

Awaking deep emotional needs of consumers based on big data and emotional analysis

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Abstract

Consumer service and customer satisfaction are related to meeting the needs and demands of consumers while retaining them for lifelong. In an effort towards customer satisfaction, the customer's emotional needs are taken into consideration for the formulation of future strategies and the development of products. The analysis of such information can

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be performed with the aid of big data tools. The study highlights the factors of emotional analysis and provided strategies for enhancing emotional marketing. The background of the topic was jotted down, and thematic analysis was conducted for the interpretation of the core variables in the study. The limitations and future scope of such a topic were also laid down.

Subject Classification: 62P25, 68T01.

Keywords: Emotional interaction, Data processing, Data analysis, Emotional marketing, Big data, Emotional analysis.

1. Introduction

The application of emotional attachment towards the growth and enhancement of business has been a vital strategy implemented by organizations (Kumar *et. al.*, 2021). Unique marketing strategies aimed at gaining consumers loyalty through customer satisfaction and improved customer engagement, are paving a positive future perspective of customer acquisition and retention for companies (Hota, 2022a). With advancement of technology, and data becoming available at the finger tips, companies are integrating chunks of data into their database for studies through the application of big data.

The advent of digitization has been a boon for the expansive nature of business (Kumar *et. al.*, 2023). As suggested by McStay (2020), the growth of the companies has been made easy due to the statistical accumulation of data and examination of past results. In such a manner, organizations have the ability to understand the preferences of the customers and develop their business in terms of such requirements. As seen in the works by An & Park (2018), emotional marketing includes the indulgence of the

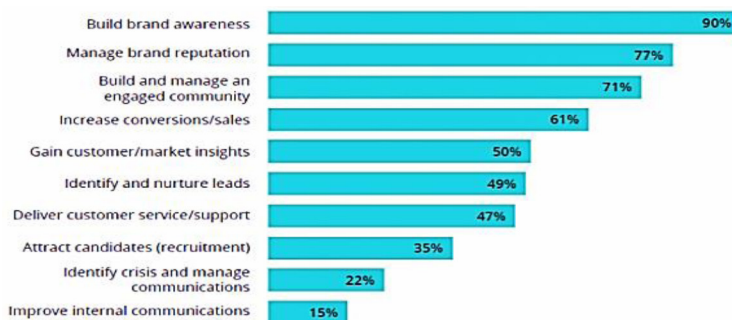


Figure 1
Goals of organization in terms of emotional marketing

(Source: An & Park, 2018)

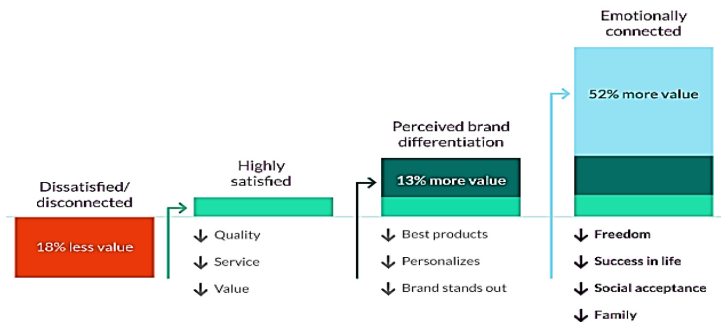


Figure 2

Percentage of customer perception toward emotional analysis

(Source: Lytras *et. al.* 2020)

emotional perspectives of the consumers. Emotions such as joy, loyalty, anxiety, satisfaction etc., related to the goods and services of the respective organizations, fall under such a concept.

Figure 1 integrates the various goals of the companies based on the emotional attachment of the consumers to the brand. As viewed by Wang, Ho & Cambria (2020) and Hota(2022b), gaining consumers, increasing their preferences for the firm, improvement of customer service and similar other deeds can be managed by the companies based on the results of analysis of the data. The highest percentage can be noted from the graph to be in relation to the generation of brand awareness amongst the customers through the engagement of emotional marketing.

Big data forms a significant tool for the inspection of behavioral psychological analysis, which further helps in the application of emotional marketing in a company. Figure 2 mentions the various percentages of the customer preferences which are linked with the emotional attachment to the firm. According to the findings by Lytras *et. al.* (2020), the changes seen in the emotional values of the consumers include or exclude them from the arena of the target audience. Brand differentiation by the consumers works about the emotional investments done by the audience towards a particular company.

