



# Driving Product Growth with Data-Driven Loyalty Programs

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*Abstract - In the current world of business with high competitiveness, customer retention or building customer loyalty is the key to sustainability and profitability. Extracting customer loyalty has thus become a central management technique for achieving this goal, with data-driven loyalty programs becoming the new popular tools for delivering the necessary incentives through the efficient use of analytics. Consequently, the focus of this paper is to investigate the application of data analytics in the implementation of loyalty programs in order to improve the customers' retention and growth of the product. The paper provides a literature review of the existing literature, the procedure of data-driven loyalty programs and the result of applying the data-driven approach in practice. We also analyzed that using data analytics to understand the loyalty programs in progress makes customer interaction, as well as consumption, enhance, leading in favor of the business organizations aiming to build up their strategic positions in the market.*

*Keywords - Data-driven loyalty programs, Customer retention, Product growth, Customer engagement, Data analytics.*

## 1. Introduction

### 1.1. Driving Product Growth with Data-Driven Loyalty Programs

In the contemporary business environment, organizations are always on the lookout for new approaches for enhancing product sales and creating a competitive advantage. Of these, the most popular strategy that has been increasingly adopted is the use of big data for loyalty programs. [1] These programs focus on the use of advanced analytical methods to customize interactions in a bid to improve customer affinity and, thus, product appeal. In this section, the aims and objectives are to identify the dynamics that manifest data-driven loyalty programs and how they lead to the growth of the product with a focus on relevant concepts, methods, and cases.

### 1.2. Understanding Data-Driven Loyalty Programs

Analytics-based loyalty programs refer to a concept of the newer generation of loyalty programs intending to transcend simple, conventional models that offer standard packages of rewards for all customers and instead apply customer data collection to provide [2] customized incentives that meet/reinforce the consumer's specific needs and habits. It is possible to use consumers' purchase information, Web keywords, age, gender, interpersonal communications on social media, and other information to design more attractive and effective member reward programs appealing to consumers on an affective level.

### 1.3. Key Components of Data-Driven Loyalty Programs

#### 1. Data Collection and Integration

- **Sources of Data:** The information may include a database of consumer interactions, including the use of cards at physical outlets, online buying and selling, social media, and mobile applications, among others.
- **Data Integration:** Integration of data from different input sources in which the data would be processed in one input system.

#### 2. Customer Segmentation

- **Behavioral Segmentation:** Grouping of customers into various groups depending on the manner in which they always patronize the products.
- **Demographic Segmentation:** Segmenting the customers by age, sex, spending and other such generic criteria.
- **Psychographic Segmentation:** It liberates the organization to be able to speak to the interests, lifestyles, and values that customers have, so it is easier to create value around those elements.

#### 3. Personalization Engine

- **Predictive Analytics:** The use of history not only for the behaviors that are going to be predicted in the future but also for preferences.
- **Recommendation Systems:** Employment of computers like the algorithms in suggesting some goods or other incentives that might prove appealing to the particular clientele.

#### 4. Program Implementation

- **Multi-Channel Deployment:** Solution, such as integrating in-store or mobile, which can allow timely and proper rewards and incentives for the target customers through e-mail, SMS, mobile applications, etc.

- **Continuous Monitoring and Optimization:** To check its performance regularly and evaluate the program for its effectiveness, determining its effectiveness and making changes whenever necessary.

#### 1.4. Data-Driven Loyalty Programs Drive Product Growth

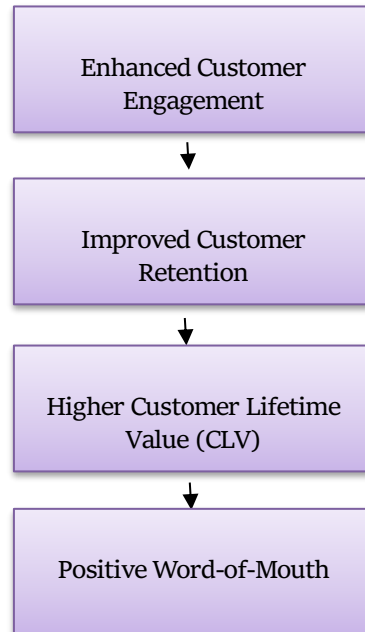


Figure 1. Data-Driven Loyalty Programs Drive Product Growth

##### 1. *Enhanced Customer Engagement*

- **Personalized Interactions:** Thus, taking into account the interests and needs of customers, the amount of communication and awards guarantees the fact that the business opens deeper and more densely.
- **Increased Engagement:** They are positive customer encounters since customers know that a firm is identity apprehensive of its requirements.

