

The Effect of E-CRM and Artificial Intelligence on Sales Performance Through Digital Marketing (Empirical Study on Customers of PT XYZ in Jakarta)

Rian Adriansah*, Mombang Sihite, Fahrudin Salim

Postgraduate Directorate, Magister of Management, Pancasila University, Jakarta, Indonesia

*Corresponding author

Abstract: The increasingly high competition in the pay-TV industry in Indonesia requires hard efforts to increase customer loyalty to the products or services provided. Several things can affect customer loyalty, ranging from differences in packages offered, package prices, image quality, attractive impressions, installation promos, and so on. This competition demands that companies can quickly adapt to changes that occur so that companies will be able to compete with their competitors. The purpose of this study is to analyze the effect of E-CRM and artificial intelligence on digital marketing and their impact on sales performance. This research uses a causal-quantitative approach. The sample in this study is XYZ product customers who are in Jakarta with a total of 150 customers. This research method uses Structural Equation Model (SEM) with SmartPLS. The results show that E-CRM and Artificial intelligence affect Digital marketing. E-CRM (Electronic Customer Relationship Management) is a business and technology concept that is supported by information systems to integrate all business processes that interact with customers. By increasing E-CRM and Digital marketing affect sales performance. However, the Artificial intelligence variable shows no significant effect on sales performance. The use of Artificial intelligence has not been able to create an increase in sales performance.

Keywords: E-CRM, Artificial Intelligence, Sales Performance, Digital Marketing

I. INTRODUCTION

Pay-TV business (satellite and cable television) is growing rapidly. In 2009, the number of pay-TV subscribers in Indonesia was only 920 thousand subscribers. This number continues to grow and is expected to grow by 7% in 2014 to 2.5 million subscribers. (Hanadian Nurhayati-Wolff (2019) This growth rate will grow significantly to 9% in 2020 with a total number of pay-TV subscribers reaching 3.8 million. The population in Indonesia is very potential with a population of 245 million people, gross domestic product (GDP) per capita of 4,300 US dollars (Rp 34.4 million), and TV ownership reaching 35 million. From its growth, the Indonesian market is dynamic and has good prospects. In 2006, the growth of pay-TV in Indonesia was the highest in the Asia Pacific, which was around 30%-40%. This figure is much higher than Japan at 10%, Singapore at 13%, and Thailand at 7% (www.kompas.com, 2020).

The increasingly high competition in the pay-TV industry in Indonesia requires hard efforts to increase customer loyalty to the products or services provided.

In terms of increasing sales effectiveness, sales managers must understand how sales technology can help salespeople carry out their tasks more easily (Rodriguez & Honeycutt 2011). In the sales process, another challenge that salespeople often face is coordination and collaboration with relevant departments within the company. Salespeople need efficient collaboration with internal stakeholders including senior managers, customer support, product design, purchasing, shipping, and billing (Rodriguez & Honeycutt 2011).

One of the factors that affect sales performance is digital marketing. Digital Marketing is a marketing strategy that is generally used to promote goods and services to customers by utilizing various distribution channels. Through social media, buyers can get information whenever and wherever they need it. With a large number of social media users and the increasing number of days, it opens up opportunities for companies to develop their market in the grip of smartphones.

PT XYZ is a Pay TV company based on Prepaid. PT XYZ is prepared as a Pay TV with a strong media background and will change the paradigm of Indonesian consumers. Currently, many subscription TVs in Indonesia rely on low prices and various channels. Each of these products has different technology and has its own target market.

Table 1. Kontan.co.id Satellite TV Report

No.	TV Satelit	Persentase
1	MNC	51%
2	Transvision	20%
3	K-vision	18.5%
4	Topas Tv	6%
5	Matrix Garuda	4%

Source: databoks.katadata.co.id, 2020

Based on top brand index data, it can be seen that the position of brand X is the third satellite tv. This shows that the level of competition in satellite tv operating in Indonesia is 51% still controlled by MNCs. To improve the brand in the eyes of consumers, XYZ must apply a competitive strategy to seize its market share, one of which is the use of social media as a means of interaction with XYZ customers.

