Application of Artificial Intelligence in Improving Customer Experience at PT Chubb Life Insurance Medan

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A R T I C L E   I N F O

A B S T R A C T

This research discusses the application of Artificial Intelligence in improving Customer Experience at PT Chubb Life Insurance Medan. Artificial Intelligence plays an important role in increasing customer loyalty and customer relationships. Artificial intelligence is a symbol of the emergence of the industrial revolution 4.0 era which is intended to provide convenience for users, in various sectors, especially in the insurance sector. With Artificial Intelligence, customers can easily connect with each other without having to be on location, or formulate an event or condition. The approach used in this research is qualitative, which is intended to understand the phenomena experienced by the research subject. This research produces data in the form of descriptive words and written words about people and observed behavior. The results of this study indicate that the application of Customer Corner in improving Customer Experience has a positive impact. Various service features in the Customer Corner web are online customer services that make it easy for customers to get policy information, partner hospitals, and claim forms. How to check the balance of Chubb Life insurance or the amount of the annual limit can also be seen in the Chubb Life online customer portal.

A B S T R A K

Penelitian ini membahas mengenai penerapan Artificial Intelligence dalam peningkatan Customer Experience di PT Chubb Life Insurance Medan. Artificial Intelligence berperan penting dalam meningkatkan loyalitas pelanggan dan hubungan dengan pelanggan. Kecerdasan buatan merupakan simbol munculnya era revolusi industri 4.0 yang dimaksudkan untuk memberikan kenyamanan bagi pengguna, di berbagai sektor, khususnya di bidang asuransi. Dengan Artificial Intelligence, nasabah dapat dengan mudah menghubungkan satu sama lain tanpa harus berada di lokasi, atau merumuskan suatu peristiwa atau kondisi. Pendekatan yang digunakan dalam penelitian ini adalah kualitatif, yaitu dimaksudkan untuk memahami fenomena yang dialami oleh subjek penelitian. Penelitian ini menghasilkan data berupa kata deskriptif dan kata tertulis mengenai orang-orang dan perilaku yang diamati. Hasil penelitian ini menunjukan bahwa penerapan Customer Corner dalam peningkatan Customer Experience memberikan dampak positif. Berbagai filtur layanan yang ada didalam web Customer Corner yaitu layanan nasabah online yang memberikan kemudahan untuk nasabah mendapatkan informasi polis, rumah sakit rekanan, dan formulir klaim. Cara cek saldo asuransi Chubb Life atau besaran limit tahunan juga bisa dilihat di Chubb Life portal nasabah online ini.

INTRODUCTION

The world of insurance is currently growing rapidly, this rapidly mainly comes from developing countries up to 52% and the remaining 48% comes from developed countries.

Then since the covid-19 pandemic, the need for insurance has soared. People are increasingly aware of protecting themselves and their families during the Covid-19 pandemic, insurance companies are required to always serve customers as much as possible (Wibi Pangestu Pratama, 2024).

OJK (Financial Services Authority) said that as of 2020 the total assets of the Indonesian insurance industry reached Rp1,450.32 trillion. This amount increased by 6.87% compared to the total assets of the previous year. From 2016 to 2020, the average insurance industry assets increased by 7.66% per year (using the Compounded Annual Growth Rate (CAGR) method).

Insurance is undergoing transformation, with both internal and external sources projecting that roughly one-third of insurance companies and their business models will vanish within the next ten years. This field confronts numerous obstacles, including the growing unpredictability of weather patterns and fierce competition, alongside the potential benefits brought by advancements in technology like artificial intelligence (AI). (Alex Zarifis, et.al, 2019).

Digital/online insurance, a service used by insurance companies, allows customers to take advantage of digital technology. For example, certain insurance companies use electronic portals to advertise their insurance products, issue policies, and manage customer claims submissions. Additionally, most insurance companies leverage websites or mobile apps to offer premium comparison services (digital consultants) and facilitate communication with agents (digital marketers).

But the fact is that there are still many insurance companies that are still unable to meet the wants and needs of their customers. The problems that arise in this insurance company include the many complaints from customers regarding the time-consuming and timeconsuming claim process, then the problem of lack of communication between insurance companies and customers. Customers do not know the digital claim process so that the claim process is assisted by agents but because the claim requirements file is so many customers there are still many errors in the submitted claim file. So that the Company needs to socialize to customers not only socialization via sms and online claim guides.