##### 2. *Improved Customer Retention*

- **Loyalty Incentives:** They are motivational incentives that are peculiar to the satisfaction of the customers, therefore stressing the paramount role of the customers to keep patronizing the brand.
- **Reduced Churn:** The above could also be applied in the analysis of big data to know which customers are most likely to let go and then try to suit a proper incentive to these customers to reduce churn.

##### 3. *Higher Customer Lifetime Value (CLV)*

- **Increased Spend:** Recommendations and especially the promotional campaigns thus cause a transformation of the average check thus causing an increase in the average spending per head.
- **Long-Term Loyalty:** The customers that shall be treated as if they are valuable shall come and shop more; it is therefore valuable in the long run.

##### 4. *Positive Word-of-Mouth*

- **Brand Advocates:** This means that happy and loyal customers will advocate for the brand to other customers due to the effect of word of mouth influences the other customers of the brand.
- **Social Proof:** The given can be a strong argument from the side of the embarrassed customer since it concentrates on branding and, therefore, attracting more and more new customers.

### 1.5. Importance of Customer Loyalty



**Figure 2. Importance of Customer Loyalty**

**1. Steady Revenue Streams:** Customers are their lifeline because they offer constant patronage. [3] Loyal customers are known to purchase the product more often and in comparatively bigger lots as compared to the new customers who are not regularly in the market for this product. Thus, the spending remains constant, and companies avoid relying on volatile fluctuations in the market.

**2. Brand Advocacy:** The habit of buying from a particular brand also makes the consumer become a Promoter for the given brand. The consumers engage their fellow friends, families, and social networks to post good effects about the business thus acting as unpaid publicists for the business. This is word-of-mouth marketing, which is more effective because people are likely to buy what their friends say is good.

**3. Higher Lifetime Value:** It is as much as eight times higher, in fact, as the value of the lifetime customer is several times more than the value of a once-off customer. This is because the latter will again and again make purchases at the business and may even graduate to other better products or services within the firm.

**4. Reduced Marketing Costs:** Gaining customers is also costly because it requires advertising and other ways of getting the information to the targeted populace. Existing customers, on the other hand, are easier to convince to make a purchase; hence, there is no need to spend much money advertising the business in a bid to attract many customers.

**5. Resilience to Competition:** A large and loyal customer base has less or no influence from the competitor's activities. They are less likely to switch towards the competitors providing cheaper or temporary promotional price offers, because they value brand loyalty more than the monetary losses in the short run.

**6. Feedback and Improvement:** The multiple-use customers are essential and can provide feedback to the firm and advice on how to change. They will be more willing to fill out questionnaires, be part of focus groups or directly approach the business to share ideas that can help in the improvement of products and services.

**7. Enhanced Reputation:** Organizations that have patronage customers often have a good image. Such a reputation not only pulls in new customers but also ensures that clients receive respect and trust, making them stick with you.

### 1.6. Rise of Data-Driven Approaches



Figure 3. Rise of Data-Driven Approaches

**1. Enhanced Customer Understanding:** Such strategies enable organizations to gather substantial information pertaining to the customers – their spending history, activities on the Internet, social networks, and ages. [4] It allows identifying the customers and dividing them into appropriate categories, which helps to create products that would be most suitable for them.

**2. Personalized Rewards and Offers:** This is the approach widely used where a business has a set list of incentives that it offers to customers as part of the loyalty program without taking into consideration which category of customers it is appealing to. On the other hand, the programs that are data driven make use of analytics to give targeted approaches to the rewards as well as incentives. For example, suppose during check-out the customer has been regularly buying particular products. In that case, the company can encourage the customer to buy them time and again by offering loyalty points or something similar associated with those products.

