

WHITEPAPER

Automating Customer Interactions with Insurance Chatbots



Hi! I have a question.

How can I help?

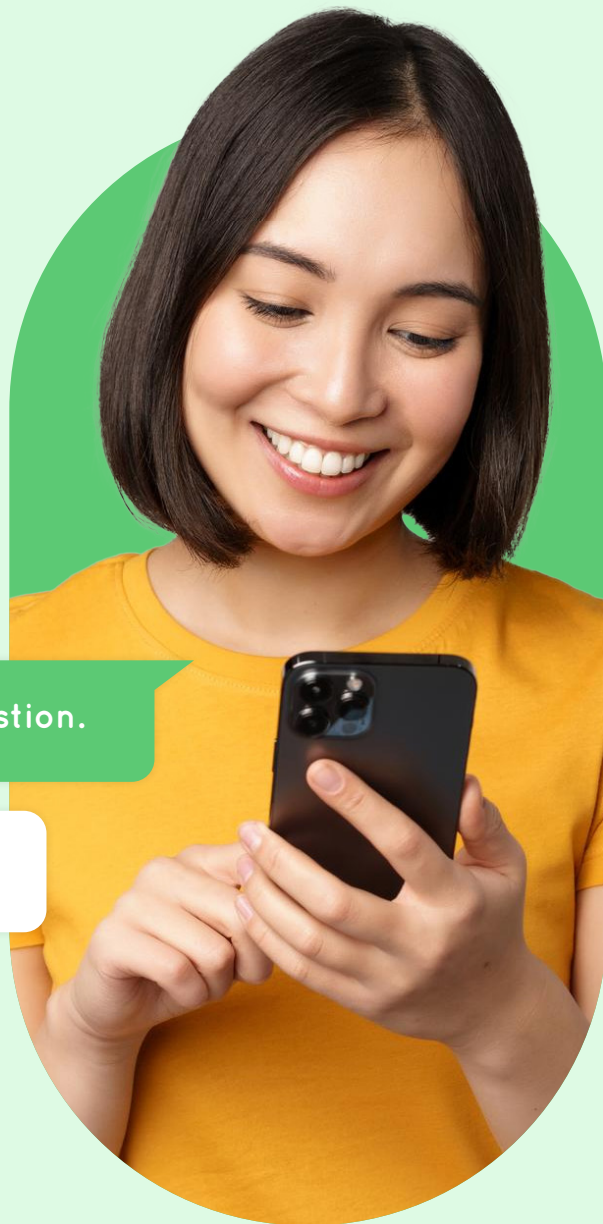


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Summary

Automating customer interactions with insurance chatbots

The insurance industry has undergone a massive transformation in the past decade, especially within the past three years, in part from the effects of the global COVID-19 pandemic¹. Insights from experts have pointed toward a paradigm shift towards digital, in response² to shifting consumer trends and behaviors.

Despite escalating macroeconomic and structural challenges, as well as fierce competition, analysts believe that the insurance industry is still poised for growth. However, insurers must continue to pursue digitalization to keep up with a rapidly digitalizing world.

Going a step further, Deloitte's research³ suggests that insurers shift their focus from basic operational transformation (such as moving to the cloud), to "fully realizing" the value and benefits of infrastructure and technological upgrades.



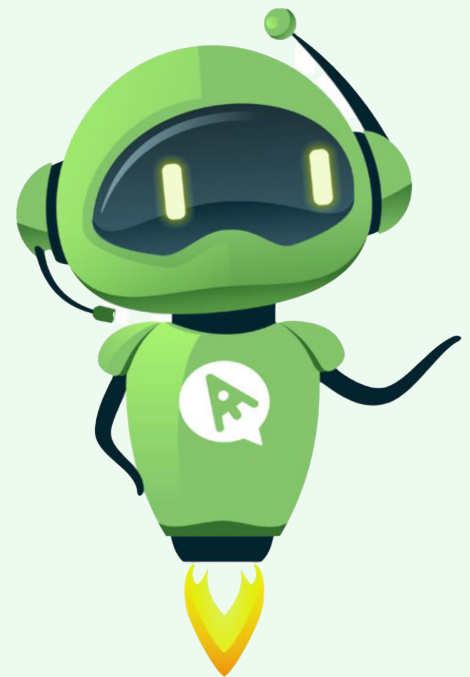
One of these infrastructural and technological upgrades is in artificial intelligence (AI), which has seen increased use across the insurance sector, especially with AI-based chatbots.

This paper will examine the role of AI chatbots in the insurance industry, deep dive into what they are, analyze the challenges insurers face with AI chatbots, and explore some solutions to these challenges.

The rise of AI chatbots

Over the last five years, chatbots have become the leading application of AI within insurance. The global growth of chatbot popularity is fueled by an increase in messaging apps and also the spread of automation across various industries. Automation can help save time and labor costs, increase your response rate, and make it much easier to scale customer support.

Research⁵ by Mantra Labs has found that at least 64% of insurers plan to let chatbots handle customer service functions.



Additionally, at least 43% feel chatbots are useful for improving lead generation and sales. Other research by Cardona et al. (2019) may help us better understand these findings⁵ – AI chatbots can improve efficiency across the insurance value chain, reduce costs, and generate customer loyalty and trust. Chatbots can also help companies influence customers' value creation⁶ by providing them with additional resources.

Furthermore, the use of conversational chatbots for insurance will lead to cost savings of almost US\$1.3 million by 2023⁷, across motor, life, property, and health insurance, up from US\$300 million in 2019.

What are Chatbots?

A chatbot is a computer program that can converse and communicate with human users, especially over the internet. It imitates a human to respond intelligently to voice or text communication by recognizing the language used and analyzing the sentences inputted to it.

Not all chatbots can interpret sentences and produce ideal output through responses, as they have limitations that affect their ability to do so. One of the methods to help ameliorate this is to create different types of chatbots for specific purposes.

There are a few challenges in AI chatbot technology specifically within the insurance sector, which we will explore in the later sections of this paper.

The technology behind chatbots



In various industries including insurance, AI has been used to power chatbots to automatically provide customers with different types of information.

Often, this system is fed with natural-language data on historical customer interaction, which is processed by an intelligent system that learns to automatically suggest answers back to the customer in text format.

Decision trees and conversation scenarios are often used to limit the number of potential answers for finite search spaces. This information is then used to build bots powered by machine learning that can, over time, learn more and provide better answers.

Types of AI chatbots in the insurance industry

Recent technological and digital developments – including the emergence of AI and chatbots – have opened new avenues for using customer data to benefit not only firms but also customers' value creation.