The growth in satellite service revenues was mainly due to the continued positive achievement in the acquisition of XYZ subscribers. In Q2-2021, K-Vision succeeded in acquiring a total of 1.1 million new customers and achieved a total sales of reloading vouchers of Rp94.7 billion. It should be noted that K-Vision managed to make its best achievement in June 2021 by winning IDR 55.7 billion from the sale of top-up vouchers, most of which came from the EURO Cup 2020 event (Ramadan, 2021).

A successful company is a company that can establish long-term relationships with its customers. A long-term relationship means loyal customers whose needs and wants are satisfied. One of the tasks of marketers here is how to keep their customers loyal to the products or services offered.

The method that can be used to make the relationship as close as possible between the company and its customers is CRM (Customer Relationship Management), by using this method the customer will be able to feel more understood by the company or business unit. CRM in the computer era has now been developed and upgraded to become E-CRM (Electronic Customer Relationship Management) whose CRM function is not only an application that is used only as a call center or help desk but is also used as a marketing application and as a liaison between the company and the company. each customer and this is also done by PT XYZ to improve the company's marketing performance.

The problems faced related to the implementation of E-CRM at PT XYZ are the lack of long-term relationships between several agents and their customers, the lack of understanding of the products provided by marketing to customers so that the desires or expectations of customers for a product are not achieved and result in a loss of customer trust in the company.

In addition to the CRM approach, the use of information technology greatly influences sales performance. One of the information technologies currently widely used by companies is the development of Artificial Intelligence.

The contribution of Artificial Intelligence (AI) in Indonesia, which is a developing country is still relatively low, this is due to several factors such as the number of worker skills that do not meet the requirements to operate Artificial Intelligent (AI) and the lack of investment to develop AI infrastructure.

AI can be applied in almost every field, some of which are expert systems, human brain simulation, natural language processing, and others. One example of the implementation of an AI system is "Chatbot". Chatbot itself is a service that is

supported by a set of rules and artificial intelligence, which interacts with users through a chat interface (Pratt Cherryleaf, 2017).

In its development, chatbots have begun to be used by almost all circles, especially in the business world. XYZ is a pay-tv service that has used chatbots. The advantage of this application is that it can provide customer service 24 hours a day by providing services in the form of interactive questions and answers to users regarding service information services. However, there are several problems related to the use of Artificial intelligence, especially the Chatbot service, one of which is often disrupted and unresponsive to questions asked by service users.

Based on the literature review and previous research, the following hypothesis can be formulated:

1. Effect of e-CRM on Digital Marketing

Digital marketing is a marketing activity including branding that uses various web-based media such as blogs, websites, e-mail, AdWords, or social networks. The presence of digital marketing is caused by the advancement of information technology development coupled with mobile technology. Utilizing mobile technology makes everyone who has an internet network, can get accurate information only on their hands (Kazali, 2011). In today's business world, the use of mobile technology is very important, including in marketing the company's products (Sanjaya, R. & Josua Tarigan, 2009).

One of the marketing activities that have a positive impact is the existence of e-CRM. e-CRM is a tool on the internet that you can use to fulfill CRM goals. Its use can be done through devices such as computers, laptops, and mobile phones.

Customer Relationship Management (CRM) is a company strategy used to pamper customers so they don't turn to competitors (Gaffar, 2007). The implementation of the E-CRM program is expected to be able to make customers loyal to the company so that the relationship that occurs is not only a relationship between sellers and buyers but rather leads to a partner relationship. According to Sin et al. (2005) stated that CRM is a strategy that companies need to optimize profits in improving their performance.

The results of research conducted by Mohammad Waliul Hasanata, Ashikul Hoqueb, and Abu Bakar A. Hamid (2019), concluded that e-CRM is related to Digital Marketing.

Based on the theory and references above, the hypotheses of this research are as follows:

H1: The E-CRM affects Digital Marketing

2. The Effect of Artificial Intelligence on Digital Marketing

Artificial Intelligence can be interpreted as a simulation of human intelligence modeled in machines and programming. Currently, Artificial Intelligence has been widely applied in

various sectors of human life. Currently, the camera feature is one of the things that makes smartphone manufacturers compete. Cameras on smartphones today can perform facial recognition, and determine the best composition and angle position, to automatically optimize so that we can get the best photos.

