

Impact of Customer Relationship Management on the Business Strategies of E-Commerce Platform

Dr.Leela.M.H¹*, Dr. Anil Ramdas Bari²

¹ Dr. Ambedkar Institute of Technology, India. ² Arts, Commerce and Science College, Bodwad, India. *Corresponding Author Email: ¹ mhleela.mba@drait.edu.in

Abstract

Customer relationship management, or CRM, is a term that refers to the process of giving consumers the services they require for a firm to succeed. The use of CRM software is also acknowledged as being beneficial and attainable in organising an organization's digital performance, which boosts the working process of the corporation with better business characteristics. The research philosophy employed for the specific issue, the study design chosen by the user, the technique of data collecting, and the research strategy have all been discussed. In addition, the researcher will decide on the sampling technique, and the inclusion and exclusion criteria, and do the final topic analysis based on the data gathered and interpretations. Several research methodologies have been used to investigate the subject issue. The interpretivism research philosophy, which is based on theoretical analysis, was employed by the researcher. The researcher has also employed secondary qualitative data collection techniques to obtain reliable data. It has been found that the use of CRM software is fundamentally required to be a part of the whole company process as an essential component of its strategy. Therefore, it can be argued that the administration of communication has been greatly changed and grasped with the quote concrete use of electronic commerce. As a result, the Internet of Things is used to better understand the business demands of potential consumers.

Keywords

Customer experience, customer relationship management, digital businesses, digital marketing social media marketing, e-commerce, IoT, online business, online customer.

INTRODUCTION

The concept of CRM also known as Customer Relationship Management is associated with the process of providing customers with the needed services that the business objectifies to attain The application of CRM software is also recognised to be helpful and achievable in organising a digital performance of an organisation and in turn it enhances the working process of the business with improved business features. Therefore, the application of CRM software is essentially needed to be a part of the entire process of business as an integral part of its strategy. The importance of CRM as a part of the business strategies that are essentially needed to be a part of the business, with justified incorporation of E-commerce techniques in the movement and learning of activities. A typical place for integrating consumers with the process of acquiring the necessary satisfaction in the process of achieving the necessary customer satisfaction has been established by the boom of digital marketing. To elaborate on the importance, categorisation and analysis of seven articles are done along with research methodology and findings that illustrate the entire notion of the topic. Therefore, by the end of this research study, the viewer will be eligible enough to understand the point of discussion and the implication of the same.

LITERATURE REVIEW

The customers are the pivotal ones who play a derogatory role in the process of creating an efficient set of demands for a particular service and product. Based on this, the paper "Impact of Digital Marketing on online purchase intention: Mediation effect of customer relationship management" states that the boom of digital marketing has created a typical space in integrating customers with the process of getting the needed satisfaction in the process of gaining the needed customer satisfaction [9]. Therefore, from the research paper, the researcher has stated that the proper functioning of the entire customer relationship is well managed and hence with the application of a proper ecommerce platform the business strategies are affected positively to promote a better customer relationship.

The process of customer relationship management is intrinsically associated with various ways of performance by the e-commerce platform. As mentioned in "Research on Customer Relationship Management in E-commerce Environment", after the justified introduction of the ecommerce platform, it has been focused that the business processes and purposes are quietly being served by the regulated business strategies of the digitised platform. Therefore, the working of these platforms is considered to be eligible enough to affect the support of the customers and this, in turn, has provided the needed access to the enterprise and its associated information [11]. Therefore, on this note, it can be mentioned that a successful relationship between the customers with the organisational setup has been a corrosive result of the application of data and this in turn ensures the very aspect of communication.

The concept of customer relationship management is not only about handling the customers in a significant manner



that in total makes the organisation focus on getting tentative customers at their base, as regulated business persons. However, issues are faced in the process of handling them in a significant manner [3]. Therefore, as portrayed in "Social customer relationship management factors and benefits", the application of business strategies by different organisational platforms, in alignment with e-commerce strategies, is beneficial enough to provide the needed support to the business platforms to endorse more significantly in getting the needed customer base [5]. The knowledge about customer demand and the aligning note on the competitors might encourage the organisation to attract more customers towards their base by the locomotive moves by the business organisations.