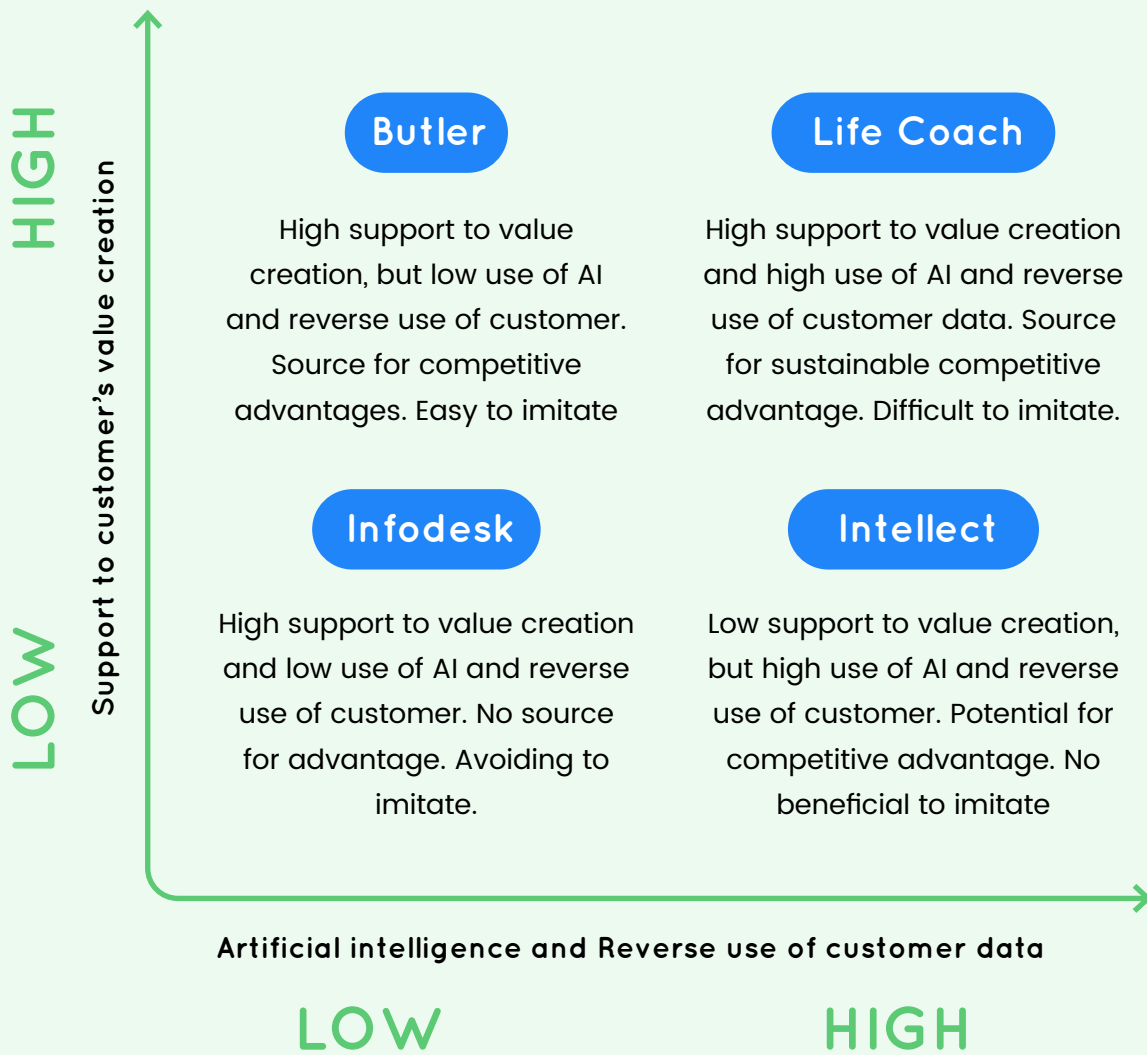
AI Chatbots, in particular, provide a convenient way to leverage such data to create new types of benefits such as providing new resources to support customers' value creation, which in turn can provide insurance companies the potential to differentiate themselves.

The paper⁶ by Riikinen et al. (2017), "Using artificial intelligence to create value in insurance", analyzed a variety of chatbots in the global insurance industry, and conceptualized AI chatbots across two dimensions: support to the customer's value creation, and the ability to combine AI and reverse use of customer data.

"Value creation" hinges on the perception of value and satisfaction that the customer gets from interacting with the chatbot (note that the ability to switch between a chatbot and a sales representative is also important to their satisfaction).

"Reverse use of customer data" refers to how well the chatbot is able to read and understand the customer's information (such as their questions or data input such as age, gender, etc.), and use this information to provide a more fitting response that sees to the customer's needs.

In their paper, Riikinen et al. came up with a categorization of four basic chatbot types: Butler, Life Coach, Infodesk, and Intellect (see figure on the next page).



Infodesk Chatbots

Provide only low levels of support to a customer's value creation. For example, they might provide customers with the same type and amount of information by pulling already available information from a company's website. It typically will not use AI to understand more sophisticated queries and answer them.

Intelligent Chatbots

An example of this is Arbie by RBC Insurance, which addresses customers' concerns with simple text analysis tools based on FAQ databases.

combine the use of AI and reverse use of customer data but are not usually directly involved with the customer. These chatbots are able to analyze vast amounts of data and even build predictive and self-enhancing models to modify customer interactions. These are usually used to help human staff working in contact/call centers.

An example is the Co-operative Banking Group's Mia (My Interactive Adviser), which acts like a virtual assistant to human contact center employees by helping employees find the correct answer to a wide range of banking and insurance questions. As a result, customer queries are addressed and resolved much more quickly.

Butler Chatbots

can provide a high level of support for customers' value creation with a low level of AI and reverse use of customer data. For example, these chatbots can advise customers quickly, easily, and comprehensively about various insurance products. Lower in cost, quicker in implementation, and without needing high technological knowledge, butler chatbots are a preferred form of chatbots for businesses that can help with sourcing leads and converting them into sales.

Life Coach Chatbots

An example of a butler chatbot is FWD Thailand's chatbot made with AiChat. The chatbot can be swiftly and seamlessly integrated into a social media messenger such as Facebook. AiChat can advise FWD Thailand's prospective customers quickly, easily, and comprehensively about various insurance products. Additionally, it can help them finalize their purchases in the messenger app itself without even needing to speak to a sales representative (see the case study of FWD Thailand x AiChat below).

are far more sophisticated and combine the use of AI and reverse use of customer data to provide the highest level of support to customers' value creation. They can provide customers with new ways to craft insurance policies and register claims, for example.

This helps customers save time and play a primary role in the customer's decision-making process by offering additional resources. These chatbots, however, can be rather expensive and take a longer time to design.

Examples are Lemonade's Maya and Trov, which help customers personalize their insurance plans, and facilitate payment and claims handling within the chat interfaces themselves.

Challenges & Opportunities

Despite the advantages of chatbots in insurance, the adoption success of its technology depends on the understanding of the ambivalent perceptions, attitudes, and beliefs of the main social actors (i.e. practitioners and potential users) towards the customer interface.

In this paper, we examine two key challenges that insurers face when it comes to the adoption of and use of AI chatbots.

PROBLEM 1

Translating opportunities into successful execution

According to PwC, more than half⁸ of financial services leaders believe artificial intelligence (AI) will create the biggest change in how financial services are delivered. One example of this is robo-advice, used in the investment sector.