Essentially, the phrase "artificial intelligence" originated in 1955, defining it as the field of creating intelligent machines through science and engineering. It elaborates further, describing artificial intelligence as a branch of computer science focused on crafting smart computer systems. These systems demonstrate traits akin to human intelligence, such as understanding written and spoken language, learning, reasoning, and problem-solving (Martin Eling, et.al, 2022).

Artificial Intelligence plays an important role in increasing customer loyalty and customer relationships. Artificial intelligence is a symbol of the emergence of the industrial revolution 4.0 era which is intended to provide convenience for users, in various sectors, (Reza Yogaswara, 2019).

The growth of AI as a sophisticated decision-making approach capable of carrying out complex computational tasks has transformed financial services, particularly in insurance

operations (Emer Owens, 2022). In Indonesia, as a developing country, the application of Artificial Intelligence (AI) is still limited, mainly due to various factors. This includes a lack of skilled workers who are proficient in AI operations and a lack of investment in AI development. Previous research consistently highlights the low uptake of technology in Indonesia compared to other Asia Pacific regions. Only 14 companies in Indonesia, online/digital insurance, this service is used by insurance companies where customers can utilize the digital technology, namely PT. Chubb Life Insurance Indonesia which has adopted technology based on Articifial Intelligence.

PT Chubb Life is a global life insurance company in Indonesia that officially changed its name as of June 01, 2016 with its previous name, PT ACE Life. The company strives to provide the best and quality service to customers. In running its business, PT CHUBB Life tries to adapt to the development and needs of the community by innovating, both in terms of service and the quality of the products offered considering the conditions of intense competition in the life insurance industry market so that policy purchase decisions continue to run (Triana R. G., & Subijanto R. W., 2019).

A company can survive because of customers or consumers. The strategy to maintain customer loyalty is to provide good service and maintain product quality. In retaining customers and getting more potential customers, it is necessary to improve in terms of service and product quality (Friska Febrianti & Sabinus Beni, 2023).

One of the fundamental goals of business is to make customers satisfied with the goods or services we sell. Most businesses have begun to realize that there is a relationship between customers and their level of performance. The objective of a company is to satisfy, fulfill and serve the needs and desires of its consumers efficiently and effectively, outperforming its competitors. However, understanding consumers is a challenge due to the diverse behavior exhibited by individuals, varying in age, income, education level, lifestyle and preferences. This is why many companies today focus more on customer satisfaction (Yusrizal & Fauzi Arif Lubis, 2020).

Research on customer experience in the era of artificial intelligence (Nisreen Ameen, et.al, 2021) found that Artificial Intelligence (AI) is revolutionizing the way customers interact with brands. Empirical research on AI-powered customer experience is still lacking AI technology supported by data analysis is increasingly being used by companies in response to continued margin pressure, shorter strategy cycles, and increased expectations from customers. This is changing the way companies interact with their customers, potentially achieving better customer-brand relationships. In particular, advances in AI have the potential to improve customer experience by increasing companies' knowledge of such customers' preferences and shopping patterns. Therefore, the strategic application of AI technologies across key customer touchpoints can provide significant benefits to companies and the possibility of increased customer satisfaction.

Literature Review
Industrial Revolution 4.0

The fourth industrial revolution, commonly known as Industry 4.0, is frequently described as the cyber-physical system. This transformation prioritizes automation and merges it with cyber technology. A key aspect of this industrial revolution is the incorporation of information and communication technology into the industrial domain. The emergence of the industrial revolution led to changes in various sectors. If in the beginning this required a lot of labor, it can now be replaced by the use of technological machines. Currently, the industrial revolution 4.0 began with the Internet in 1990 which changed people's lives. The world became easier to connect with the invention of the Internet in 1990. The more easily the world is connected, the changes and developments that occur quickly in one country are experienced locally or in other countries, including technological developments.