According to Chen and Yang, (2021), in the writing "The Impact of customer experience on consumer purchase intention in cross border E-commerce", has been observed to become a new trend and this in turn has led to a new turn point in the business world. The application of the e-commerce platform is effective and beneficial enough to attract the needed customers to get the needed market recognition [6]. Therefore, based on that aspect, it can be seen that the business strategies by internet-based companies have a synchronising effect on consumer purchasing behaviour that in turn are sure to affect influential consumer choices, hence the strategy leading to the strategic promotion of corporate profits.

The development of the conceptual research model is significant enough to provide space for the development of the relationship of the enterprises with the customers in a formative manner, that in turn affects the performance of the business enterprises in terms of providing the needed access to the tentative customer base [18]. Therefore, as mentioned in "Journal of Theoretical and Applied Electronic *Commerce Research*", the application of the e-commerce strategy in the form of social media and other forms has helped enterprises in managing their relations with customers and this in turn has enhanced the performance ratio of business firms [1]. With the cyclical emergence of social media, customer relationship management has become an exclusive factor that in total is sure to affect the integration and movement of the noticeable changes that come in the path of developing the conceptual research model.

"Customer behaviour as an outcome of social media marketing: The role of social media marketing activity and customer experience", the impact of social media has been observed to play a significant role in getting the needed access to the marketing strategy. Therefore, on this note, it can be stated that the application of the SNS helps in accelerating the progressive growth of sustainable performance. The study has also revealed that the act of social media marrying activities and the intrinsic application of the customer experience (CX), in turn, allows the working of the engaging marking activities on the working of SNS [27]. It has been noted that any enterprises that identically focus on the marketing channel are tentative enough to promote the working of the strategies appointed by the business enterprises. To serve with technologies and techniques and also with strategies and designs that in turn demonstrate the content created through SNS [5]. This has effectively led to the exercising of the relationship quality and hence is effective enough in the representation of the relationship as a quality product.

The concrete application of artificial intelligence in alignment with the business process is effective enough to present remarkable and industrious work for gathering the needed customer base for proper business proliferation. Therefore, as mentioned in "The application of Artificial Intelligence in Electronic Commerce", it is observed that the businesses are locomotive enough to gain the base of using the delivery service and intra-city logistics [25]. This, in turn, emphasises the process of delivery and giving out of services that in turn assist in meeting the timelines and security of the services provided. to provide tools and methods, as well as ideas and designs, to help showcase the material produced by SNS. As a result, the connection's quality has been successfully exercised, which is sufficient to portray the relationship as a high-quality product. Therefore, it can be said that with the quote concrete application of Electronic Commerce, the management of communication has been significantly adjusted and understood. Therefore, the use of the Internet of Things or IoT helps in understanding the business needs of the tentative customers.

METHODOLOGY

The researcher that is carrying out this study has chosen the "Interpretivism Research Philosophy". This research perspective is frequently linked to ideas that emphasise the researcher's unique position in monitoring the entire social environment. This concept states that the study is linked to and relies upon the researcher's interests. Contrary to positivism, interpretivism does not seek to establish a causal relationship between the independent and dependent variables [4]. This research philosophy is in contrast with positivism as it holds reality as subjective and is constructed socially along with the composite of several perspectives [3]. Moreover, in this research philosophy, the research is inherently derived by the researcher who brings their point of view according to the phenomena which are also created with their personal experiences.

The researcher has followed a *Deductive* Research Approach. A deductive approach is concerned with logical reasoning where the researcher can find the progression from the general ideas to specific concluding statements of the problems. However, it is significant to note that deductive reasoning intends not to provide any conclusive statement but rather encourages an in-depth understanding of the problem statement. However, a deductive approach is also intended to formulate certain hypotheses which are associated with certain existing grounded theories [19]. One of the biggest advantages of the deductive research approach is that it is cost-effective and it helps in formulating hypotheses based

on existing theories.