Besides being found in everyday life, AI can also be used in the business world. Many companies are currently investing more in AI technology to be able to give them more sales to optimize the performance of the company. First, Artificial Intelligence can help a business to personalize the shopping experience of its customers. When customers get an advertisement that suits their current needs, the potential for buying the product will be greater. In addition, personalized advertising can also increase brand awareness and engagement from customers, which ultimately leads to increased sales.

The results of research conducted by Patrick van Esch, J. Stewart Black, (2021), and Tiago Ribeiro and José Luís Reis, (2020) prove that Artificial Intelligence affects Digital Marketing.

Based on the theory and references above, the hypotheses of this research are as follows:

H2: The Artificial Intelligence affects Digital Marketing

3. *Effect of e-Customer relationship management on Sales performance*

Utilization of CRM has an impact on sales performance in different areas. Sales performance measures are based on different areas related to the work function of the sales force namely customer relationship performance and sales process effectiveness (Rodriguez & Honeycutt, 2011). Customer relationship performance is the extent to which salespeople can build relationships with customers, "build an understanding of the unique issues of concern to customers and then can provide recommendations to address those problems" (Hunter & Perreault 2006). CRM technology makes it possible for salespeople to process information about customers such as storing, retrieving, and analyzing customer data so that they can make specific and customized recommendations as a long-term business solution (Jones et al. 2005).

The effectiveness of the sales process is determined by how effective salespeople are in carrying out their duties, the use of CRM technology helps salespeople to work more effectively, for example, with this technology, salespeople can easily analyze lost or won opportunities, it is also reported that there is an opportunity, an increase in the closing rate (Stoddard et al. 2011), and Nikashemi et al. (2013) mention that this technology can also increase customer retention. By taking advantage of CRM capabilities, salespeople can further increase their knowledge, improve sales skills, improve presentation skills (Ahearne et al. 2007), which in turn will make all sales activities more effective.

The results of research conducted by Feby Ferdinan syah (2015) and Hani H. Al-Dmour, Raed Salah Algharabat, Rawan Khawaja Rand H. Al-Dmour (2020) prove that e-CRM has an effect on sales performance.

Based on the theory and references above, the hypotheses of this research are as follows:

H3: The e-CRM affects Sales performance

4. *The Effect of Artificial Intelligence on Sales Performance*

The world of marketing continues to evolve along with technology. Currently, artificial intelligence is known to carry out digital marketing strategies. One of the factors that support digital marketing is the use of artificial intelligence.

Artificial Intelligence technology is indeed made to facilitate human life. One of the sectors that is facilitated by this technology is the business world. Artificial Intelligence can help a business to personalize the shopping experience of its customers. When customers get an advertisement that suits their current needs, the potential for buying the product will be greater.

Artificial intelligence can help in finding new marketing channels that may not be used by a company's competitors. Systems using artificial intelligence can test platforms and optimize targeted marketing. Artificial intelligence is able to analyze, organize and optimize marketing efforts with paid advertising. That way, companies can know whether marketing through the new channel is the right decision or not before actually doing it.

The results of research conducted by Wael Basri (2020) Xueming Luo, Marco Shaojun Qin, Zheng Fang (2020) prove that Artificial Intelligence has an effect on sales levels.

Based on the theory and references above, the hypotheses of this research are as follows:

H4: The Artificial Intelligence affects Sales performance

5. *The Effect of Digital Marketing on Sales Performance*

The development of information technology is growing rapidly. Various small to large business activities take advantage of this development to run their business. The number of competitors is a consideration for entrepreneurs to enter in a very tight competition. Appropriate marketing and media strategies are used to be able to reach the target market so that sales volume always increases and profits.

Digital Marketing is one of the marketing media that is currently in great demand by the public to support various activities carried out. They are gradually starting to leave the conventional/traditional marketing model for modern marketing, namely digital marketing. With digital marketing, communication and transactions can be done any time / real time and can be global or global.

The results of research conducted by Silviana, MS (2020), Rofik Satria, Hasmawaty A.R. (2021) and Risa Ratna

Gumilang (2019) prove that digital marketing has an effect on sales levels.

