

Construction of innovative customer service model for insurance companies

Peng Cai

*School of Advanced Studies, Saint Louis University, Baguio City, 2600, Philippines
2236303@slu.edu.ph*

Keywords: Insurance company, customer service innovation, artificial intelligence, big data, customer satisfaction

Abstract: This article takes customer service innovation in insurance companies as its research objective, focusing on how to enhance customer satisfaction and corporate competitiveness through technological innovation and optimization of service processes. Through questionnaire surveys and case analyses, it uncovers the existing issues and underlying causes in customer service within insurance companies today. Subsequently, based on artificial intelligence and big data technologies, a specific plan for customer service innovation is presented, encompassing the introduction of intelligent customer service systems and the optimization of service processes. Experimental results indicate that the innovation plan significantly enhances customer satisfaction and processing efficiency, albeit revealing issues related to compatibility in certain technological applications and training challenges. The study ultimately identifies key elements of a customer service innovation model and, drawing from practical operational experience, proposes targeted improvement suggestions. This article not only provides practical guidance for insurance companies but also offers theoretical support and empirical evidence for customer service innovation within the industry.

1. Introduction

As a crucial component of the modern financial system, the insurance industry's customer service capabilities directly impact its market competitiveness and customer satisfaction. Currently, insurance companies are gradually breaking through the limitations of a single service model, enhancing their service levels through the integration of multiple channels, including online platforms and offline branches. As of 2022, over 85% of China's major property insurance companies have established digital service platforms, including official websites, mobile apps, and WeChat mini-programs. This layout has greatly improved the convenience of customers obtaining services and effectively expanded the coverage of services. Despite continuous technological advancements, some companies still have shortcomings in service response speed and consistency of quality. For instance, the lack of intelligence in online customer service systems leads to inefficient problem resolution, and information fragmentation across different channels affects customer experience.

In the face of increasingly diverse market demands, customer service innovation has become the core for insurance companies to maintain their competitive edge. Customers' demand for personalized

services is growing, and traditional standardized service models have become difficult to meet this demand.

Studying the current status and innovation paths of customer service in insurance companies holds significant practical importance. By combining domestic and international literature and case studies, we explore the theoretical foundation and technical support for customer service innovation, such as utilizing blockchain to ensure transparency in claims processing or predicting customer needs through machine learning ^[1]. Based on the research findings, we propose targeted recommendations and construct an efficient, flexible, and forward-looking customer service innovation model. This process comprehensively considers technical feasibility, cost-effectiveness, and customer acceptance, striving to form practical solutions that provide strong support for the sustainable development of the property insurance industry.

2. Brief description of the concept

The essence of customer service in insurance companies lies in comprehensively meeting customers' diverse needs in the purchase, use, and subsequent protection of insurance products through a series of professional actions.

In the customer service process, insurance companies usually divide it into three stages: pre-sale, in-sale, and after-sale. In the pre-sale stage, insurance companies utilize data analysis to identify the personalized needs of potential customers and conduct precise marketing through internet platforms. For example, Ping An Property Insurance's "Intelligent Customer Service" system recommends suitable products based on customers' historical behavior data, thereby enhancing their willingness to purchase^[2]. In the in-sale stage, insurance companies strive to simplify operational processes and enhance convenience. The online insurance application platform of Pacific Property Insurance has shortened the average insurance application time to within 5 minutes, significantly improving satisfaction. In the after-sale stage, efficient claims services become crucial. Over 80% of PICC P&C's car insurance claims are settled on the same day, thanks to the application of big data risk control and automated claims systems.

Customer experience management is the key to enhancing service quality. It requires starting from the overall process and constructing a comprehensive service system, rather than merely optimizing individual service nodes ^[3]. Zhong'an Insurance interacts with customers through social media, adjusts service strategies in real time, and utilizes artificial intelligence to analyze customer behavior data, predict needs, and intervene in advance. Research shows that over 70% of property insurance customers prefer companies that provide personalized services, indicating that customer experience management is not only the foundation of service innovation but also a significant advantage in market competition ^[4].

Customer service innovation has a profound impact on the development of insurance companies. Technological innovation has improved service efficiency, such as Taiping Property Insurance's use of drone technology to shorten the claims processing cycle. Innovative service models have enhanced customer loyalty, with nearly 90% of mobile application claim users highly praising its convenience. Innovation also helps shape corporate brand image. Sunshine Property Insurance has been rated as the "Best Customer Service Brand" for many years, which is the result of its continuous optimization of customer experience. Customer service innovation is not only an effective means to cope with market competition but also a core driving force for achieving sustainable development of insurance companies.

3. Theoretical analysis

Insurance companies are facing unprecedented challenges in the field of customer service,

especially amidst the tide of digital transformation^[5]. Data shows that the average proportion of online customers for insurance companies was only 42% in 2020, but it is expected to jump to 60% by 2025. This trend clearly indicates that the traditional offline service model has become difficult to adapt to the needs of modern customers, and digital transformation has become an inevitable choice for the survival and development of enterprises^[6]. The road to transformation is not smooth, and the automation level of enterprises in underwriting, underwriting verification, and claims processing still needs to be improved. Currently, the automation rate of underwriting is 56%, the automation rate of underwriting verification is 65%, and although the automation rate of claims processing has increased from 22% to 40%, there is still much room for improvement. These issues directly lead to potential problems in customer service processes such as inefficient information processing, slow response speed, and uneven service quality.