However, a disconnect still exists between the amount of disruption perceived and an insurer's willingness to invest and take advantage of emerging trends.

This can be seen in a PwC Global Fintech Survey 2019 where it was found that less than 40% of financial services companies and technology, media, and telecommunications companies have moved AI projects beyond the pilot stage into implementation.

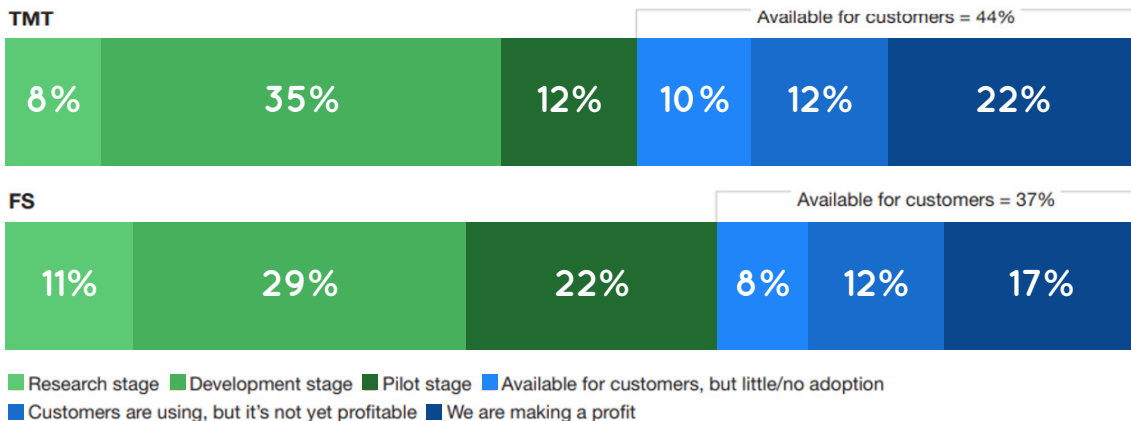
Specifically, in the financial services industry, 63% have not moved past the pilot stage. 11% are still in the research stage, 29% are in the development stage and 22% are piloting.

When it comes to reaping the investments of AI, 8% of FS organizations see little to no adoption by customers; 12% see customer use but have yet to be profitable, and only 17% are making a profit (see figure below).

Exhibit 5: FS organisations are slightly behind TMT firms in moving products to market

TMT respondents: Thinking about your fintech products/services that are at the most mature stage, where would you place your organisation on the scale below in relation to the implementation of fintech products/services?

FS respondents: Thinking about how you are incorporating emerging technology (e.g., AI, blockchain, robotics, fourth industrial revolution) into your existing products or developing new fintech products/services, where would you place your organisation on the scale below in relation to the implementation of these products/services? Please focus on the products/services that are at the most mature stage.



44% of **TMT** organisations have fintech-based products or services available to their customers, compared to 37% of FS organisations. However, more than a fifth (22%) of FS organisations have products or services in the pilot stage.

Base: TMT (260), Don't know (0%); FS (248), Don't know (1%)

Source: PwC Global Fintech Survey 2019

When it comes to insurers, they found that their main challenge often revolves around how they integrate AI into their core policy systems, which can be difficult to integrate.

Solution: Start with low-effort,
high-impact implementations

There are many serviceable areas in insurance processes including pre-purchase, purchase, customer service, and back-end operations.

Research by Cognizant found that certain areas are better suited to chatbot implementation⁹ than others as they maximize business value and have the most significant and immediate impact with the least implementation effort.

As such, it is not necessary to overhaul the entire system, which may often comprise legacy technology – there are always ways to integrate AI chatbots in specific areas. The areas below show how affordable and simple AI Chatbots can be used in high-priority areas without much disruption to the existing business' structure and operations.

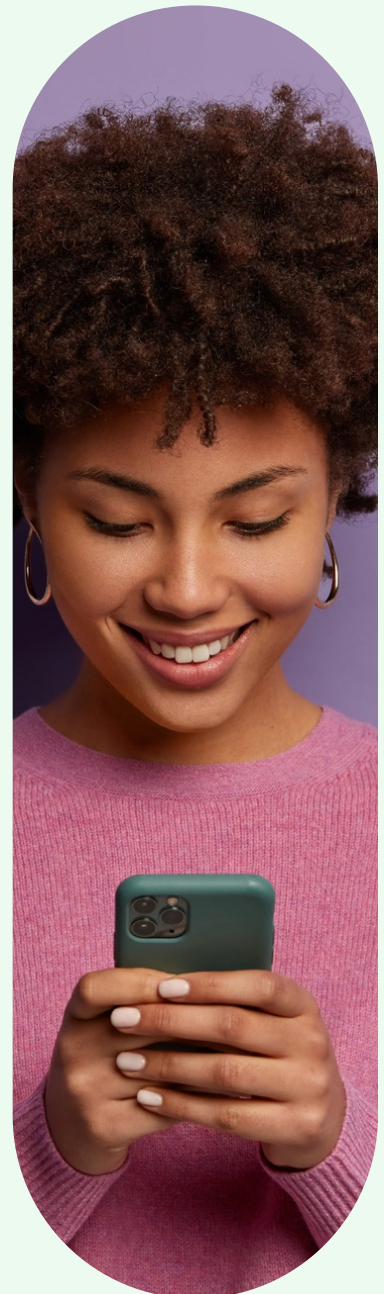




Table of priority areas for AI chatbot implementation

Case study:

FWD Thailand's AI Chatbot



After the 14th iOS update¹⁰, many businesses found that their ads on Facebook had been negatively affected, resulting in lower sales and higher Cost per Quotation (CPQ) and Cost per Sale (CPA).

FWD Thailand relies heavily on Facebook, and, aside from diversifying its advertising channels, looked for an affordable, easy, and quick solution to more effectively earn better quality leads at a lower cost for its “E-Cancer” campaign.

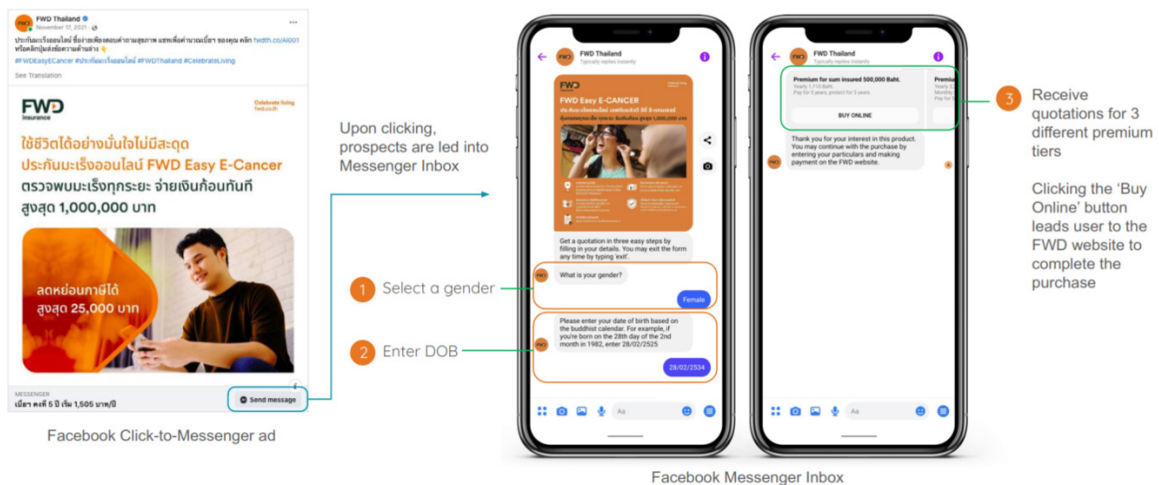
To boost quote conversion rates by five times, the insurance company worked with Meta Business Partner AiChat to build a Facebook Messenger-powered conversational experience, then promoted it with ads that link to Messenger.