Artificial Intelligence

In the era of information technology development, there is a combination of human skills and new technology, namely artificial intelligence. Artificial Intelligence (AI) is the embodiment of machines that exhibit aspects of human intelligence and continues to be used in services and is a source of innovation today Artificial intelligence or artificial intelligence is a system that makes computers capable of thinking, learning and like humans. This technology can be used to identify and solve complex problems in the business sector, as well as make decisions by analyzing the data available in the system. AI has the potential to revolutionize various aspects of life, including business. In a business context, AI can be used for efficiency, effectiveness, and productivity.

Customer Experience

Customer experience in the context of customers relates to the stages of awareness, consideration, purchase, service and advocacy. Customer experience refers to a series of interactions generated between consumers and products, which will evoke emotions or provoke actions or reactions. Perceptions are formed on the basis of data obtained from memory processing which is reprocessed based on experience, there are cognitive and conative components in perception, which are considered as attitudinal predispositions to respond and behave. Customer experience is a reaction that arises because of the interaction and relationship using the product and the bond between the customer and the company and the customer and the product. Therefore, there needs to be concrete action from marketers to focus on studying changes in consumer behavior after using a product (Sri Rahayu, 2022). Customer experience providing a meaningful customer experience is considered essential to achieving competitive advantage and customer satisfaction. Consumers want products that truly satisfy them or fit their lifestyle, thus providing them with a valuable experience. Customer loyalty is not something that can be taken for granted, but is the result of several factors: product or service quality, customers will stay if the company provides quality products or services, meets their expectations, and resolves problems or problems quickly, quickly and efficiently. Good communication interactions

with customers through communication channels help strengthen relationships and create trust.

RESEARCH METHODS

The approach used in this research is qualitative, which is intended to understand the phenomena experienced by the research subject. This research produces data in the form of descriptive words and written words about people and observed behavior. The reason researchers use this approach is because the problem is unclear, holistic, complex, and meaningful so it is impossible to collect data about social situations using quantitative research methods (Marliyah, et.al, 2024). According to Sugiyono, data collection techniques are the most strategic step in research, because the main purpose of research is to get data. Data collection procedures can also be interpreted as an effort to collect data. The techniques used by researchers in this study are interviews, and documentation (Marliyah, et.al, 2023).

Data analysis in this study will be analyzed using interactive analysis techniques developed by Miles and Huberman Punch, that this technique consists of three components, namely: (1) Data reduction has three stages, namely the first stage, namely editing, grouping and data, the second stage, namely compiling notes on various matters related to the unit of analysis, so that researchers can find themes and patterns in the data, and the third step, namely conceptualizing themes, themes and data patterns; (2) Presentation of data, namely organizing data into or connecting a group of data with a group of data, so that all data can be analyzed in one unit; (3) Drawing or testing conclusions, including applying inductive principles by considering data patterns that trend in displaying the organized data.

RESULTS and DISCUSSION

The insurance industry has been one of the early adopters of the new technology that is chatbots. Chatbots have been used by various companies for both. External purposes, such as customer support, and internal purposes, such as supporting employees to work more efficiently. While this automation technology can also be considered from a cost-effectiveness perspective, our research focuses on understanding what creates value for the end customer.

The development of science and technology is growing very rapidly and has a positive impact on mankind. One of the technological developments that continues to grow is the Internet. Digital transformation as the use of new technologies that allow large businesses to improve and influence all aspects of customer life. This has a direct influence on the basic needs in human life today, because all information is very easy to obtain in various aspects of human life. In the field of science and information, there are always direct and indirect impacts.

AI technology can personalize product service recommendations by processing customers' previous purchases and preferences. This has implications for various sectors, such as insurance. Expect the benefits to be increased levels of automation, reduced costs, increased flexibility, and streamlined customer interactions. For these advantages to be fully utilized, it is necessary to analyze and understand this complex phenomenon in

greater depth. For example, reliance on Artificial Intelligence technology and the need for an ever-increasing amount of customer data can lead to trust issues between customers.

In addition, the lack of human interaction or the additional effort required by customers can create tradeoffs that impact their overall experience. The impact of these and other potential issues on AI-based customer experiences needs to be better understood.