To address these issues, theoretical research has provided numerous beneficial guidelines. Customer experience theory emphasizes that optimizing service details can significantly enhance customers' overall satisfaction. Taking Zhejiang Commercial Property Insurance Co., Ltd. as an example, its "Zhejiang Commercial Insurance C-end Customer Service Platform" fully utilizes the internet and mobile technology to achieve comprehensive digitization of insurance sales, customer service, and online claims processing, greatly simplifying customer operation processes and improving service efficiency. Service innovation theory points out that introducing new technologies is the key to achieving service upgrades. China Postal Savings Bank has created companion digital employees through the application of large models, such as the intelligent customer service AskBob, which has a response rate and accuracy rate both exceeding 90%, providing valuable reference experience for insurance companies.

The application of new technologies plays a crucial role in the innovation of customer service in insurance companies. The use of artificial intelligence and big data technology enables enterprises to more accurately understand customer needs and provide personalized services. For example, Ping An Life Insurance relies on the Jinjiaguan platform to provide services such as online consultation with family doctors and assistance with hospital outpatient registration, which are based on insights into customer needs derived from big data analysis. The construction practice of the intelligent assistance system for customer service employees at Industrial and Commercial Bank of China also shows that technological means can significantly improve the work efficiency and service quality of service personnel. By providing real-time customer information support and business guidance, it effectively reduces human errors and enhances customer satisfaction.

To establish an effective customer service management system, enterprises need to comprehensively consider various factors^[7]. Continuously optimizing service processes and introducing automation tools ensure efficient operation in every link, such as significantly reducing claim processing time. Strengthening the training of service personnel is equally crucial. It is not only necessary to impart basic product knowledge and service skills, but also to focus on cultivating their understanding and application abilities of new technologies. Establishing a comprehensive customer feedback mechanism, regularly collecting customer evaluation data, and adjusting service strategies based on big data analysis results help enterprises identify problems in a timely manner and make improvements. Only by combining technological innovation with management optimization can insurance companies achieve comprehensive improvement in customer service amid fierce market competition.

4. Empirical research design

The effectiveness verification of innovative customer service models in insurance companies cannot be separated from scientific and rigorous research methods, with data collection and analysis

serving as the foundation. The "Zheshang Insurance C-end Customer Service Platform" launched by Zheshang Property and Casualty Insurance Company Limited has fully digitized insurance sales, customer service, and online claims processing through the internet and mobile technology. It has accumulated 335,000 registered users and generated premium income exceeding 90 million yuan. These data intuitively demonstrate the application effectiveness of the platform and provide important references for subsequent research. Questionnaire surveys have become a key tool for understanding the current status of customer service. By distributing questionnaires through a combination of online and offline methods, a wide and representative data sample can be efficiently collected. Interviews serve as a supplement, delving into customer needs and expectations. For example, Ping An Life Insurance's "Smart Customer Service AskBob" has shown response and accuracy rates exceeding 90% through interviews, significantly reducing customer communication costs.

Based on the current situation analysis, the design of innovative solutions has become the core of improving service levels. Zhejiang Commercial Property Insurance has integrated online and offline channels, established a unified service platform, and achieved seamless docking across multiple channels, greatly enhancing user experience and enterprise operational efficiency. In terms of service content, providing personalized and differentiated solutions, such as customized insurance products or value-added services, has become the key to attracting customers. Service process optimization focuses on shortening waiting times and improving problem-solving efficiency. Through reforms, China Reinsurance has achieved significant growth in premium income and net profit, indicating that the introduction of advanced technological tools such as artificial intelligence and big data analysis can significantly enhance the level of customer service intelligence.

5. Experimental results and analysis

In empirical research, by introducing a customer service innovation model, the impact of this system on key indicators such as customer satisfaction, service efficiency, and problem resolution rate was deeply evaluated^[8]. Experimental results showed that customer satisfaction significantly increased from 75% to 90%, primarily attributed to the widespread application of intelligent service channels. For instance, Tencent Weibao's online customer service has served over 11.9 million users and provided 1-on-1 dedicated services to nearly 49,000 users, achieving a satisfaction rate of 97%. Ping An Life Insurance has further enhanced customer convenience and satisfaction by offering one-stop services through its Jinjiaguan platform, such as online consultations with family doctors. These cases demonstrate that the widespread adoption of intelligent services has greatly improved the customer experience.