FWD Thailand adopted and rolled out AiChat's Messenger chatbot, which provides real-time responses to interested parties by directly answering their queries through two features: Click to Messenger Ads, and Keyword Commenting.

The chatbot drove better conversion rates (CVR) and nurtured sales from Facebook users who had commented on their ads.

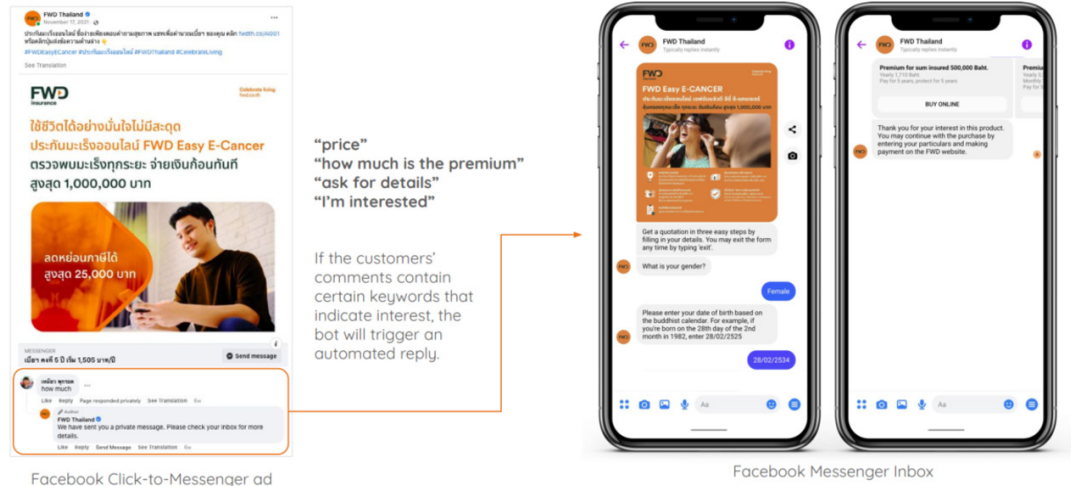
On Facebook, users typically ask for more information in the comments section. Prospective customers will want to better understand things such as premiums, or pricing calculations, so an AI chatbot will be able to quickly pick up on and answer those questions. The team also created conversational scripts tailored to specific products, especially its cancer-protection offerings.

User Journey via ads that Click-to-Messenger



With this technology, customers who click on the ad will be led to the chatbot on Facebook Messenger. After answering some basic questions, they will be able to receive information on the policies or services, and then will be redirected to the website to purchase those plans (refer to figure below) in a seamless journey.

User Journey via Keyword Commenting



In order not to miss out on prospective customers who might not click on the ad, this feature allows the chatbot to directly reach out to customers who have typed certain keywords in the comments section. The chatbot will then provide the user with more information, and help to nudge them further down the purchase journey. towards making a purchase.

Results

AiChat’s Phase 1 resulted in over 133,000 chats. As compared to the start, the implementation of AiChat’s chatbot resulted in a whopping nine times the sales, four times the quotes, with 88% cheaper costs than before.



133K conversations initiated

Results Phase 1:

Vs Start	Vs Social Ads	Vs all Paid Media*
+9x Sales	+7.5x Sales %	+3x Sales %
+4x Quotes	+2.5% Quote %	+3% Quote %
-88% Cost per Sale	-64% Cost per Sale	-64% Cost per Sale

This low-effort, high-impact implementation of an AI chatbot did not require FWD to build a new ecosystem and was easily integrated into their existing presence on Facebook.

It allowed FWD to enjoy a significant reduction in CPQ and CPA, while at the same time, boosting customer satisfaction, quotes, and sales.



Two-Pronged Media Strategy

Prospecting

- People who are interested in insurance
- Lookalike of people who currently like or follow FWD Thailand Facebook Page
- Lookalike of people who sent a message to FWD Thailand Facebook Page

Remarketing

- People who had sent a message to FZD Thailand Facebook Page
- People who like or follow the FWD Thailand Facebook Page
- People who dropped off from the E-Cancer quote page on FZD website

The two-pronged media strategy by FWD and AiChat covered prospecting and remarketing; first by targeting Facebook users interested in insurance, and then remarketed to those who had interacted with the AiChat chatbot or on the website

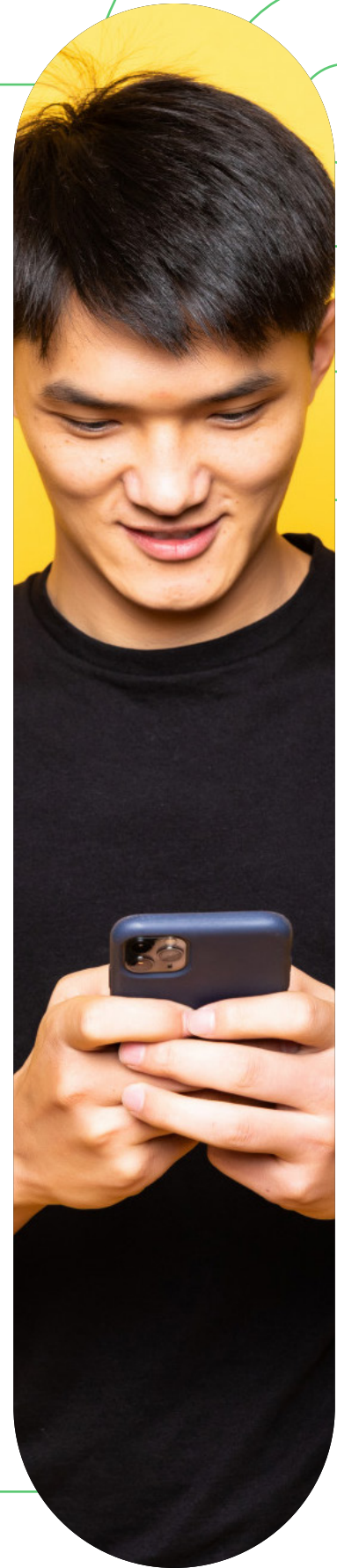
FWD Thailand served both campaigns to a lookalike audience based on a Facebook Custom Audience of existing customers. The insurance company also targeted people interested in insurance, as well as those who followed its Facebook Page and had recently visited its website.