Based on the theory and references above, the hypotheses of this research are as follows:

H5: The Digital Marketing affects Sales performance

The theoretical framework that describes the influence of funding and investment decisions on competitiveness is as follows (Figure 1):

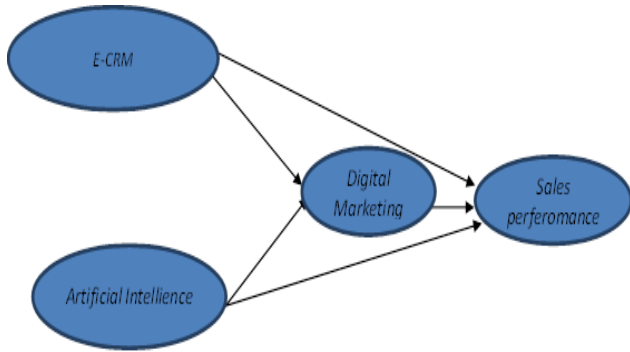


Fig.1:-Research Model

II. RESEARCH METHODS

This study uses a quantitative approach. The population in this research as many as 637,570 customers. The sample in this study were 150 customers of PT XYZ. The data analysis used in this study is descriptive statistical analysis and quantitative analysis using the Structural Equation Modeling (SEM) method from the SmartPLS statistical package.

III. RESULTS AND DISCUSSION

3.1. Descriptive Statistical Analysis Results

In this chapter, researchers will describe the results of research from E-CRM and artificial intelligence on sales performance through digital marketing. The main data source used in this study was a questionnaire distributed to 150 respondents. This study consisted of 2 independent variables, namely E-CRM consisting of 11 statement items, artificial intelligence consisting of 17 statement items, the intervening variable, namely digital marketing, consisting of 10 statement items and the dependent variable, namely sales performance, consisting of 18 statement items.

Furthermore, the data that has been collected is then coded and processed using descriptive analysis to determine respondents' responses to each variable studied, then followed by Structural Equation Modeling (SEM) analysis using Partial Least Square (PLS) to analyze the effect of E-CRM and artificial intelligence on sales performance through digital marketing

The results of the descriptive analysis describe respondents' responses to the CRM variable. Based on the processing results, it can be seen that the average for the E-CRM variable is 3.48. This shows that the implementation of E-CRM at PT XYZ has been going well

Based on the processing results, it can be seen that the average for the Artificial Intelligence variable is 3.56 or strongly agrees. This means that the Artificial Intelligence used by PT XYZ is good

Based on the processing results, it can be seen that the average for the Digital Marketing variable is 3.51 or agree. This means that PT XYZ's Digital Marketing is good.

Based on the processing results, it can be seen that the average value for the Sales Performance variable is 3.21 or quite good. Thus it can be concluded that the Sales Performance of PT XYZ is quite good category.

3.2. Results of Statistical Calculations Using Path Analysis

In this study, model testing was carried out by showing the R2 value in the endogenous latent construct. The hypothesis in this study will be tested using the path coefficient values and p-values which are presented as follows.

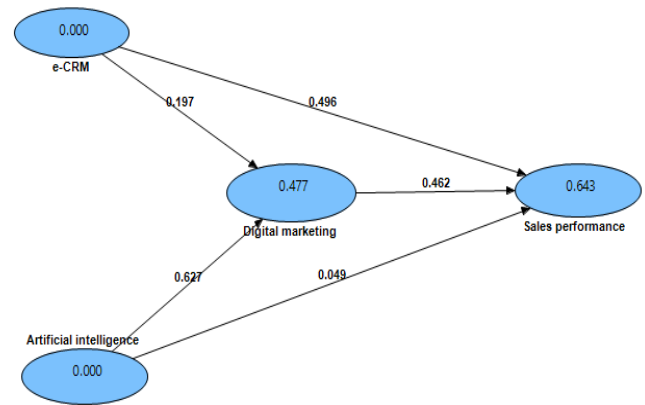


Fig. 2: -Structural Model

Table 2. Path Coefficient Value

Influence between variables	Path Coefficient	Critical T ratios
E-CRM → Digital Marketing	0.197	2.738
Artificial intelligence → Digital Marketing	0.627	8.304
E-CRM → Sales performance	0.496	7.306
Artificial intelligence → Sales performance	0.049	0.539
Digital Marketing → Sales performance	0.462	5.364

Source: Data processed using PLS software

Based on statistical parameters, it shows that tcount of 2.738 is greater than ttable of 1.96 at a significance level of 5%. This means that E-CRM has a significant effect on Digital Marketing. Thus Ha is accepted and Ho is rejected.