**3. Predictive Analytics for Proactive Engagement:** There are also some techniques in business intelligence, including the ability to forecast customer behavior, such as customer churn. Marketing strategies: Since these customers are potentially in danger of attrition, organizations are able to try to intervene and communicate in different ways and give special offers, among other ways, to make the targets remain loyal to the business. Such an action is proactive and assists in holding on to its customer base and thus minimizing cases of customer turnover.

**4. Real-Time Customer Interaction:** The use of analytics-based loyalty programs facilitates two-way conversations in real time with the clients. For example, firms can alert customers through an app or email with suggestions while the latter is perusing the firm's website or purchasing products. This underlines the concept of immediacy, which is further beneficial in improving the experience of the customer and making them feel closer to the brand.

**5. Machine Learning for Product Recommendations:** An example of artificial intelligence would be where the customer data could be analyzed using computer programs, and from this, the programmers could determine the likelihood of the customer buying a product or using a particular service. This personalization also reaches out to the loyalty program to follow the whole voyage right from the stage of shopping to after-sales, thereby increasing conversion rates and customer satisfaction.

**6. Increased Customer Engagement and Satisfaction:** Personalization is used to warm the customer, and how they are treated is crucial in their engagement; thus, their satisfaction is high. When the customers are given offers and rewards that are close to what they desire or actually need in the market, they are more likely to engage in the loyalty program and, hence, the brand.

**7. Optimized Marketing Strategies:** The owned data assists the companies in reviewing their approaches towards marketing. Thus, based on these aspects, companies can adapt their campaigns more effectively to reach the most responsive audience with the right message at the most suitable time. Such precision helps to cut more on the marketing expenses and improves the performance of promotional activities.

**8. Continuous Improvement:** Technology-based and reliant loyalty programmes have a constant feedback loop. Loyalty programs can reveal the immediacy of the cost advantages and enable companies to scrap plans that do not exactly work well. This cyclical process makes loyalty programs dynamic to meet the inferred customers' behaviors and market conditions at every time.

**9. Strengthened Emotional Connection:** Loyalty through big data enhances the functional elements of the program while at the same time building customer touch-feel with the brand. When customers find that a brand has invested in them, the value associated with the brand grows, and when the customers feel that a brand cares for them, they respond and there is a certain bond that is created.

## **2. Literature Survey**

### **2.1. Traditional Loyalty Programs**

Most traditional loyalty programs give out standard rewards on a customer's purchase activity. These programs are meant to help the companies coax the original customers to make more purchases in the future by offering them offers such as scaled-down prices and rewards in the form of other special offers. [5] As far as the measure of their effectiveness is concerned, it should be noted that the traditional approach to the concept of loyalty programmes lacks the rigorous degree of accuracy needed to factor in the differences in clients' preferences and consumption patterns. This process may lead to customer disengagement since the incentive programs do not suit the customer's needs and preferences. In the course of its implementation, especially when it is ongoing, such approaches may lose their absorbing interest among the customers and, therefore, become less useful. In addition, the more conventional methods of using reward programs might not give enough feedback on the consumers' behaviors and preferences, thus not effectively helping to create long-term consummation with clients.

### **2.2. Transformation to Data-Based Programs**

Transforming the sort of loyalty programs from conventional to analytic-based forms is very much a progressive change in the customer communication process. Advanced data analytics inform data-driven loyalty programs which are specific to customers' details on their buying habits in the market. Indeed, owing to customer data like purchasing patterns, web history, and social media profiles, one can easily design appealing incentives. Thus, it is possible to receive individual values through the necessary data manipulations and analysis, which are achieved by employing such methods as machine learning or predictive modeling, enabling to forecast of customer behaviors or preferences in the future. Hence, converting the programs into data-driven applications helps to improve the appeal of the loyalty programs and gives them better returns regarding customer retention and lifetime. McDonalds' approach was more successful because individualized loyalty programs are more effective on an emotional level, thus linking the customer closer to the brand.