The analyst here has chosen an Exploratory research design. It can be described as research which is utilised for making an investigation of a problem statement and which is not defined clearly. This Research Design is usually comported to have an enhanced knowledge of the existing problem statement however it does not intend to provide any conclusive result [4]. Which researcher begins with the general idea regarding the statement of the problem and utilises this entire research as a part to recognise certain issues and put more emphasis on the future implications. This type of research is usually conducted to address the problem statement and the initial phase and it is often referred to as the ground theory to answer the rationale of the problem statement [1].

The researcher here has chosen a Qualitative data collection technique. Qualitative data is descriptive and is not numerical which is based on the perceptions of people. Qualitative research usually carries out the study to understand exploratory reasoning and to assess the various ways in which a problem statement of the topic can be better understood [23]. It is significant to note that the qualitative data Collection technique helps the researcher to access numerous relevant facts that help in a proper understanding of the problem statement. This data collection technique has the initial purpose of collecting the textual facts for analysis. Automatic analysis is always conducted in a qualitative Data Collection method that helps in gaining knowledge around a particular topic or experience of the people and it also helps in assessing the meaning and relationships among the issues [13].

The various secondary data collection sources that the researcher has utilised for conducting this research are government records, books, journals, articles and many more. Collecting the data from books journals and government records usually makes the entire analysis more accurate. Moreover, it is significant to note that internet searches and libraries are also some of the options from which the researcher has collected data. The importance of customer relationship management is best defined in certain newspapers and books that have helped the researcher to gain enhanced knowledge regarding the topic [1]. This is also helpful in a proper analysis of the problem statement thematically.

The researcher for conducting this research has chosen **Simple convenience sampling.** This can also be referred to as a process of sampling which implies the non-probability method of sampling where all the units are chosen for inclusion in the sample size as it can be considered one of the easiest processes of sampling that the research can make access. This is also related to geographical proximity, the can writer access that any given point in time and the intention to participate in the entire process of research [23]. Here a small sample is chosen who can be interviewed with the help of open and questions so that the researcher can get an idea of what the interviewee thinks about the problem statement.

Inclusion and Exclusion

Table 1: Inclusion and exclusion criteria

Inclusion criteria	Exclusion criteria	
 The criteria of inclusion are concerned with all the key attributes of the target sample that the researcher usually makes use to answer the problem statement and the Research question [22]. It typically includes certain criteria which are clinical geography and demographic characteristics. 	 The criteria of exclusion involve various attributes or characteristics that are usually used for the recruitment of the population who are ineligible for the completion of the study. These attributes usually confound the entire parameter of outcomes. 	

Thematic analysis is concerned with one of the major forms of analysis in the qualitative Data Collection method. It puts more emphasis on the recognition, analysis and interpretation of various patterns that have proper meaning within the qualitative facts. Thematic analysis is a technique for analysing qualitative facts that entail the assessment across a large amount of data [23]. Moreover, it is one such method that helps in the destruction of the data and also involves interpretation of the chosen facts with the process of selecting certain quotes and by development and formulation of the things based on the research objectives [13]. This helps in understanding all the research objectives in an enhanced manner with the help of which the problem statement can be easily answered.

Ethical consideration refers to certain ethical norms that the researcher needs to follow while conducting the entire research. The secondary data collection method is followed here by the researcher. Significantly, the researcher master provided proper citations to all the data that has been taken from other books and records. Without providing proper citations to all those records it can lead to plagiarism and the researcher can face legal lawsuits. It may also lead to academic integrity issues and hence the resources can be debarred from the university as well [13]. It is significant to note that is not even allowed to use any abusive language or jargon while taking interviews with the research participants.

RESULTS AND DISCUSSION

Customer relationship management (CRM) enhances the overall experiences of consumers and helps to maintain straightforward interconnections efficiently, starting from sales, customer service, and marketing. Appropriate customer relationship management helps to improve customer loyalty, profitability, and especially the productivity of E-commerce businesses. Customer relationship management is a kind of technology utilized to assess and maintain the interrelationship of organizations with their customer segment [11].