Other use-cases by insurers

In one case, a global peer-to-peer online property insurer's chatbot crafted personalized insurance policies and quotes for customers right in their native app. The chatbot was able to quickly respond to a variety of customer queries and process claims.

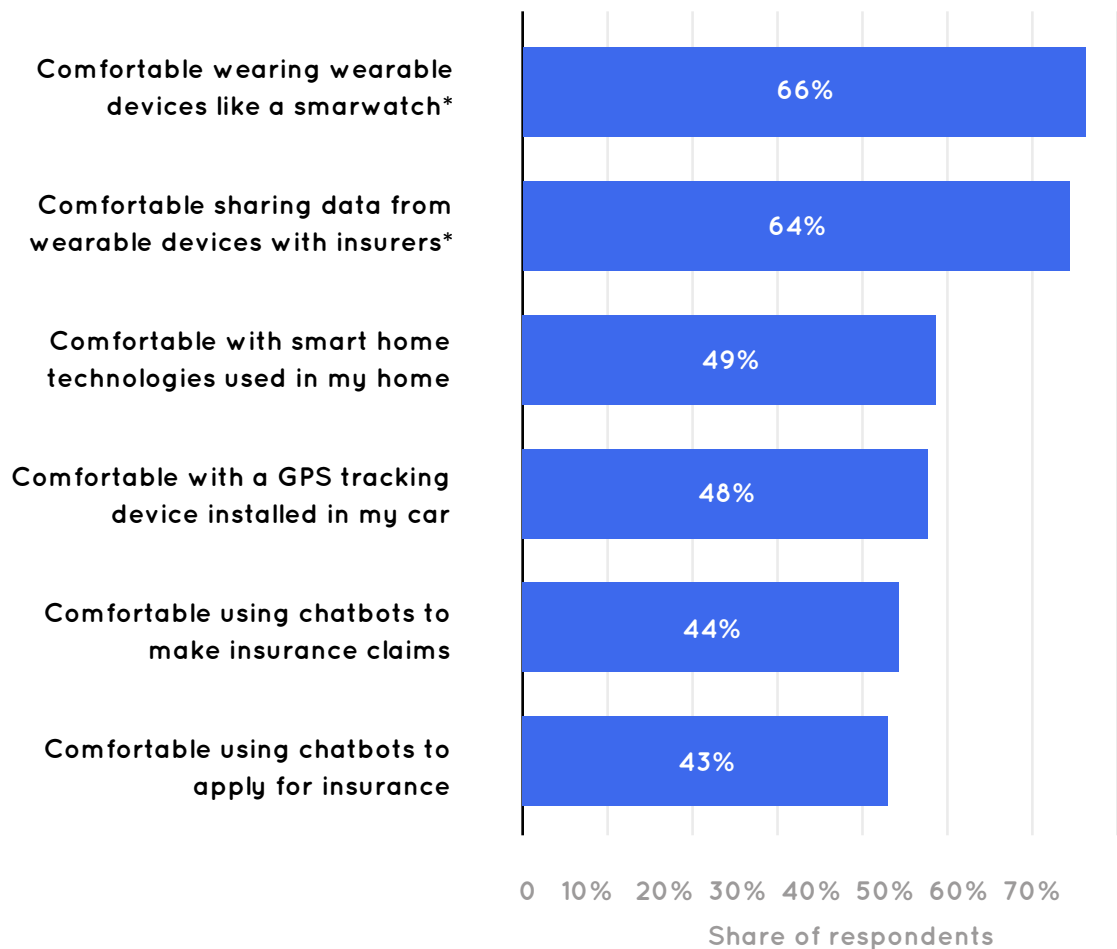
In another case, a general liability, professional liability, and commercial auto insurer launched a chatbot on Facebook Messenger with which small businesses can obtain quotes and buy insurance. The insurer's chatbot could deliver tailored insurance policies and quick and precise responses that drive customer engagement.



Serviceable Area 1: Quote

According to a Statista survey¹¹, 43% of consumers in the US are comfortable using chatbots to buy insurance policies.

Share of consumers comfortable to use insurance technologies for cheaper premiums in the United States in 2019, by technology

**Sources:**

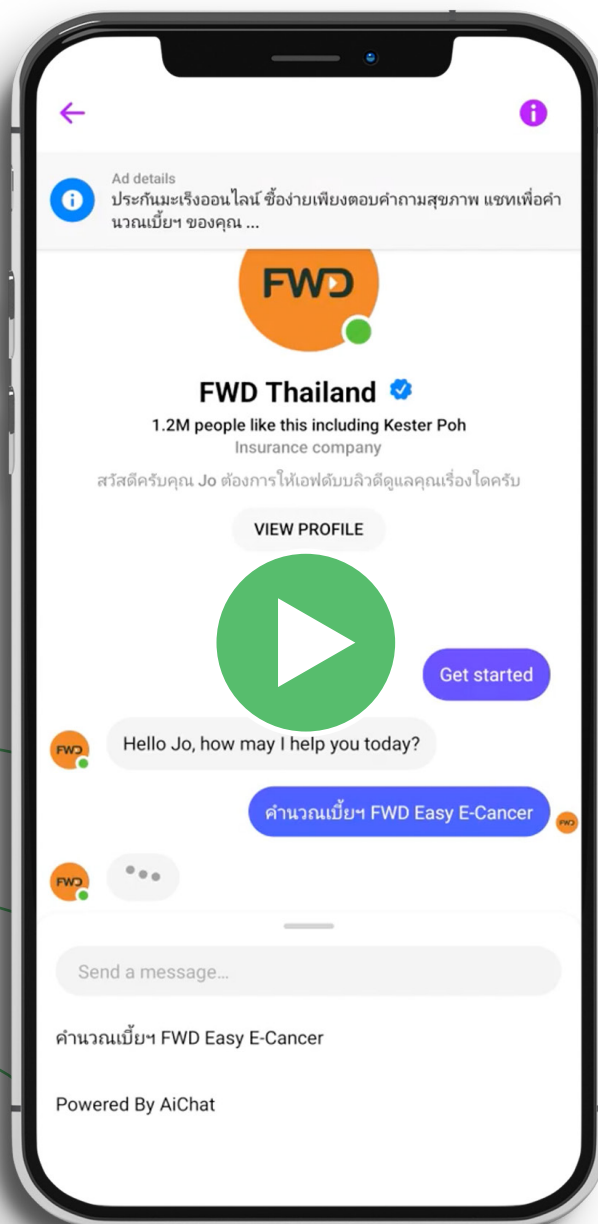
DXC Technology; Telsyte © Statista 2022

Additional Information:

United States; October 2019; 2,011 respondents; 18 years and older; U.S. consumers; Online survey