### **2.3. Case Studies and Empirical Evidence**

The Case of Microsoft: Analyzing the Global Markets and Regulatory Systems Moreover, Such Evidence of Microsoft: Cases of Global Markets and Regulatory Structures. Research has shown that these data-driven loyalty programs work since there are many success stories from firms that have implemented the same. For instance, had researched some aspects of loyalty programs where they discovered that customized programs were able to raise the rate of customer retention by 25 percent than the normal programs. Such an increase clearly shows that personalization affects customer loyalty in a big way. In the same manner, a case study of Starbucks showed that their ever popular rewards program that utilizes data analytics to distinguish between customer's patronages increased customer expenditure and visits to the outlet. This program follows the purchase behavior of each Starbucks patron in order to give incentives that would help drive the customer back to the store and spend more. Such examples give an idea of how the use of data-driven models in designing loyalty programs can contribute to increasing customers' interest and business performance.

### **2.4. Challenges and Considerations**

While it is possible that the usage of big data technologies can be helpful in the sphere of marketing and, as a result, increase the effectiveness of the developed rewards programs, it is necessary to mark that there are some concerns and challenges concerning the application of big data technologies. The first one is data protection or data privacy and security concerning the information which is collected, stored, and analyzed. As such programs are very dependent on the collection and analysis of customers' data, it is crucial to ensure that such data will not only be secured but also processed legally in accordance with the existing data protection law. This indicates that if customers' data is not safeguarded, they may switch their support to other organizations, not to mention the legal consequences felt in law courts. Several problems are at stake here, yet another problem is the problem of how to amalgamate the data. Applying the system of combining different streams of data, for example, online, in-store, social media, etc., is not a small challenge and requires specific efforts and IT specialists. Furthermore, sound analytical tools are necessary to analyze large amounts of data that enable business operations. Others have skilled data scientists and advanced analytical tools for analyzing the competitors. To overcome these challenges, there is, therefore, the need to facilitate efficient implementation and operation of data-driven loyalty programs. This is why companies must mandatorily build the measures for

secure management of the data, as well as integration of the data into the main systems of the organization, and high analytical capabilities to support these developed new advanced loyalty programs.

### 3. Methodology

Conceptualizing a data-driven loyalty program also has several key steps that need to be taken, these include data acquisition and consolidation and the development of the loyalty program and its evaluation and data feedback. [6,7] The following is a detailed description of each step leading to a methodology that is useful in the designing and implementation of the data-driven loyalty program.

#### 3.1. Data Collection and Integration

Among the initial steps toward the establishment of the data-driven practices of the loyalty program there is the customers' data accumulation and combination of the data received from different sources. These are transactional data, demographic data, social media data, and many others. Data integration means the accumulation of such information about patients into a single database where it can be retrieved and plumbed as needed. The integration process ensures that the customer's data is in a standard format and thus can be analyzed and insights obtained.