Based on statistical parameters, it shows that tcount of 8.304 is greater than ttable of 1.96 at a significance level of 5%. This means that Artificial intelligence has a significant effect on Digital Marketing. Thus Ha is accepted and Ho is rejected.

Based on statistical parameters, it shows that tcount of 7,306 is greater than ttable of 1.96 at a significance level of 5%. This means that E-CRM has a significant effect on sales performance. Thus H_a is accepted and H_o is rejected.

Based on statistical parameters, it shows that the tcount of 0.539 is smaller than the ttable of 1.96 at the 5% significance level. This means that Artificial intelligence has no effect on Sales performance. Thus H_a is rejected and H_o is accepted.

Based on statistical parameters, it shows that tcount of 5.364 is greater than ttable of 1.96 at a significance level of 5%. This means that Digital Marketing has a significant influence on Sales performance. Thus H_a is accepted and H_o is rejected

Table 3. Coefficient of Determination Value (R^2 Test)

Laten Variable	R^2
E-CRM and artificial intelligence → Marketing digital	0.477
E-CRM, artificial intelligence and Marketing digital → Sales performance	0.643

Source: Data processed using PLS software

In the table above, it can be seen that the R Square value for the competitive advantage variable obtained is 0.477 or 47.7%. These results show that E-CRM and artificial intelligence together have an influence of 47.7% on Digital marketing, while the remaining (1-R Square) 52.3% is a large contribution of influence given by other factors not examined.

Then the value of R Square for the Sales performance variable obtained is 0.643 or 64.3%. These results show that e-CRM, artificial intelligence and Digital Marketing Sales performance together have an effect of 64.3% on sales performance, while (1-R Square) 35.7% is the remaining large contribution of influence given by factors others not investigated.

3.3. Discussion of Hypothesis Test Results

1. Effect of E-CRM on Digital Marketing

Based on statistical parameters, it shows that tcount of 2.738 is greater than ttable of 1.96 at a significance level of 5%. This means that e-CRM has a significant effect on Digital marketing. Thus H_a is accepted and H_o is rejected.

One of the marketing activities that have a positive impact is the existence of e-CRM. e-CRM is a tool on the internet that you can use to fulfill CRM goals. Its use can be done through devices such as computers, laptops, and mobile phones. Customer Relationship Management (CRM) is a company strategy used to pamper customers so they don't turn to competitors (Gaffar, 2007). The implementation of the Customer Relationship Management (CRM) program is expected to be able to make customers loyal to the company so that the relationship that occurs is not only a relationship between sellers and buyers, but rather leads to a partner relationship. According to Sin et al. (2005) stated that CRM is

a strategy that companies need to optimize profits in improving their performance.

The results of this study are in accordance with research conducted by Mohammad Waliul Hasanata, Ashikul Hoqueb, Abu Bakar A. Hamid (2019) and V. Selvam, A. Kumari (2020) showing that e-CRM has a positive and significant effect on digital marketing.

2. The Effect of Artificial Intelligence on Digital Marketing

Based on statistical parameters, it shows that tcount of 8.304 is greater than ttable of 1.96 at a significance level of 5%. This means that Artificial Intelligence has a significant effect on Digital Marketing. Thus H_a is accepted and H_o is rejected.

Artificial Intelligence can be interpreted as a simulation of human intelligence modeled in machines and programming. Currently Artificial Intelligence has been widely applied in various sectors of human life. Currently, the camera feature is one of the things that makes smartphone manufacturers compete. Cameras on smartphones today can perform facial recognition, determine the best composition and angle position, to automatically optimize so that we can get the best photos. Besides being found in everyday life, AI can also be used in the business world. Many companies are currently investing more in AI technology to be able to give them more sales to optimize the performance of the company. First, Artificial Intelligence can help a business to personalize the shopping experience of its customers. When customers get an advertisement that suits their current needs, the potential for buying the product will be greater. In addition, personalized advertising can also increase brand awareness and engagement from customers, which ultimately leads to increased sales.