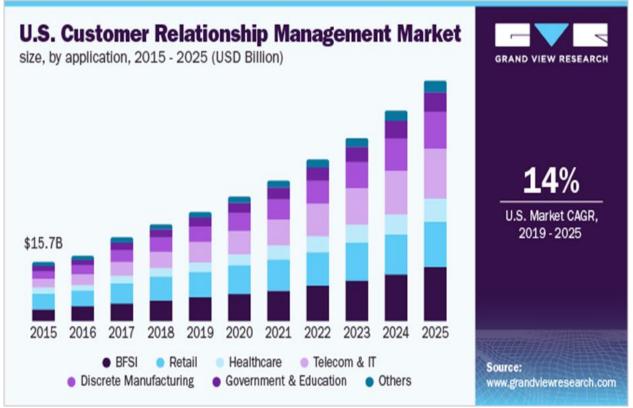
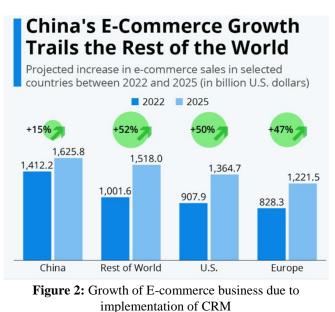


Figure 1: U.S. customer relationship management market. (Source: grandviewresearch, 2023)

Compared to 2019, the business growth of e-commerce rose by 14% in 2025. By 2025, the size of the U.S. customer relationship management market is projected to be \$64.2 billion. It is projected to grow at a compound annual growth rate of 14% during the forecast period. By 2025, it is expected that the global market for customer relationship management (CRM) software would reach a value of 49.6 billion US dollars [17]. The rise in revenue was estimated to reach close to 4 billion dollars in 2020, with a compound annual growth rate of 1.7%. It was noted that 16% of American companies accepted their organization's distribution of realistic customer interlinks across touching points and tools as efficient, displaying that companies must utilise the appropriate CRM technology [11]. Managing customer-centric decisions and activities across the operations of the business is the key factor for the enhanced investment of the companies in actual-time consumer analytics in the U.S. It has been predicted that between 2023 and 2028 the statistic of businesses following a CRM system for enhancing E-commerce business will step by step increase by 12% [5]. It has been observed that the implementation of CRM software has increased the conversion rates of sales in E-commerce businesses by nearly 300% [17]. Using CRM has a significant effect on customer retention and 47% of CRM users have also experienced increased customer satisfaction and customer retention. A few surveys have found that 64.2% of companies using CRM have increased the financial growth of their E-commerce businesses worldwide [21].



(Source: statista, 2023)

Asia, China, Europe, and North America have all seen huge increases in the selling of e-commerce products, and this trend will continue until 2025. The world's largest e-commerce market has now been formed in China, where in 2022 1.4 trillion dollars will have been spent on e-commerce. This is not the only instance; other industry studies have forecasted that this market would soon surpass this number due to its exponential growth. The Chinese e-commerce



market is predicted to grow by 15% by 2025 and will continue to dominate the global market [16]. The E-commerce market is projected to grow between 47% and

50% over the given timeframe, which is less than the global average. This huge growth of the business is due to the adoption of CRM technology in the last few years.

Marketing	Sales	Customer service
• Customer segment	• Lean management	• Service tracking
Campaign development	• Account management	• SLA agreements
Campaign execution	• Pipeline management	Account inquiries
• Project management	• Cross-selling and upselling	Request Management
	• Activity management	

Table 2: Customer relationship management of the e-commerce platform

In 2019, it was calculated that an average of 27 organizations out of a hundred utilize a customer relationship management (CRM) software process. It was recorded that among 53 organizations in France that belonged to the communication and information sector, only 10% of the organizations that belonged to the construction business utilized a CRM system in 2019. The revenue margins from the general software market and business software market in France increased steadily from 2006 to 2021 and it is expected that the increase will continue if the proper implementation can be done in business strategies of e-commerce platforms. In 2019, the usage of customer relationship management increased from 56% to 74%, and 49% of E-commerce businesses planned to implement CRM practices [14]. CRM helps to improve personalized experiences for consumers and it has been estimated that approximately 80% of consumers used to do E-commerce shopping from brands that provide customized shopping experiences and nearly 71% of consumers do not like to purchase through E-commerce business websites when the brand does not provide personalized experiences [15].