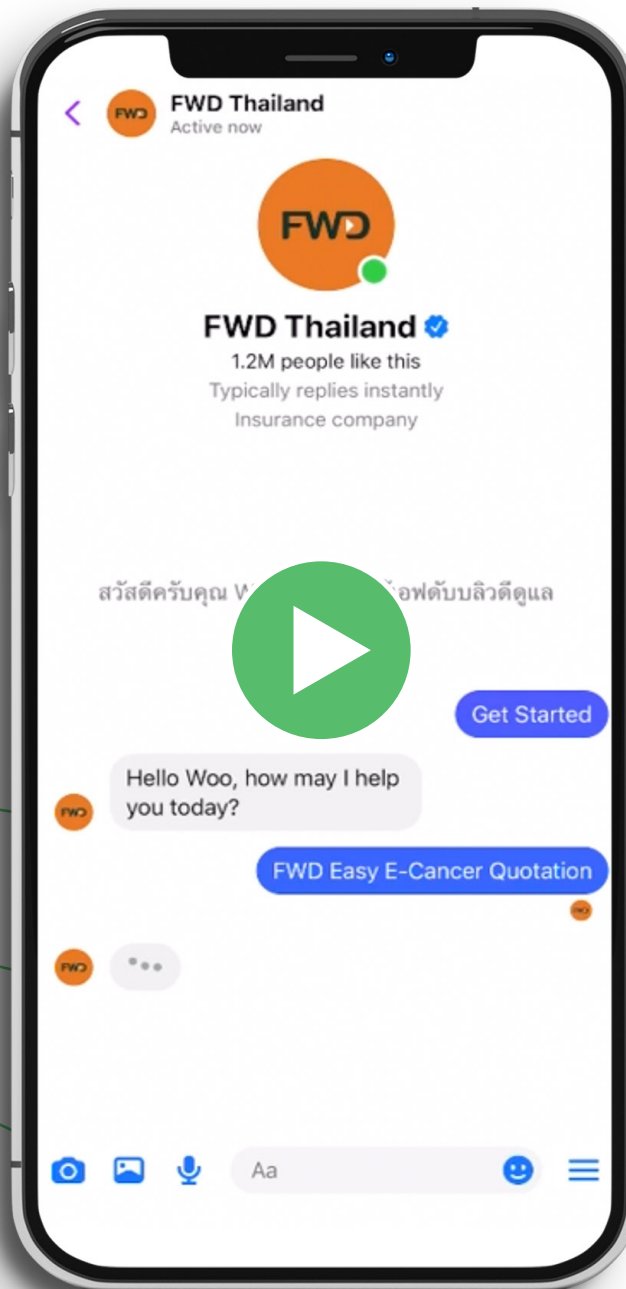
For customers who are ready to buy a policy, an insurance chatbot can make the process a lot more simple and user-friendly with step-by-step conversational forms and immediate, tailored quotes.

Prospects can input a few pieces of data into an online form or tool, and APIs can allow for the exchange of this information with back-end systems needed to produce a policy quote.

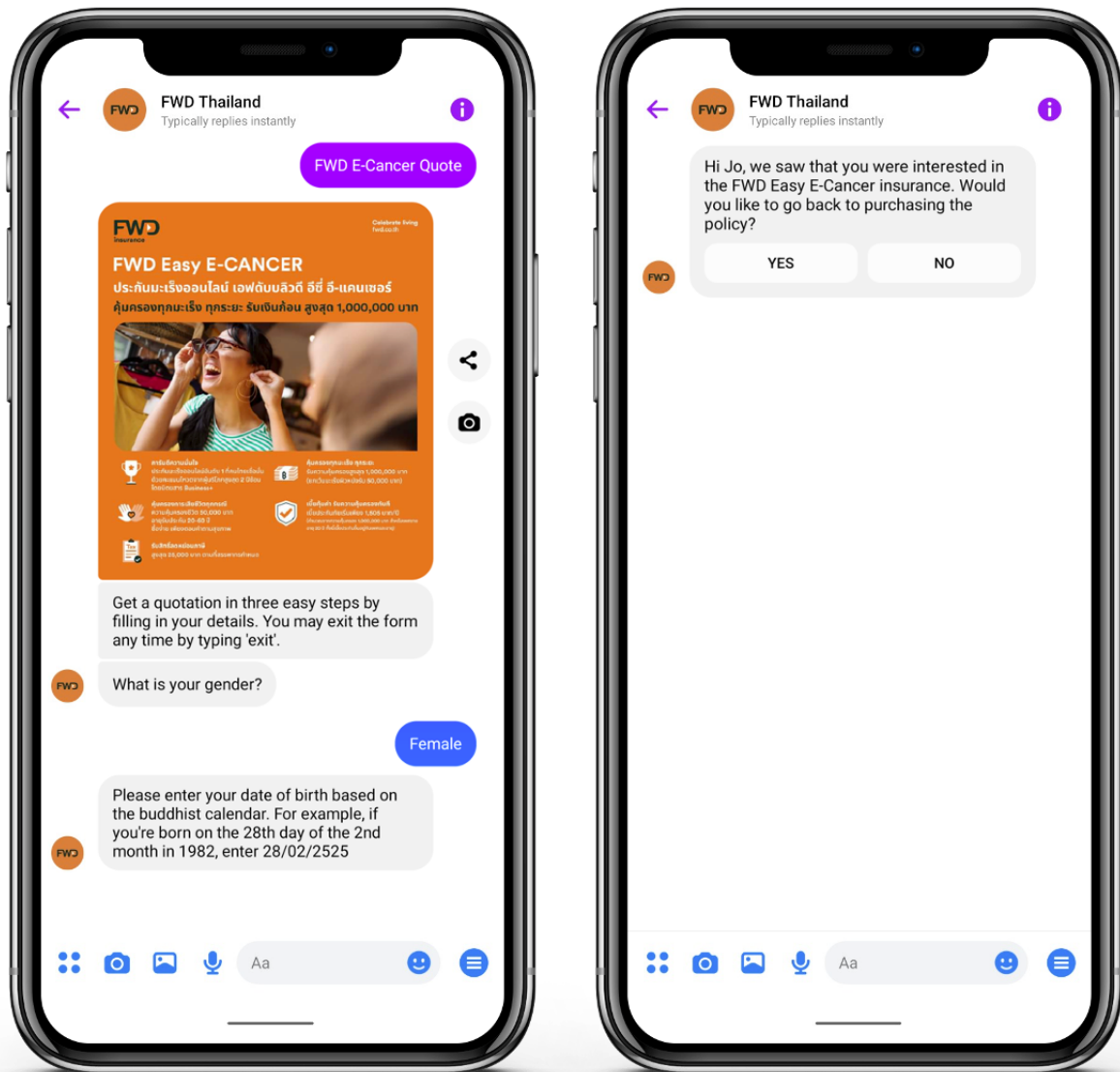


Rules can also be implemented to check for eligibility.

For customers who are not eligible, the bot can prompt them to check out other products.