The results of this study are in accordance with research conducted by Patrick van Esch, J. Stewart Black, (2021) Tiago Ribeiro and José Luís Reis (2020) and ArnaudDe Bruyn, VijayViswanathan, Yean ShanBeh, Jürgen Kai-UweBrock, (2020) and Krystyna Jarek , Grzegorz Mazurek (2019) who concluded that Artificial Intelligence has an effect on Digital Marketing.

3. Effect of E-CRM on Sales Performance

Based on statistical parameters, it shows that tcount of 7.306 is greater than ttable of 1.96 at a significance level of 5%. This means that E-CRM has a significant effect on sales performance. Thus H_a is accepted and H_o is rejected.

Customer relationship performance is the extent to which salespeople can build relationships with customers, "build an understanding of the unique issues of concern to customers and then can provide recommendations to address those problems" (Hunter & Perreault 2006). CRM technology makes it possible for salespeople to process information about customers such as storing, retrieving, and analyzing customer data so that they can make specific and customized recommendations as long-term business solutions (Jones et al. 2005).

The effectiveness of the sales process is determined by how effective salespeople are in carrying out their duties, the use of CRM technology helps salespeople to work more effectively, for example, with this technology, salespeople can easily analyze lost or won opportunities, it was also reported that there was an opportunity. an increase in the closing rate (Stoddard et al. 2006), and Nikashemi et al. (2013) mention that this technology can also increase customer retention.

The results of this study are in accordance with research conducted by Hani H. Al-Dmour, Raed Salah Algharabat, Rawan Khawaja Rand H. Al-Dmour (2020) and Feby Ferdinan syah (2015) who concluded that E-CRM has an effect on sales performance.

4. *The Effect of Artificial Intelligence on Sales Performance*

Based on statistical parameters, it shows that the tcount of 0.539 is smaller than the t-table of 1.96 at the 5% significance level. This means that Artificial intelligence has no effect on Sales performance. Thus H_a is rejected and H_o is accepted.

Artificial Intelligence technology is indeed made to facilitate human life. One of the sectors that is facilitated by this technology is the business world. Artificial Intelligence can help a business to personalize the shopping experience of its customers. When customers get an advertisement that suits their current needs, the potential for buying the product will be greater. In this study, the use of artificial intelligence has not been able to increase sales at PT XYZ. This is possible because Artificial Intelligence has not been implemented optimally.

The results of this study are not in accordance with research conducted by Xueming Luo, Marco Shaojun Qin, Zheng Fang (2010) and Wael Basri, (2020) which concluded that Artificial intelligence affects sales performance.

5. *The Effect of Digital Marketing on Sales Performance*

Based on statistical parameters, it shows that tcount of 5.364 is greater than ttable of 1.96 at a significance level of 5%. This means that Digital Marketing has a significant effect on Sales performance. Thus H_a is accepted and H_o is rejected.

The results of the study show that the direct influence of Digital Marketing on Sales performance means that with the achievement of Digital Marketing, the increase in Sales performance will also be better. Appropriate marketing and media strategies are used to be able to reach the target market so that sales volume always increases and profits. Digital Marketing is one of the marketing media that is currently in great demand by the public to support various activities carried out. They are gradually starting to leave the conventional/traditional marketing model for modern marketing, namely digital marketing. With digital marketing, communication and transactions can be done any time / real time and can be global or global.

The results of this study are in accordance with research conducted by Shella Wongso (2020) and Nur Ocvanny Amir, Rahmad Pulung Sudiby, Mamlu Atul Hasanah (2019), Andi Hendrawan, Hari Sucahyowati, Kristian Cahyandi, Indriyani, Atril Rayendra (2019), Theresia Pradiani (2017) and Risa Ratna Gumilang (2019) who concluded that Digital Marketing has an effect on Sales performance.

IV. CONCLUSION

Based on the results of data analysis and discussion that has been described, the following conclusions are drawn.