North America Customer Relationship Management Market Size, 2017-2028 (USD Billion)

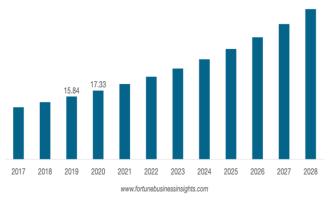


Figure 3: North America CRM market size, 2017-2028. (Source: crm, 2023)

Customer satisfaction in the E-commerce industry is a key factor that can change the forecast at any time as uncertainty will always exist in the business market. According to various surveys, the overall growth of the CRM industry will reach 12% in 2028 and the revenue margin will touch 129 billion dollars. According to statistics, the revenue margins of CRM companies will increase from a little under 14 billion dollars in 2010 to about 69 billion dollars in 2020. In other words, the net rise in E-commerce sales was almost 55 billion US dollars, and as a result, the net compound annual growth rate was calculated to be 393% [24]. These figures can provide an idea about the financial growth of an E-commerce business due to the adoption of CRM technology as a business strategy. The CRM software market has been predicted to expand by 49.6 billion U.S. dollars by 2025 [12]. The Forrester study has published that out of 10 companies, 4 organizations have reached an increase in revenue of nearly 11 to 20% after applying CRM technology in their E-commerce business strategies. Several surveys have revealed that business that has adopted CRM technology recently have experienced a growth rate of 29% increase in sales and sales productivity has increased by 34% while the sales prediction correctness rate increased by 42% [1]

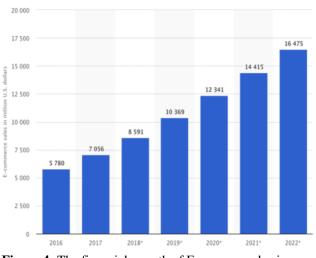


Figure 4: The financial growth of E-commerce businesses worldwide due to the Implementation of CRM. (Source: Saputra, 2019)

The implementation of CRM technology has increased the financial growth rate of the E-commerce business and the cash flow from E-commerce sales was 780 U.S. dollars in 2016 which has increased to reach 16, 475 U.S. dollars by the end of 2022, definitely execution of CRM technology has a significant impact on the E-commerce business growth. The revenues produced in China comprise the major portion of



the Asian market. However, other markets such as Europe and North America are growing very fast in terms of revenue generation. It has been predicted that the E-commerce business growth will expand by 52% within the next three years in The U.S. and Europe due to the adoption of CRM in the E-commerce business [14].

CONCLUSION

From the above discussion, it can be concluded that the impact of customer relationship management on e-commerce platforms is interlinked with each other. E-commerce business is only dependent on the customers that are why it is certain to have a relationship between the online customers and the business representatives. In that case, the strategies can also be affected due to customer relationship management. In the study, the literature review may take place on the concept of virtual reality. Certainly, customers think that digital marketing influence is more effective for online purchasing. Although materials and methods which can be involved towards the strategies of customer relations depict the fact customer transaction and other online information securities and how the companies can control the issues to give improve the purchasing experiences of the customers. As a result, E-commerce platforms rescued unfavourable conceptions and argued the situation by using customer relationship management. In the context of the E-commerce platform customers have more expectations than in the offline markets, so the companies need to satisfy them to enhance their business. Moreover, customer satisfaction gets impacted because of the relationship management-related strategies. According to the experts, online purchasing is more impactful, and if the customers are satisfied it will be not difficult to survive in E-commerce platforms.