Research Objectives

The research objectives of the study are mentioned below:

- To examine the relationship between emotional marketing and consumer preference

- To inspect the implementation of big data for analysis of emotional marketing
- To analyze the use of the marketing approach for enhancing consumer preference in terms of emotional marketing

Research questions

The research questions of the study are mentioned below:

RQ1: What is the association between emotional marketing and consumer preference?

RQ2: In what manner does big data allow for the analysis of emotional marketing?

RQ3: What ways are laid down to use marketing approaches for enhancing consumer preference in the case of emotional marketing?

Literature Review

Analysis of the emotional connection of customers for the marketing of goods and services

Consumers and companies have been seen to have an inherent relationship based on emotional investments and the sentimental growth of the relationship (Shakeel&Khan 2023). Analysis of emotional marketing acts as a viable technique that can be adapted by companies for improving

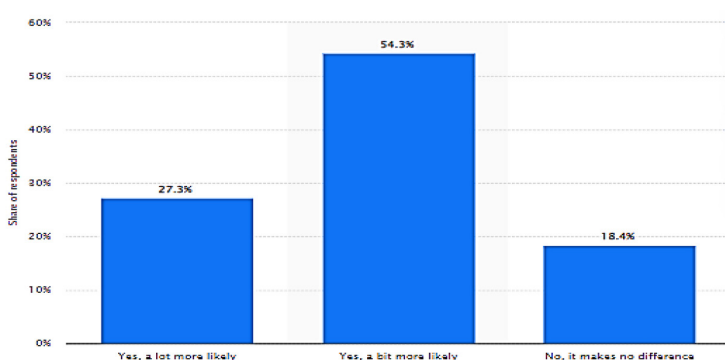


Figure 3

Does an emotional connection to a retailer or brand make you more likely to purchase?

(Source: Statista, 2013)

their customer satisfaction methods. As per the thoughts of André *et. al.* (2018), the growth in competitive advantage can be performed by the respective organizations by understanding the requirements of the consumers, and by examining their emotional attachment to the firm. In such a manner, the improvement of the customer relationship with the firms heightens, which further increases their loyalty.

Figure 3 illustrates the percentage of responses obtained, based on the survey on the emotional connection between the consumers and the retailers for consumption of the brand. It can be observed that an increase in emotional attachment allows the consumers to reconsider their buying approaches from the firms. From the point of view of Grgić, Podobnik & Carvalho (2022), the application of big data to companies allows the establishment of such means to increase their emotional connectivity.

By understanding the peak factors which increase the loyalty of customers through the application of big data, companies can further increase their chances to improve their strengths. On the other hand, as per the opinions of Liu, Cui & He (2021), the mitigation of the negative elements identified from the examination of information from the consumers through big data could also be performed, for increasing customer retention.

Integration of Big Data for emotional analysis of the consumers

The emotional experiences of the consumers during obtaining of an item or the post-purchasing services mediate how the audience perceives

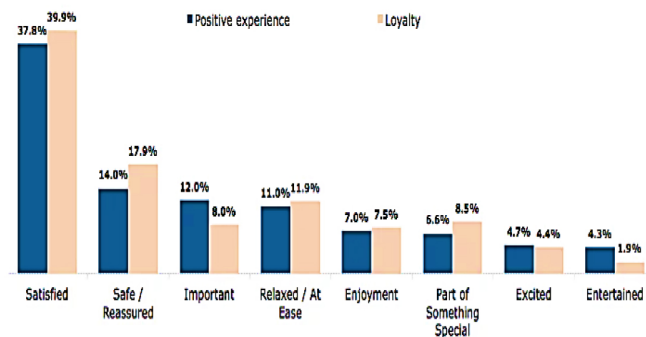


Figure 4

Percentage of consumers buying goods based on their emotional attachments

(Source: Bilro *et. al.* 2019)

the firms. Through an easy communication mode, the consumers have the ability to gather a positive consumer experience. According to the thoughts of Bilro *et. al.* (2019), the building of a synchronised relationship between the firms and the customers is necessary for increasing their loyalty.

Through the integration of computer science, companies have the capability of understanding the emotional and psychological needs of consumers. As per the views of Greco & Polli (2020), emotional advertising is a major tool being implemented for attracting consumers. The obtained data through customer preference can be examined through the application of Big Data.

Figure 4 mentions the different percentages shown by the consumers in different customer services which deploy their emotions of positive experience and loyalty. According to the opinions of Kanjo *et. al.* (2019), the application of big data allows enterprises to deploy model innovation methods and also increase the techniques of sustainable development. Data processing can also be utilised for enhancing emotional marketing methods by improving their decision-making strategies.

