverage it to extract premium service and/or price discounts. Loyal customers may expect and demand more from the company than other customers and resent any attempt to charge full or higher prices. They may also feel jealous if the company pays attention to other customers (Li, Ma, & Zhou, 2017). Loyal customers may not necessarily be the best ambassadors for the company. Research shows that customers who scored high on behavioral loyalty and bought a lot of products of the company are less active word-of-mouth marketers than customers who scored high on attitudinal loyalty and expressed greater commitment to the company (Peltier, Zahay, & Lehmann, 2013).

7. DISCUSSIONS

The study discusses about the various aspects related to customer databases, database marketing, and customer relationship management. The benefits of database marketing do not come without significant costs and risks. A huge amount of cost is involved not only in collecting the original customer data, but also in maintaining and in mining them. When it works, a data warehouse yields more than it costs, but the data must be in good condition, and the discovered relationships must be valid and acceptable to consumers.

7.1 Theoretical Implications

Academicians will be able to appreciate the importance of developing and maintaining customer databases, doing database marketing, and focusing on customer relationship management. They may analyze the various aspects related to customer database, database marketing, and customer relationship management and how they contribute to the success of companies. They may also analyze the various strategies adopted by companies and suggest effective strategies for the future. Based on the discussions, they may develop theoretical models to study and to analyze the various aspects better.

7.2 Managerial Implications

Employees in an organization should be oriented towards building relationships with customers. Employees need to understand that building relationships with customers will benefit the organization in the long run. At the same time, any organization and its employees should realize that developing and maintaining a customer database is not the solution to all the issues an organization faces with its customers.

The discussions will sensitize managers in an organization about the importance of building relationships with customers and maintaining a customer database for that purpose, practical problems which an organization may face in the application of a customer database for building relationships, and how to orient its employees towards building relationships with customers.

The discussions done in the study emphasize upon the fact that although database marketing might be beneficial to a company, it becomes sometimes costly to maintain and to execute it. Database marketing invests not only in the collection of authentic customer data, but also in maintaining them and in mining them. So, any company needs to be cautious before investing in database marketing. Otherwise, after its implementation if the company finds that it is not generating results, it might be costly for the company. Managers must be aware that database marketing is beneficial only when it yields more than it costs. Managers also need to ensure that the data must be in good condition, and the discovered relationships must be valid and executable.

8. CONCLUSION

Companies often require building a customer database and database marketing and doing data mining to detect trends, segments, and individual needs and preferences of the customers to serve them better. Customer databases and database marketing help companies in developing and in maintaining proper relationships with their customers. At the same time, companies need to understand that only developing customer databases and database marketing will not result in building better customer relationships. Companies need to collect relevant data about customers and mine the data properly to develop effective customer relationships. Companies also need to be aware about the limitations and the downside of database marketing and customer relationship management. The employees of any company need to understand the importance and the benefits of database marketing. At the same time, it needs to be understood that database marketing is not the solution for all customer problems. Keeping all these aspects in mind, companies should employ customer databases and database marketing to build lasting and fruitful relationships with customers which will result in company growth in the long run.

8.1 Limitations of the Study

The study focuses on doing a conceptual analysis of the literature on customer databases, database marketing, and customer relationship management, and the connections and the inter-connections among these aspects. Primary data is not collected and empirical analysis is not done.

8.2 Avenues of Future Research

Researchers may collect primary data related to customer databases, database marketing, and customer relationship management and conduct an empirical analysis to arrive at realistic and actionable strategies. Academicians may conduct a further review of the different strategies and suggest improved strategies for building relationships with customers. Efforts are made to include the relevant and the latest literature related to database marketing and the connections between database marketing and building relationships with customers. However, database marketing and managing relationships with customers is an evolving field with developments happening regularly. Researchers and practicing managers require keeping themselves updated about the latest trends and developments taking place to understand the roles of customer databases and database marketing in developing relationships. They should implement better strategies for building relationships with customers. Researchers may investigate the applications of customer databases and database marketing and understand the best practices to be implemented to develop customer relationships and to achieve business excellence.

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