REFERENCES

- Alexander, S.M., Jones, K., Bennett, N.J., Budden, A., Cox, M., Crosas, M., Game, E.T., Geary, J., Hardy, R.D., Johnson, J.T. and Karcher, S., (2020). Qualitative data sharing and synthesis for sustainability science. Nature Sustainability, 3(2), pp.81-88. Available at: https://www.nature.com/articles/s41893-019-0434-8
- [2] Alfonso, V., Boar, C., Frost, J., Gambacorta, L. and Liu, J., (2021). E-commerce in the pandemic and beyond. BIS Bulletin, 36(9). Available at: https://www.bis.org/publ/bisbull36 appendix.pdf
- [3] Alharahsheh, H.H. and Pius, A., (2020). A review of key paradigms: Positivism VS interpretivism. Global Academic Journal of Humanities and Social Sciences, 2(3), pp.39-43. Available
 at: https://scholar.google.com/scholar?hl=en&as_sdt=0%2C5&a s_ylo=2019&q=interpretivism&btnG=#d=gs_qabs&t=16728 07214296&u=%23p%3DiFiljr=zc9gJ
- [4] Carter, S., Andersen, C., Stagg, A. and Gaunt, L., (2022). An exploratory study: Using adapted interactive research design and contributive research method. The Journal of Academic Librarianship, p.102620. Available at: https://www.sciencedirect.com/science/article/abs/pii/S00991

33322001367

- [5] Chatterjee, S., Chaudhuri, R., Vrontis, D., Thrassou, A., Ghosh, S.K. and Chaudhuri, S., (2020). Social customer relationship management factors and business benefits. International Journal of Organizational Analysis. Available at: https://www.researchgate.net/profile/Demetris-Vrontis/public ation/340063742_Social_customer_relationship_managemen t_factors_and_business_benefits/links/5ff40e2d92851c13fee b62ba/Social-customer-relationship-management-factors-and -business-benefits.pdf
- [6] Chen, N. and Yang, Y., (2021). The impact of customer experience on consumer purchase intention in cross-border E-commerce—Taking network structural embeddedness as mediator variable. Journal of Retailing and Consumer Services, 59, p.102344. Available at: https://www.sciencedirect.com/science/article/pii/S09696989 20313527
- [7] crm.org, (2023). CRM statistics. [Available at: https://crm.org/crmland/crm-statistics], [Accessed on: 03-01-2023].
- [8] Cui, Y., Mou, J., Cohen, J. and Liu, Y., (2019). Understanding information system success model and valence framework in sellers' acceptance of cross-border e-commerce: a sequential multi-method approach. Electronic Commerce Research, 19(4), pp.885-914. Available at: https://link.springer.com/article/10.1007/s10660-019-09331-0
- [9] Dastane, D.O., (2020). Impact of digital marketing on online purchase intention: Mediation effect of customer relationship management. Journal of Asian Business Strategy, DOI, 10, pp.142-158. Available at: https://archive.aessweb.com/index.php/5006/article/downloa d/4257/6613
- [10] grandviewresearch.com, (2023). Industry analysis US customer relationship management CRM market. [Available at:

https://www.grandviewresearch.com/industry-analysis/us-cus tomer-relationship-management-crm-market], [Accessed on: 03-01-2023].

- [11] Guo, F., (2021), March. Research on customer relationship management in E-commerce environment. In IOP Conference Series: Earth and Environmental Science (Vol. 693, No. 1, p. 012072). IOP Publishing. Available at: https://iopscience.iop.org/article/10.1088/1755-1315/693/1/0 12072/pdf
- [12] Hossain, M.S., Rahman, M.F. and Zhou, X., (2021). Impact of customers' interpersonal interactions in social commerce on customer relationship management performance. Journal of Contemporary Marketing Science. Available at: https://www.emerald.com/insight/content/doi/10.1108/JCMA RS-12-2020-0050/full/html
- [13] Jowett, A., (2020). Carrying out qualitative research under lockdown-practical and ethical considerations. Impact of social sciences blog. Available at: http://eprints.lse.ac.uk/104352/
- [14] Kampani, N. and Jhamb, D., (2020). Analyzing the role of e-crm in managing customer relations: A critical review of the literature. Journal of Critical Review, 7(4), pp.221-226. Available at: https://www.jcreview.com/admin/Uploads/Files/61a8ca7972 9dd0.29082495.pdf
- [15] Karpunina, E.K., Isaeva, E.A., Galieva, G.F., Sobolevskaya, T.G. and Rodin, A.Y., (2021). E-commerce as a driver of



economic growth in Russia. In Institute of Scientific Communications Conference (pp. 1622-1633). Springer, Available Cham. at: https://link.springer.com/chapter/10.1007/978-3-030-69415-9 _179