E-CRM has an effect on Digital marketing. E-CRM a business and technology concept that is supported by information systems to integrate all business processes that interact with customers. Increasing the role of e-CRM will increase digital marketing activities. The implementation of the E-CRM program is expected to be able to make customers loyal to the company so that the relationship that occurs is not only a relationship between sellers and buyers but rather leads to a partner relationship

Artificial intelligence has an effect on digital marketing. Artificial intelligence or AI technology embedded in computer systems, allows the marketing team to carry out various commands without having to touch a particular device. This makes it easier for business people to determine marketing strategies, to analyze competitors so they can maximize digital marketing.

E-CRM has an effect on sales performance. E-CRM technology makes it possible for salespeople to process information about customers such as storing, retrieving, and analyzing customer data and making specific recommendations as a long-term business solution so as to maximize sales performance.

Artificial intelligence has no effect on sales performance. The use of Artificial intelligence has not been able to create an increase in sales performance. Artificial Intelligence can help a business to personalize the shopping experience of its customers. When customers get an advertisement that suits their current needs, the potential for buying the product will be greater.

Digital marketing has an effect on sales performance. Digital Marketing helps a company in promoting and marketing the company's products and services. Digital Marketing can also create or open new markets that were previously closed due to limited time, communication methods, and distance. By using digital marketing, it will improve sales performance.

REFERENCES

- [1] Ahearne, M., Hughes, D. E., & Schillewaert, N. (2007). Why sales reps should welcome information technology: Measuring the impact of CRM-based IT on sales effectiveness. *International Journal of Research in Marketing*, 24(4), 336-349.
- [2] Andi Hendrawan, Hari Sucahyowati, Kristian Cahyandi, Indriyani, Atril Rayendra. (2019). Pengaruh Marketing Digital Terhadap Kinerja Penjualan Produk Umkm Asti Gauri Di Kecamatan