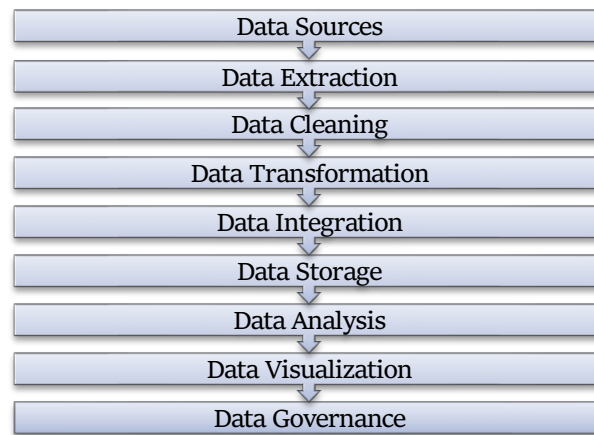


Figure 4. Data Collection and Integration Process

#### 3.2. Customer Segmentation

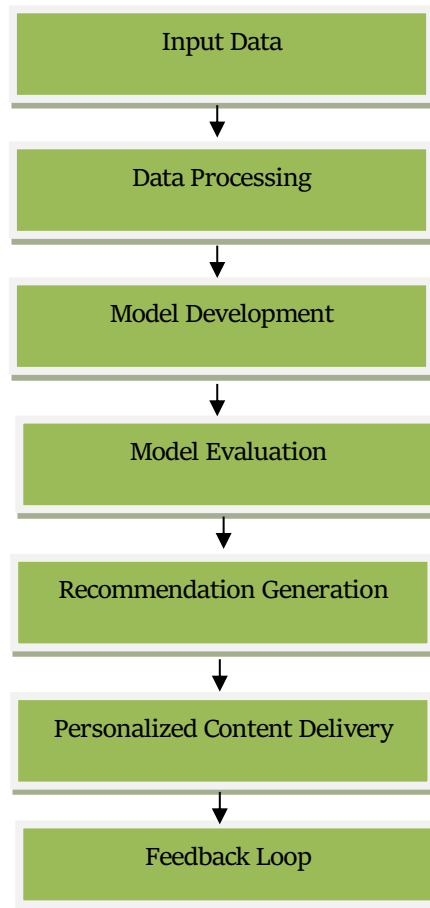
It is only after the collection of the customers' data that the next process of segmenting the buyers based on their behaviour and the specified characteristics occurs. Regarding the types of algo and specifically the segmentation algo, one is likely to use types of algorithms that are, in fact, called clustering algorithms such as the K-means and the hierarchical clustering. This process is important in identifying segmented customer groups that can be motivated to remain loyal there; it helps to explain how one can develop incentives that can be offered to the targeted customers.

Table 1. Customer Segmentation Criteria

Segment	Criteria	Example Attributes
Segment A	High Spending	Frequent Purchases, High Value
Segment B	Occasional Buyers	Infrequent Purchases, Moderate Value
Segment C	New Customers	Recent Sign-ups, Low Value

#### 3.3. Personalization Engine

In the case of the personalization engine, the recommendation is specifically directed towards the particular reward and incentive categories through the help of machine learning models sectoring the customers. Such models are useful to make prognoses related to the behavior and preferences based on the history so that the bonuses which are being provided shall be interesting. Collaborative filtering decision trees and neural nets are some definitions considered in the advanced data mining method that can be used to develop better and updated recommendation systems.



**Figure 5. Personalization Engine Workflow**

- 1. Input Data:** Is delimited by a “Historical Data” or “Customer Data” box, or a box that contains brief details of the customer, some of which may include purchase records or histories, sites/areas most frequently visited, age and or gender, and comments/suggestions given to the company.
- 2. Data Processing:** An arrow leading to another box that has ‘Data Cleaning & Preprocessing.’ This class includes handling of missing values, normalization and feature selection, among others.
- 3. Model Development:** An arrow from the oval ‘Data Cleaning & Preprocessing’ to a rectangle ‘Model Training.’ Inside this rectangle, write/ draw icons/ notes of the following techniques used in machine learning.
- 4. Model Evaluation:** An arrow from “Model Training” to another box called “Model Evaluation” with processes such as cross-validation, Performance measures such as Root Mean Square Error(RMSE), Precision, Recall value, and Tuning.
- 5. Recommendation Generation:** An arrow from “Model Evaluation” to the box that says “Produce a set of recommendations” regarding the emergence of rewards and incentives that are unique to each customer after the training of the model.
- 6. Personalized Content Delivery:** An arrow linking this to a box labelled Deliver Recommendation to Customer: this might involve the merging of the user’s interface, application or Website through which the customer gets his or her rewards and incentives.
- 7. Feedback Loop:** A loop from “Customer Interaction” back to the “Data Cleaning & Preprocessing” step in order to see future enhancements for the models based on the fresh customer data and their conduct.

### 3.4. Program Implementation

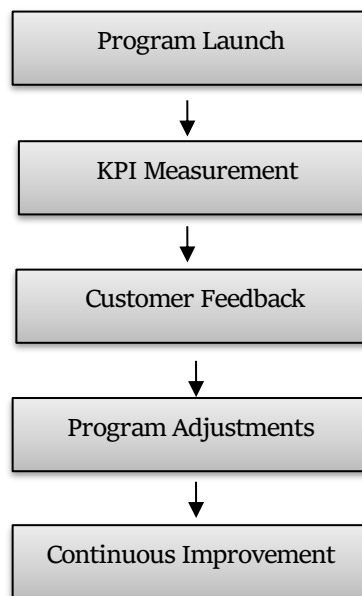
In the third stage of the STAR model, the organization is required to transfer the identified customized rewards to the buyers using email notifications, mobile alerts, and face-to-face communications. [8] Special attention must be paid to the constant evaluation of the program's effectiveness and its modifications to adapt to the changes in customer attitudes.