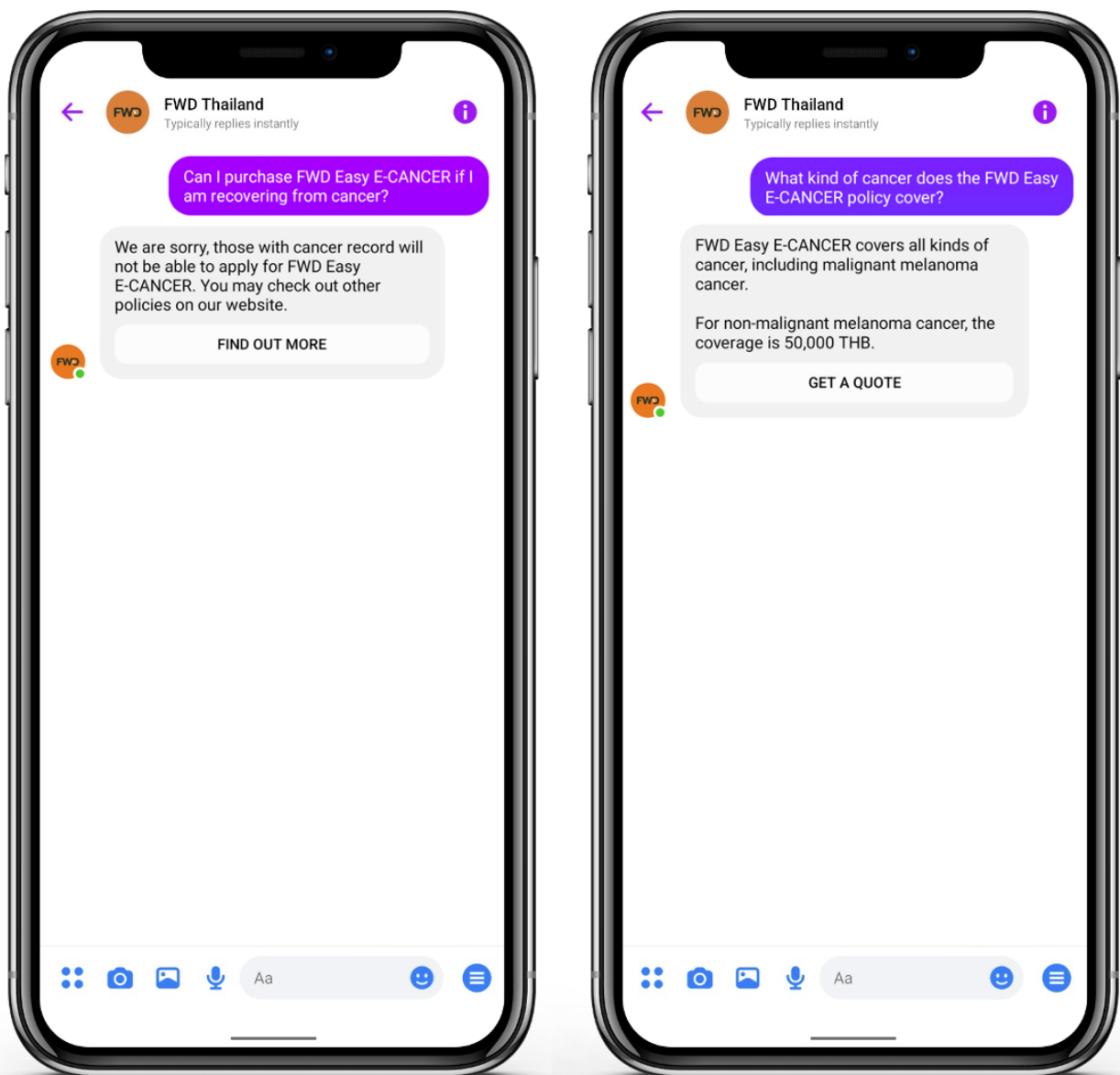


Follow-up mechanisms can be put in place to combat potential drop-offs. If inactivity is detected before the quotations can be generated, a push message will be sent out to customers to remind them to get back to exactly where they had left off.



Serviceable Area 2: Customer education & Customer queries

Pre- and post-purchase, chatbots can provide policyholders with 24/7, instant information about what the policy covers, premiums, and claims processes. This is especially important at the pre-purchase point of the insurance value chain where major successes have been found [9].



Serviceable Area 3: Campaign and Lead Generation

Chatbots can function as lead generation machines and turn up the marketing scale, especially if they are deployed on channels that have already achieved critical mass and are supported by a robust advertising ecosystem, such as Facebook Messenger.

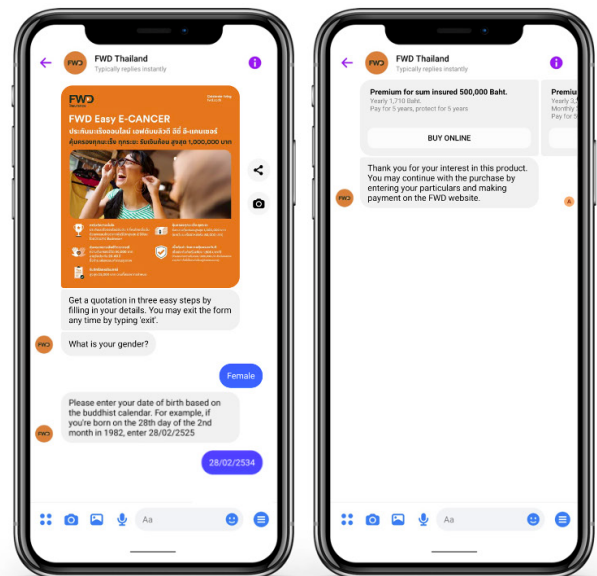
Social amplification through Facebook Click-to-Messenger ads

When the 'Send Message' button in the ad is clicked, the chatbot would send a private message to their inbox to start the conversation flow. Guided by the chatbot, prospects receive a quotation in a simple and seamless journey.



Facebook Click-to-Messenger ad

Upon clicking,
prospects are led into
Messenger Inbox



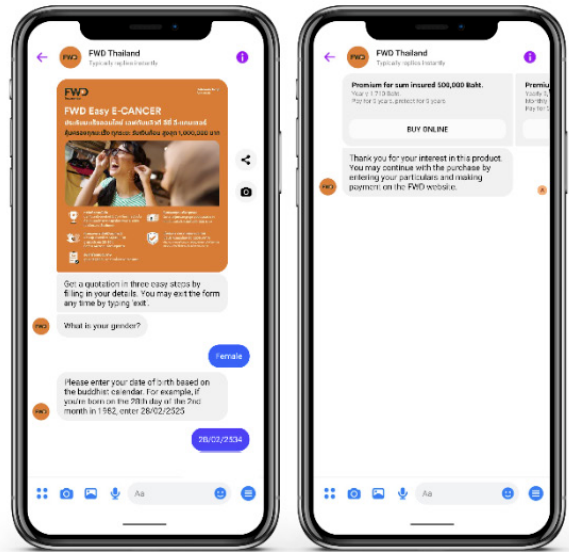
Using Facebook's native 'Acquire from Comments' feature, chatbots can be configured to send out an instant private message to all customers who commented on the posts to invite them to get a quote via the bot. Many one-to-one interactions can therefore be handled at scale.