- Bantarsari Cilacap. *Jurnal Administrasi dan Kesekretarian*, Volume 4 – Nomor 1 Maret 2019
- [3] Bilal Ramadhan, (2020) *Ini Strategi Digitalisasi Selama Pandemi*. *Jumat* 13 Aug 2021 22:57 WIB. <https://www.republika.co.id/berita/qxs48p330/ini-strategi-digitalisasi-selama-pandemi>
- [4] Bröker, M., Cooper, B., DeTora, L. M., & Stoddard, J. J. (2011). Critical appraisal of a quadrivalent CRM197 conjugate vaccine against meningococcal serogroups A, C W-135 and Y (Menveo®) in the context of treatment and prevention of invasive disease. *Infection and drug resistance*, 4, 137.
- [5] Feby Ferdinan syah (2015). *Analisis Pengaruh Customer Relationship Management (Crm) Terhadap Kemampuan Kolaborasi Dan Kinerja Tenaga Penjualan (Studi Empiris Pada Pt Aplikasi Lintasarta)*. Sekolah Pascasarjana Universitas Sumatera Utara Medan 2015
- [6] Gaffar, Vanessa. (2007). *Customer Relationship Management and Marketing, Public Relation*. Bandung: Penerbit Alfabeta.
- [7] Hanadian Nurhayati-Wolff (2019) Number of pay TV subscribers in Indonesia from 2016 to 2022(in millions). <https://www.statista.com/statistics/257298/pay-tv-subscribers-in-indonesia/>
- [8] Hani H. Al-Dmour , Raed Salah Algharabat , Rawan Khawaja Rand H. Al-Dmour. (2019). Investigating the impact of ECRM success factors on business performance: Jordanian commercial banks. Sumber: *Asia Pacific Journal of Marketing and Logistics*. ISSN: 1355-5855
- [9] Hunter, G. K., & Perreault Jr, W. D. (2006). Sales technology orientation, information effectiveness, and sales performance. *Journal of Personal Selling & Sales Management*, 26(2), 95-113.
- [10] Jones, T. M. (2005). *AI Application Programming (Charles River Media Programming)*. Charles River Media, Inc..
- [11] Mohammad Waliul Hasanata, Ashikul Hoqueb, Abu Bakar A. Hamid. (2019). Effect of Customer Relationship Management In Digital Marketing For Customer Satisfaction And Loyalty. *International Conference on Business, Accounting, Finance and Economics (BAFE, 2019) Universiti Tunku Abdul Rahman, Kampar, Perak, Malaysia, 4th Oct, 2019*
- [12] Nikashemi, Sayed Rajab; Laily Paim; Farzana Yasmin; dan Abdolaziz Yousefi, (2013), “Critical factors in determining customer satisfaction toward internet shopping in Malaysia,” *International Journal of Bussiness and Management Invention*.
- [13] Nur Ocvanny Amir, Rahmad Pulung Sudibyoy, Mamlu Atul Hasanah. (2019). Pengaruh Penggunaan Digital Marketing terhadap Kinerja Pedagang Bunga di Desa Sidomulyo, Kota Batu. *Jurnal Administrasi dan Kesekretarian*, Volume 4 – Nomor 1 Maret 2019
- [14] Patrick van Esch, J. Stewart Black. (2021). *Artificial Intelligence (AI): Revolutionizing Digital Marketing*. *Australasian Marketing Journal*, 2021
- [15] Pratt, E. (2017). *A Primer Artificial Intelligence and Chatbots in Technical Communication—A Primer*.
- [16] Risa Ratna Gumilang. (2019). *Implementasi Digital Marketing Terhadap Peningkatan Penjualan Hasil Home Industri. Coopetition : Jurnal Ilmiah Manajemen (E-ISSN : 2615-4978, P-ISSN : 2086-4620) Vol 10 No 1, Maret 2019*
- [17] Rodriguez, M. and Honeycutt, E. (2011). CRM’s Impact on B2B Sales Professionals’ Collaboration and Sales Performance. *Journal of Business-toBusiness Marketing*.
- [18] Rofik Satria, Hasmawaty A.R. (2021). Pengaruh Digital Marketing dan Brand Awareness terhadap Penjualan Produk KartuAS Terhadap Cabang Palembang. *Jurnal Nasional Manajemen Pemasaran & SDM e-ISSN: 2745-7257 Vol. 2, No. 3, September 2021*
- [19] Shella Wongso. (2020). Pengaruh Digital Marketing Terhadap Kinerja Penjualan Dengan Kualitas Layanan Sebagai Variabel Moderating Pada PT. Tiki Jalur Nugraha Ekakurir (JNE). *Artikel Ilmiah. FEB Univ. Gunadarma*,(2020).
- [20] Silviana, MS (2020). *Pengaruh Digital Marketing Terhadap Tingkat Penjualan Melalui Sosial Media (Studi Kasus Di Kecamatan Bone-Bone)*. Skripsi thesis, Universitas Muhammadiyah Palopo.
- [21] Sin, Leo Y.M. Alan C.B. Tse and Frederick H.K.Yim, (2005). CRM: Conceptualization and Scale Development, *European Journal Of Marketing*. Vol 39, No. 12, P. 1264- 1290
- [22] Tarigan, J., & Sanjaya, R. (2016). *Creative digital marketing*. Jakarta: Elex Media Komputindo.
- [23] Theresia Pradiani (2017). *Pengaruh Sistem Pemasaran Digital Marketing Terhadap Peningkatan Volume Penjualan Hasil Industri Rumahan*. *JIBEKA*. Volume 11 Nomor 2 Februari 2017 : 46 - 53
- [24] Tiago Ribeiro and José Luís Reis (2020). *Artificial Intelligence Applied to Digital Marketing*. IPAM, Portuguese Institute of Marketing, 2020
- [25] Wael Basri. (2020). Examining the Impact of Artificial Intelligence (AI)-Assisted Social Media Marketing on the Performance of Small and Medium Enterprises: Toward Effective Business Management in the Saudi Arabian Context. *International Journal of Computational Intelligence Systems*, Volume-Issue, 13 – 1, 142 – 152, (2020), ISSN (Online) 1875-688, ISSN (Print) 1875-6891
- [26] Xueming Luo, Yasmin, A., Tasneem, S., & Fatema, K. (2015). Effectiveness of digital marketing in the challenging age: An empirical study. *International Journal of Management Science and Business Administration*, 1(5), 69-80.