The advantage of using Artificial Intelligence (AI) is that it mainly saves costs for human labor, because some of the work done by humans has been replaced by technology from artificial intelligence. For example, Web Customer Corner.
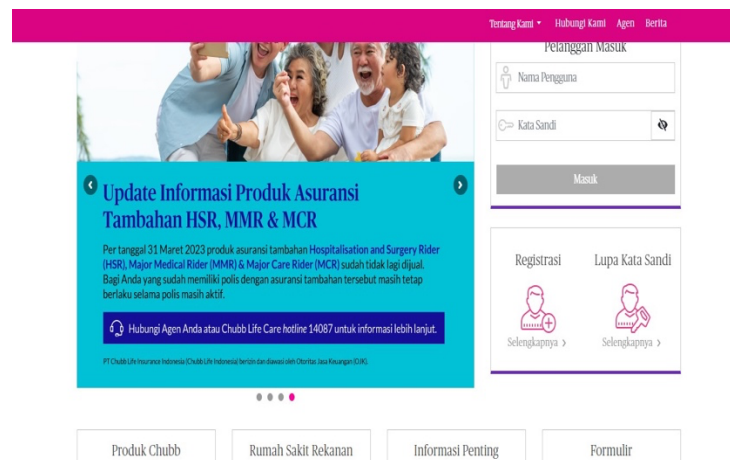

Figure 1. Customer Corner Web View

The customer corner web adopts artificial intelligence in it. This web is a special filtur service site introduced by Chubb Life Insurance Company Indonesia that offers various insurances accessed by customers. Customer Corner is an online customer service that makes it easy for customers to get policy information, partner hospitals, and claim forms. How to check the balance of Chubb Life insurance or the amount of annual limit can also be seen in the Customer Corner of this online customer portal.

Customer Corner is used to increase the ease and convenience of customers using the app. By using Customer Corner, users can create a personalized experience and use the product recommendation system and dynamic features to load only the features they are interested in thus increasing their comfort and ease of use. Advances in technology and accustomed to a dynamic lifestyle, so in terms of service customers want speed and convenience. Customers also enjoy researching products or services online before making a decision. Customers always strive to maximize customer perceived value. The presence of artificial intelligence makes human activities more effective and efficient because it is equipped with anti-malware capabilities that can prevent system errors and minimize the risk of personal data leakage due to human error.

The current situation, the development of Customer Corner's ability to identify a problem, is considered to exceed the ability of human intelligence itself. Supported by the ability to perform perfect computation (computing power) and the ability to process large amounts of data (big data), making intelligent computer programs have a much higher

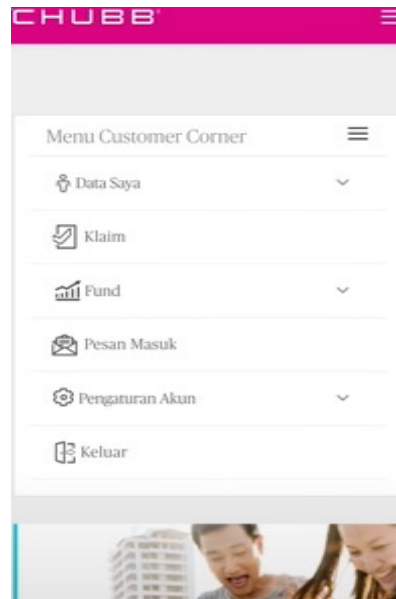learning ability than humans. Customer Corner will be very useful in meeting human needs in the future.

Figure 2. Display of Customer Corner Service Features

A long and complicated claims process is a big concern for many people, and is often the reason why people do not want to buy insurance. At customer corner, we understand that a hassle-free claims process is crucial to the customer experience. So, it is committed to providing protection and peace of mind for customers, especially when they themselves are already faced with unexpected risks. By providing a web customer corner, the insurance claim process is easier, faster, and can be accessed anywhere and anytime.

Application of Customer Corner to Customer Experience

From the results of the research that has been carried out, it produces primary data obtained from the activities of interview techniques with customers at PT Chubb Life Insurance Medan that the application of Customer Corner to Customer Experience shows good application. This shows that the initiative taken by the company to improve Customer Experience through Customer Corner has been successful and received a positive response from customers. so that the existence of the web Customer Corner has helped customers in obtaining the information they need more quickly and easily. This strengthens the Customer Experience aspect because it provides easy access to customers to get solutions related to products and services, thereby increasing customer satisfaction with the services provided by PT Chubb Life Insurance Medan.