- [16] Luo, X., Wang, Y. and Zhang, X., (2019). E-Commerce development and household consumption growth in China. World Bank Policy Research Working Paper, (8810). Available at: https://openknowledge.worldbank.org/bitstream/handle/1098 6/31539/WPS8810.pdf
- [17] Mariia, H., Natalia, T., Popkowski, T. and Kateryna, M., (2020). Digital transformations of logistics customer service business models. Intellectualization of Logistics and Supply Chain Management, (1), pp.57-75. Available at: https://cyberleninka.ru/article/n/digital-transformations-of-lo gistics-customer-service-business-models
- [18] Marolt, M., Zimmermann, H.D., Žnidaršič, A. and Pucihar, A., (2020). Exploring social customer relationship management adoption in micro, small and medium-sized enterprises. Journal of theoretical and applied electronic pp.38-58. commerce research, 15(2), v https://www.mdpi.com/0718-1876/15/2/12/pdf
- [19] Pandey, J., (2019). Deductive approach to content analysis. In Qualitative techniques for workplace data analysis (pp. 145-169). IGI Global. Available at: https://www.igi-global.com/chapter/deductive-approach-to-c ontent-analysis/207796
- [20] Pantelimon, F.V., Georgescu, T.M. and Posedaru, B.Ş., (2020). The impact of mobile e-commerce on gdp: A comparative analysis between romania and germany and how covid-19 influences the e-commerce activity worldwide. Informatica Economica, 24(2), pp.27-41. Available at: http://revistaie.ase.ro/content/94/03%20-%20pantelimon,%2 0georgescu,%20posedaru.pdf
- [21] Priambodo, I.T., Sasmoko, S., Abdinagoro, S.B. and Bandur, A., (2021). E-Commerce readiness of creative industry during the COVID-19 pandemic in Indonesia. The Journal of Asian Finance, Economics and Business, 8(3), pp.865-873. Available at:

https://koreascience.kr/article/JAKO202106438543586.pdf

- [22] Quintero, J., Baldiris, S., Rubira, R., Cerón, J. and Velez, G., (2019). Augmented reality in educational inclusion. A systematic review on the last decade. Frontiers in psychology, p.1835. Available 10. at: https://www.frontiersin.org/articles/10.3389/fpsyg.2019.0183 5/full
- Raskind, I.G., Shelton, R.C., Comeau, D.L., Cooper, H.L., [23] Griffith, D.M. and Kegler, M.C., (2019). A review of qualitative data analysis practices in health education and health behavior research. Health Education & Behavior, pp.32-39. Available 46(1).at: https://journals.sagepub.com/doi/full/10.1177/109019811879 5019
- [24] Saputra, A., (2019). Fraud Detection using Machine Learning in e-Commerce. International Journal of Advanced Computer 10(9). Science and Applications, Available at: https://www.proquest.com/openview/6f17cc61f7d88de70e3a de6c284b3fa3/1?pq-origsite=gscholar&cbl=5444811
- Song, X., Yang, S., Huang, Z. and Huang, T., (2019), August. [25] The application of artificial intelligence in electronic commerce. In Journal of Physics: Conference Series (Vol. 1302, No. 3, p. 032030). IOP Publishing. Available at: https://www.researchgate.net/profile/Xiaoqiang-Zhu-7/public ation/338023130_XDL_an_industrial_deep_learning_frame work_for_high-dimensional_sparse_data/links/5e00c3bb299 bf10bc3727d1c/XDL-an-industrial-deep-learning-framework -for-high-dimensional-sparse-data.pdf
- [26] statista.com, (2023). E-commerce sales growth by region. [Available at: https://www.statista.com/chart/22729/e-commerce-sales-gro wth-by-region/], [Accessed on: 03-01-2023].
- [27] Wibowo, A., Chen, S.C., Wiangin, U., Ma, Y. and Ruangkanjanases, A., (2020). Customer behavior as an outcome of social media marketing: The role of social media marketing activity and customer experience. Sustainability, 13(1),p.189.' Available at: https://www.mdpi.com/2071-1050/13/1/189/pdf