Facebook Click-to-Messenger ad

"price"
"how much is the premium"
"ask for details"
"I'm interested"

If Customers' comments contain certain keywords that indicate interest, the bot will trigger an automated reply.



Facebook Messenger Inbox

PROBLEM 2

Technical limitations of chatbots



In the paper Chatbots: History, technology, and applications by Adamopoulou & Moussiades (2020)¹², the authors stated that subjective human perception of talking to a chatbot can make them feel that the bot is less informed and emotionally intelligent. Customers who discover they're talking to a chatbot would get upset and buy fewer products.

Generally, consumers want the reassurance of some human oversight and access to a human adviser for key decisions. This human bias in interacting with chatbots can pose a risk of losing leads and customers, especially if the experience is a negative one.

Despite advancements in AI & Natural Language Processing (NLP), there will be moments when bots will stumble. In situations like these, it becomes imperative to ensure that the user experiences a smooth transition from the bot to the human agent.

Solution 1: Adding the human touch through service-based chatbots

A service-based chatbot answers users' queries with a specific goal or focuses on the completion of certain tasks requested by their customers. This can be a crucial implementation during the pre-and post-purchase stages of the customer journey for insurers.

A paper by Nuruzzaman & Hussain (2019)¹³ stated that one requirement for service-based chatbots is to display empathy in responses, which will help the user relate better to the bot.

Chatbots that assist in customer support should not sound too serious or transactional, because these will impede the continued use of the service. Ultimately, a service-based chatbot should keep customers engaged and have dialogue abilities instead.

Solution 2: Complement AI with a human touch

The combination of chatbots and humans is by far a superior approach to realizing a fulfilling customer experience given the tech limitations.

This sentiment is supported by Deloitte, who, in its 2022 insurance industry outlook [3] said:



“Insurers are increasingly dependent on emerging technologies and data sources to drive efficiency, enhance cybersecurity, and expand capabilities across the organization. However, most should also focus on improving the customer experience by both streamlining processes with automation as well as providing customized service where needed and preferred.”

To create a great customer experience, using the right service chatbot working alongside a human can help companies give better experiences for their customers.

Singapore-based AiChat, which has worked with some of the largest brand names globally including FWD Insurance, has found that combining a chatbot with human customer support software can result in up to 72% more customer satisfaction and happiness.

AiChat’s bot, which comprises multi-language support including Southeast Asian language packs, uses NLP and Machine Learning in an intelligent way.

When a new message is received, the bot suggests the most relevant answers to the agent. If the prediction falls below the confidence threshold, the agent can personalize the answer and the bot learns from every interaction.

With regular bot training, AiChat can eventually automate up to 70% of enquiries, improving operational efficiency greatly.

Solution 3: Fallback Message

When an answer is not found in the existing knowledge base, the least the bot can do is to return Users with a fallback message which would redirect them to other available options such as connecting to live chat if a customer service agent is available or direct users to leave a message.

Chatbot design: Other considerations

The implementation of AI in insurance need not be a gargantuan task, as some case studies have shown. Here are some other considerations to keep in mind when choosing a chatbot for your insurance business.

Know your customer journey

Before building the chatbot,

01

Identify which part of the marketing funnel the target user is at (pre-purchase, purchase, post-purchase, claims) and decide which customer your chatbot will interact with or service

02

Map out the user journey visually using post-it notes or online tools

03

Identify the possible drop-off points

04

Anticipate situations where intervention from the customer service team is needed

Train your chatbot to recognize frequently asked questions

01

Prepare a list of FAQs. Note that one single question may be asked in a variety of ways, and can also be answered in a variety of ways. When creating answers, ensure the conversational chatbot recognizes all the possible variations of the question. It is wise to curate various combinations of questions and answers.

02

Depending on your target audience, you can consider including media components in your chatbot to make the dialogue more interesting.

03

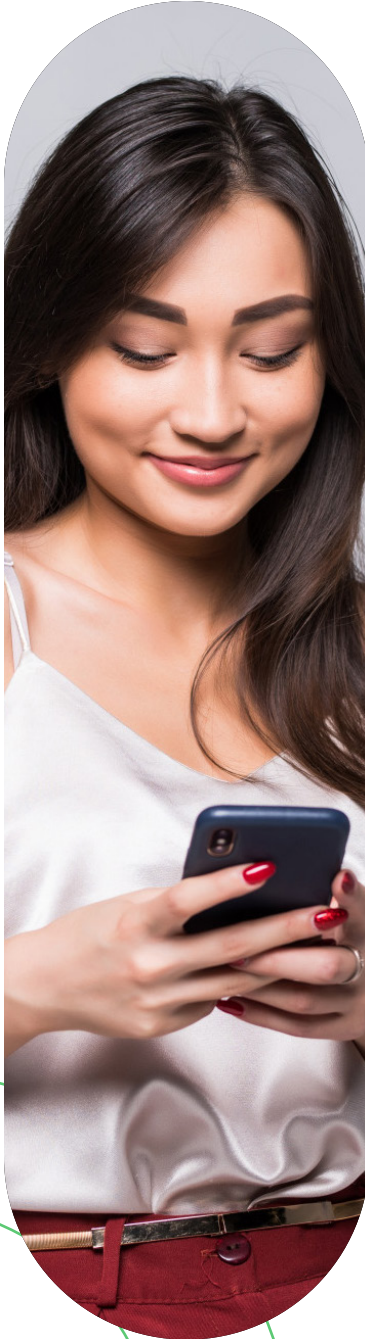
Work with a conversation designer to craft dialogues that are optimized for chatbots

04

Continuously improve chatbot post-launch. Remember that your chatbot must be constantly 'trained'. After the chatbot has been launched, keep an eye on how it interacts with users. You must identify and correct issues that your chatbot is having.



Looking forward



As the insurance industry navigates the tough technological shift, AI and chatbots are here to stay, and it is imperative that players quickly move to see to their customer's evolving needs.

To recap, in order to address some of the challenges faced, businesses would do well to start with low-effort, high-impact implementations. Secondly, although chatbot AI has seen advances, there still needs to be a human touch point in the customer journey with the chatbot you choose.

The state of chatbots and their use cases within the industry will eventually evolve and mature, and with it, bring changes to the industry as well. Importantly, insurers would do well to remember that the value that insurance chatbots bring will speak for itself in the revenues generated.

Insurers that smartly and swiftly leverage AI-chatbot technology will surely be a step ahead of their peers on the road to digital transformation

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About AiChat

AiChat is a leading A.I-Powered Conversational Customer Experience platform designed to help brands automate business processes in customer service, marketing and commerce via popular social messaging apps such as Facebook Messenger, WhatsApp, Instagram and Google Business Messages etc.

The company is based in Singapore, Malaysia, and Indonesia with a diverse team of experienced digital marketers, user experience designers and A.I experts who help brands to develop effective messaging and A.I strategies that improve customer experience and drive business ROI. Some of AiChat's clients include Bayer, TESCO, Marina Bay Sands, MR D.I.Y, Mondelez, Petron, Unilever and many other enterprises across South East Asia.

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