In addition, the results also show that the adoption of Customer Corner has created a more inclusive atmosphere for customers. By providing a space to interact and share experiences, Customer Corner has enabled a community to form between the company and its customers. This not only increases customer loyalty but also strengthens the long-term relationship between the company and its customer base. Thus, the implementation of Customer Corner is not just about improving the individual customer experience, but also

developing a deeper and more sustainable bond between PT Chubb Life Insurance Medan and its customers.

One of the areas in insurance that is currently developing significantly to apply customer corner technology is in Customer Experience. Today, customers have the opportunity to benefit from efficient services provided by a company. This causes consumers to expect targeted, responsive, and efficient behavior from businesses.

Based on the results of the Customer Experience interview, the advantages of the Customer Corner web are: (1) Accessibility, Service accessibility can access the Customer Corner web. This makes it possible to access information and services whenever they need it, without having to visit a branch office or contact the authorities; (2) Easy Policy Management, Web Customer Corner allows customers to easily manage their policies. They can view details of active policies, including payment deadlines, coverage amounts, and premiums payable. Customers can also renew their policy, file a claim, or update their contact data; (3) Fast and Easy Claims Service, Web Customer Corner provides convenience in the claims process. Customers can report claims via the web, upload the necessary documents, and follow the status of their claims in real time. This saves time and reduces the hassle associated with managing claims through traditional methods. Artificial intelligence can do a better job than natural intelligence; (4) Product Information and Special Offers, Customers can also access information on products and special offers through the Customer Corner web. They can browse insurance products offered by PT Chubb Life Insurance, read policy summaries, and compare benefits and premiums offered. Customers can also receive special offers that may not be available to other customers.

One of the problems arising from the development of information technology is the birth of crimes that use the internet as a tool known as cybercrime. Cybercrime is a crime committed by a person or group of people or corporations by using or targeting computers or computer systems or computer networks. Prohibited acts regarding cybercrime are regulated in Article 27 through Article 37 based on Law of the Republic of Indonesia Number 11 of 2008 concerning Electronic Information and Transactions. computers, software, and internet technology have changed our society.

Based on the results of the Customer Experience interview, the weaknesses of the Customer Corner web are: (1) Technical Capability Needs, Web Customer Corner requires high technical proficiency to deliver an optimal experience. Customers who do not have sufficient technical skills to use the web may experience difficulties in accessing the platform. This becomes a problem if customers do not have sufficient technical skills to use the platform; (2) Limited Functionality, Customer Corner has limitations in the types of transactions that can be done online, so customers must come to a physical branch for more complex transactions. Customers may experience difficulties in performing more complex transactions, lowering the customer experience in performing more complicated transactions. Claim submissions at Customer Corner can only be made below Rp. 5,000,000 and below while claim submissions above Rp. 5,000,000 and above can be made directly to the Chubb Life Insurance Company so that claim submissions at Customer Corner are very limited in limit; (3) Customer Protection, The development of the Customer Corner web in

cyberspace has resulted in more transparent personal data traffic, because this web available requires user personal data in its use so that if it is not managed carefully, digital criminals will easily misuse personal data. Therefore, it is an obligation for service providers to protect the personal data of their customers in accordance with the regulations that are the legal basis for ensuring the security of customer privacy data, namely Law No. 8 of 2019 concerning Consumer Protection and Law No. of 2011 related to the Financial Services Authority. To provide convenience to consumers, maximum protection of personal data security is needed, there are various types of potential that can be maximized, including the use of artificial intelligence.

CONCLUSIONS

One of the areas in insurance that is currently developing significantly to apply customer corner technology is in customer experience. The application of Customer Corner in improving Customer Experience has a positive impact. Various service features in the Customer Corner web make it easy for customers to access information or access transactions anywhere and anytime. Currently, customers have the opportunity to benefit from efficient services provided by a company. This causes consumers to expect targeted, responsive, and efficient behavior from businesses.

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