Theory

Emotional contagion theory

The engagement of the *emotional contagion theory* towards the creation of emotional attachment of the target audience with the firms has been noted in customer management. The spread of emotional states of the consumers amongst each other, based on the experiences with the

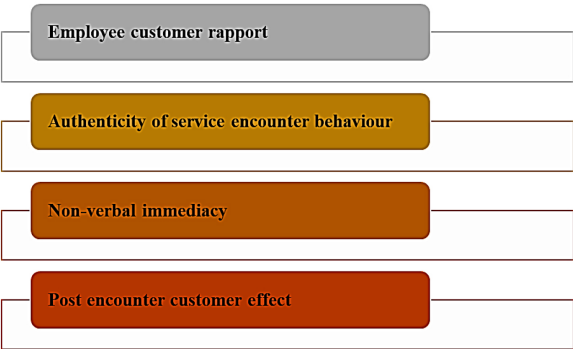


Figure 5
Factors of Emotional contagion theory
(Source: Influenced from the works of Kang, Martinez & Johnson, 2021)

firms, allows the growth or decline in the business platform (Banerjee & Srivastava, 2019). Such an establishment can be reached once the negative notions of the services of the firm are spontaneous spread amongst the consumers. However, as per the findings by Kang, Martinez & Johnson (2021) Figure 5, enhancement of customer management allows the further proliferation of the firm through word-of-mouth among the consumers.

The emotional engagement, behaviour, and attitude of the consumers allow the various companies to integrate the data into their database, and implement the big data techniques for obtaining the required results. The factors of *emotional contagion theory* can then be assessed for the formulation of the required strategies. Improvement of emotional connectivity, providing improved customer services, and personalised approaches allow the respective organisations to attract a larger number of loyal consumers.

Methodology

The study was performed through the collection of secondary data from different sources such as books, articles, journals, and related websites. The data analysis was based on the conduction of the secondary qualitative method and thematic analysis was performed to inspect the gathered data. The application of positivism research philosophy was carried out by the researcher during the obtaining and examination of the data. According to the thoughts of Ryan (2018), the trustworthy analysis of factual data and information through observation is done in the case of positivism research philosophy.

The descriptive research design and exploratory research framework were integrated into the study for the accurate interpretation of themes and key concepts in the core topic. An extensive analysis of the key factors and elements in the topic of the study could be performed with the aid of a descriptive research design. The exploratory research framework allowed the researcher to perform the examination and investigation of the research questions laid down in the study.

Result

Quality review

Table 1
Quality review

Authors	Study design	Number of resources	Measured outcomes	Result	Quality review
Anshari <i>et. al.</i> (2019)	Qualitative	15	Big data analysis and multi-way communications between the firms and consumers improve the engagement of customers	The formulation of strategies in terms of Customer Relationship Management (CRM) through personalised customer experience by big data analysis was seen in the study	High
Chang, McAleer & Wong (2018)	Qualitative	12	Marketing management done through Big Data analysis has the ability to gain high financial sustainability	Customer interactions with the firms allow the gathering of the requisite data and forming further data analysis for the explanation of the alterations in customer interactions	Moderate
Ardito <i>et. al.</i> (2019)	Qualitative	15	Increased customer satisfaction can be seen in the firms performing big data examination	Improvement of organisational productivity can be seen in firms integrating big data analysis by providing personalised marketing campaigns	Moderate

Contd...

Kauffmann <i>et. al.</i> (2020)	Quantitative	20	Sentiment analysis allows the firms to understand the emotional background of customers within the firms	The examination of the positive and the negative factors in case of customer management through big data analysis allows the firms to perform strategic decision making	Moderate
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(Source: By learner)

Table 1 highlights the four major articles which were assessed in the thematic analysis of the study.

Thematic coding

Table 2
Thematic coding

Author	Code	Themes
Anshari <i>et. al.</i> (2019), Chang, McAleer & Wong (2018)	Big data analysis, service quality, customer satisfaction, commercial sector, customer loyalty, customer preferences, emotional marketing	Integration of big data for emotional marketing analysis
Ardito <i>et. al.</i> (2019), Kauffmann <i>et. al.</i> (2020)	Marketing approaches, customer knowledge, Bigdata analysis, customer satisfaction, customer retention, emotional marketing	Marketing approaches to increase consumer preference for emotional marketing

(Source: By learner)

Table 2 mentions the various themes applied in the study, the related authors, and the key codes present in the themes.