**Table 2. Key Performance Indicators**

KPI	Description
Customer Retention Rate	Percentage of customers retained over time.
Engagement Levels	Measures of customer interaction and participation.
Revenue Growth	Increase in revenue attributed to the loyalty program.
Customer Satisfaction	Feedback on customer experience and satisfaction.

### 3.5. Evaluation and Feedback

Last but not least, the programme efficacy is highlighted by the basic indicators, for example, the customer loyalty rates, the customer interaction rates, and the revenue increase rates. System feedbacks are also put in place to enable the collection of customer feedback in order to make appropriate changes to the program. This step means that the program is constantly adjusted to allow it to suit the customer needs as well as the business goals.



**Figure 6. Evaluation and Feedback**

**1. Program Launch:** Data driven loyalty program was for the first time used in Thomson holidays. In this step, the program is spread through all the communication angles to the customers as is explained below.

**2. KPI Measurement:** Concerning the consumption indices set on the basis of the organization of the program, some of them are concerned with the measurement of the impact of the program as well. This is because it entails a comparison of such things as changes in the retention rates and the average spending/engagement levels.

**3. Customer Feedback:** It is crucial to get feedback from the side of the customers as to the program, while this implies the systematic collection to enable the measurement of the level of the program's adoption as well as the perceived satisfaction with the awarded incentives.

**4. Program Adjustments:** These are evaluated by KEIP and the data gathered is used in correcting the program's evil or improving on it. This could imply a modification for incentives, work in progress in the Customers' customization or even Customers' complaints administration.



**5. Continuous Improvement:** The final one is accountability, which implies the constant evaluation and improvement of the program and another process which is characteristic of it. Sustainment enables the program to satisfy the customer's need and at the same time, efficiently conduct the operations.

## 4. Results and Discussion

### 4.1. Case Study: This assignment is focused on a retail company referred to only as Company X.

As an example of the impact of data-driven loyalty programs, the paper describes the example of the development and functioning of an advanced analytics and personalized rewards-based loyalty program in the context of Retail Company X – a retail organization. The implications arising out of the findings of this case study lie in highlighting major accretion in some of the major performance parameters that were observed in the course of the study, the major of which lies in the effectiveness of data analytic models in driving customer retention and consequent growth of the business.

**Table 3. Key Performance Indicators**

KPI	Before Implementation	After Implementation
Customer Retention	60%	75%
Average Spend per Customer	\$50	\$65
Customer Engagement	Moderate	High

#### 4.1.1. Customer Retention

Employing the concept of a data-driven loyalty program introduced in the paper, Retail Company X's customer retention rate prior to employing the loyalty program was at 60%. While the program has not been deployed, the estimated rate of customer retention was at about fifty-five percent; after that, this rate rose to seventy-five percent, illustrating that the company has greatly improved in its capacity to retain customers. With an increase in the number of flips, this implies that the tailored incentives and personalized rewards were successful in boosting customer traffic and increasing the customers' patronage.

#### 4.1.2. Average Spend per Customer

The total spending per customer, too, went up from the previous \$50 to \$65. It can, therefore, be attributed to the attempts to customize reward programs of the establishment so as to ensure that customers spend much more with each purchase. Thus, making offers and promotions that are close to the client's interest ultimately assisted the company in enhancing the average order value.

#### 4.2. Customer Engagement

Activity level increased from a moderate level to a high level after adjustment was made by launching the data-driven loyalty program. Thus, change in this aspect is seen as increased engagement with the loyalty program, including increased participation in promotional events as well as the use of rewards. More participation is a sign of customer interest because it shows that they are keen enough to take time and follow the program keenly.

#### 4.3. Customer Feedback and Satisfaction

A survey of the customers was used to determine the success of the program. The customers had a high satisfaction level with the personalization of rewards, saying that the rewards given were relevant and valuable. It was noted that most of the customers found the relevant rewards to be more fulfilling, personal, and engaging. The positive feedback received as a result was significant and enhanced customer patronage and hence validated the approach to customer segmentation as a way to improve customers' spending and satisfaction. This meant that the program was successful in meeting the expectations of the customers through cementing their loyalty and also the willingness to spend more money. Consumers acknowledged the topicality of the incentives, which only served to boost the general company allegiance of consumers. These practices aligned with customer preferences factored prominently in enhancing satisfaction and furthering the significance of the customers' data-driven Weltanschauung.

#### 4.4. Challenges Encountered

Nevertheless, the following are some of the issues that Retail Company X faced while rolling out the data-driven loyalty program. One of the major issues that were faced during the study was data amalgamation. Assembling data from the client's multiple databases, employing transactions, demographical data, and social network feeds, was intricate and time-consuming. [9] The integration process depended on IT investment for the improvement of the hardware, software, and other system support to enable the proper collection and storage of data as well as its availability for analysis. Another difficulty was the fact that with a vast number of users, the personalization of content was based on complicated algorithms. It was very important to design and optimize accurate and relevant recommendation mechanisms, such as employing machine learning models. These obstacles were

the reason why Retail Company X had to pursue sophisticated analytical tools and employ data scientists to make the program successful.

#### 4.5. Future Directions

In turn, future research may consider several promising directions for increasing the effectiveness of data-driven loyalty programs. AI and blockchain technologies are emerging technologies that, when adopted, could provide further chances for innovative creation. AI can continue to improve personalization algorithms, which will give even more accurate suggestions and data. Through applying a block chain technique, data can be protected privately, but at the same time, this information can be generated to be more transparent and be trusted by many customers. Furthermore, by pursuing longitudinal research, one might discover more about the effects of data-driven loyalty programs on customers' conduct and businesses' outcomes. Therefore, by tracking these programs over several years, it is possible to study the development of the loyalty concept and ways in which businesses can modify them to meet the ever-shifting customers' demands. In balance, Retail Company X's case illustrates what is possible by taking a loyal customer approach to data-based CRM that can augment customer retention, usage, and satisfaction rates. But even so, the issues should be confronted with proper investments in technology and professionals to yield amazing profits. Subsequently, new technologies and research approaches will contribute to the improvement of the effectiveness of data-driven loyalty programs, which will lead to the success of various businesses.

### 5. Conclusion

In today's world of treacherous competition, customer loyalty programs more and more based on the usage of data are a new era in customer relationship management. These programs use complex data processing tools to improve on conventional, dull, loyal customer reward plans and craft innovative marketing communication strategies that suit individual clients' behavior patterns. With the help of the data obtained through numerous contact points, including transactional histories, demographic information, social media presence, and web-browsing behaviors, businesses can predict their customers' needs and want. This level of segmentation guarantees that rewards offered to the clients are not only appropriate to their needs but attractive as well, thus increasing the clientele base's satisfaction.

As noted above, the advantages of data analytics in loyalty programs are diverse. Firstly, it ensures that clients are retained in large numbers mainly because customers feel emotionally attached to the brand. This made customers feel appreciated hence making them loyal to the brand since it knowledge them. Improved retention means that consumers buying a firm's product are likely to purchase the product several times in the future, and it is common knowledge that consumers who remain loyal to a particular brand buy more in that brand than consumers who switch their loyalty frequently. In addition, such programs assist the companies in minimizing their marketing expenses, as the efforts made to maintain loyal clients are usually more resource-saving than the ones dedicated to attracting new clientele. The third benefit which can enhance the firms' performance is the likely prospect of higher profits. With the help of modern technologies, it is possible to create data-driven loyalty programs that would help businesses define the highest-value customers and target them with special offers, overtures to purchase higher-value products, and promotions. The utilization of this strategy also increases the average size of transactions and, thus, the overall increase in sales volume. Further, it enables business organizations to make anticipations of customers' needs and wants hence preventing or dealing with emerging problems effectively and efficiently and improving on the services or products provided.

Nevertheless, the benefits that come with the use of data-driven loyalty programs make these propositions quite attractive to any company that is seriously positioning itself for the long haul in the market. The capacity for offering additional, well-targeted pass-and-buy experiences that appeal to consumers not only strengthens consumers' appreciation for brands and products but also fosters product improvement in popularity and public acceptance as people use the brands and buy frequently. The right execution of these programs means improved and less unpredictable cash inflows, fewer customer losses and enhanced competitive position. Namely, data-driven loyalty programs can be considered the vision of the future of CRM, which presents numerous opportunities for companies ready to use big data and personalization.

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