Thematic analysis

Theme 1: Integration of big data for emotional marketing analysis

Emotional artificial intelligence (Emotional AI) has been integrated into numerous companies to the improvement of customer services in a variety of industries Bhalerao *et. al.*, (2022). The emotion detection principles and indicators are being examined through Big Data tools for

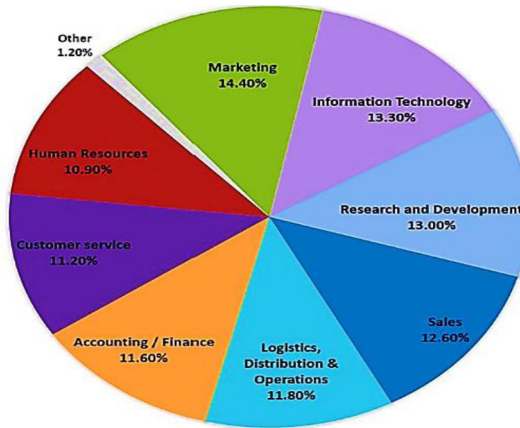


Figure 6

Implementation of emotional marketing in various sectors of an organisation

(Source: Anshari *et. al.* 2019)

reflecting on the numerous industry practices. As per the workings of Anshari *et. al.* (2019), such data are being studied for increasing the emotional attachment of the consumers, which further increases their chances of turning into loyal consumers.

Recognition of the brands heightens with the improvement of customer service, which depends on the emotional marketing aspects integrated by the companies. Figure 6 mentions the various percentages of emotional marketing performed in the diversified sector of an organisation. From the point of view of Chang, McAleer & Wong (2018), the study of the interdisciplinary nature of emotional marketing by firms proves to be necessary for the formulation of novel strategies.

Theme 2: Marketing approaches to increase consumer preference for emotional marketing

Several marketing methods and techniques can be integrated into the development of strategies, future working perspectives, and improving the currently running practice. Based on the needs and the requirements of the consumers, the companies have the ability to identify the emotional factors which regulate their buying approaches and perceptions. According to the workings of Kauffmann *et. al.* (2020), the conduction of emotional and sentiment analysis of the achieved data from the consumers allows the firms to evolve their purchasing decisions of the same.



Figure 7

Attributes of companies that emotionally attract consumers

(Source: Ardito *et. al.* 2019)

Through the generation of numerous practices, firms have the ability to obtain a larger group of consumers. The Big data analysis of the gathered data allowed the companies to observe that the integration of environment-friendly and sustainable practices obtained a larger crowd Figure 7 (Ardito *et. al.* 2019). On the other hand, CSR methods present in the firm that provide financial, economic, and social support to the local communities also allow the growth of emotional attachment. As per the suggestions of Ardito *et. al.* (2019), social movements and the launching of sustainable campaigns helps the firms to achieve the emotional aspects of the consumers. Hence, through the provision of data analysis, emotional marketing can be performed by organisations to advertise such related techniques.

Through the integration of emotional marketing, easy decision-making techniques can be approached by organisations. As commented by Hossain & Muhammad (2019), the constructions of frameworks based on the emotional factors that lay an impact on the emotional approaches of the consumers can be performed. In such a manner, the big data analysis of the gathered information would aid the companies in further enhancing the personalised methods of customer services. Along with such, the designing of emotional campaigns for the emotional modelling of the consumers can be applied by the industries. As per the notions of Chatterjee *et. al.* (2019), the various kinds of advertising campaigns provided by companies on digital platforms, the presentation of sales, and similar methods can be integrated for increasing consumer preferences. Heightening of the brand image, brand awareness, and brand awareness can be achieved by the companies.

Conclusion

Hence, the study laid down the various approaches seen in the emotional marketing performed by firms for the improvement of customer engagement. The interpretation of the obtained data through big data analysis and the approaches for further improving the strategic-making techniques by the firm were also observed. The application of the secondary qualitative method and thematic analysis allowed the researcher to examine the core topic of the study in a descriptive manner. The acquisition of data by the firms from the consumers allows the integration of big data tools for the examination of the related factors for improving the concept of emotional marketing. The study also highlighted the different tools and approaches taken by companies for enhancing the quality of big data techniques.

Limitations

One of the major limitations found in the study is the lack of primary quantitative data. Without the views and opinions of the public, the generalisation of the core topic in the population could not be known. The conduction of statistical analysis could not be approached, which limited the accuracy of data interpretation performed. With expansive financial support, the gathering of relevant data from several paid websites and articles could also be obtained.

Future Scope

The application of big data can be thoroughly integrated for the inspection of the elements of customer management and emotional marketing by organisations. According to the suggestions of Marechal *et. al.* (2019), cloud computing and artificial intelligence (AI) can be further implemented into the decision-making strategies for growing the consumer base of organisations.

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