The improvement in service efficiency is equally remarkable. Compared before and after the experiment, the average service response time was shortened from 30 minutes to 15 minutes. Zhejiang Commercial Insurance has utilized the Internet and mobile technology to build a C-end customer service platform, achieving comprehensive digitization in insurance sales, customer service, online claims processing, and other aspects. The registered users have reached 335,000, and the premium income has exceeded 90 million yuan^[9]. The carbon sink insurance product launched by Pacific Property Insurance has provided 220 billion yuan of risk coverage for 350 million mu of forest land, demonstrating the great potential of service innovation in meeting personalized needs. These achievements prove that the introduction of technological means and optimization of service processes can significantly improve service efficiency and reduce customer waiting time.

The implementation process also faced some challenges. The penetration rate of intelligent service channels is not high, and some customers fail to fully utilize intelligent services due to insufficient understanding of new technologies or limited usage habits. To address this issue, this paper has intensified promotional efforts, optimized user experience, and promoted the advantages of intelligent

services through multiple channels. The adaptability of service personnel to the new system is also a challenge. To this end, the enterprise has organized multiple training sessions and established a technical support team^[10]. Improving the customer feedback mechanism is also a key focus. This paper collects customer opinions through multiple channels such as online surveys and telephone interviews, and makes timely improvements.

Looking ahead, in order to further optimize the customer service innovation model, we will embark on multiple fronts. We will continue to upgrade our intelligent service channels, combining big data and artificial intelligence technologies to enhance the precision and personalization of our services^[11]. We will strengthen professional skills training for service personnel, drawing on the product innovation experience of China Life Property Insurance Company to provide a more diversified risk protection supply system. We will improve the customer feedback mechanism, not only collecting data but also enhancing the analysis and application of feedback information, forming a closed-loop management system, and continuously improving service quality and customer satisfaction.

6. Conclusion and Discussion

The construction of an innovative customer service model for insurance companies is a multi-dimensional and systematic project. Through in-depth analysis and practical verification, this study has identified several core elements. The transformation of service concept serves as the cornerstone, with the shift from a passive service model to an active one significantly enhancing customer experience. For instance, after introducing the "instant response" mechanism, a large property insurance company witnessed a sharp decrease of 45% in customer complaint resolution time and a jump of over 30% in satisfaction. The optimization of work style is equally crucial. Ping An Property Insurance has shortened the claim settlement cycle from 7 days to a maximum of 24 hours through one-stop claim services, greatly enhancing user experience. By strengthening civilized service norms and employee training programs, it has shaped a professional and reliable brand image, further consolidating customer trust.

Some issues have also been exposed in practice. Some employees lack communication skills when handling complex complaints, resulting in compromised customer satisfaction. A survey involving 1,000 customers showed that 28% of respondents believed that the customer service attitude or expression was not clear and friendly enough. The uneven level of business skills, especially in the promotion of emerging insurance products, directly affects sales performance. In terms of market expansion, the problem of blindly pursuing scale while ignoring precise positioning still exists. For example, a regional branch company conducted promotions without sufficient research, resulting in waste of resources and poor results. In response, it is recommended to strengthen employee communication skills training, use scenario simulation to enhance practical ability, establish an online learning platform to ensure that employees grasp the latest product information and sales strategies in a timely manner. For market expansion, it is necessary to strengthen data analysis and use big data to accurately target potential customers.

Looking ahead, intelligent service innovation and personalized customization will become the key to service upgrades for insurance companies. The application of AI customer service systems has significantly increased the problem-solving rate of enterprises by 60% and reduced operating costs by 30%. Personalized service customization, through deep mining of customer behavior data, designs product solutions that better meet needs. For example, the scene-based insurance products launched by Zhong'an Insurance based on user personas have been widely praised in the market. Cross-industry cooperation has great potential, such as jointly developing payment-type insurance products with financial technology companies, or integrating insurance into the bank loan process to achieve mutual benefit and win-win results. These innovative directions can not only improve service levels but also

open up new growth spaces for enterprises and promote the transformation and upgrading of the entire property insurance industry.

References

- [1] Service innovation of insurance data based on cloud computing in the era of big data. W Yang, J Zhou - *Complexity*, 2021 - Wiley Online Library. <https://onlinelibrary.wiley.com/doi/abs/10.1155/2021/2303129>.
- [2] Customer relationship management in the insurance industry. C Matis, L Ilies - *Procedia Economics and Finance*, 2014 – Elsevier. <https://www.sciencedirect.com/science/article/pii/S2212567114005681>.
- [3] Process innovation case study of insurance industry: Based on Case of H Company. JY Jeon, JI Lee, DS Kwon - *Indian Journal*, 2015 - sciresol.s3.us-east-2.amazonaws.com. <https://sciresol.s3.us-east-2.amazonaws.com>.
- [4] The Research of the Property Service Enterprises Innovation Based on the Customer Relationship Management Theory. L Feng - 2015 8th International Conference on Intelligent , 2015 [ieeexplore.ieee.org](https://ieeexplore.ieee.org/abstract/document/7473477/). <https://ieeexplore.ieee.org/abstract/document/7473477/>.
- [5] Learning, working, and innovation: a case study in the insurance industry. JC Henderson, CMA Lentz - *of Management Information Systems*, 1995 - Taylor & Francis. <https://www.tandfonline.com>.
- [6] Li Linli. Research on the Business Innovation and Development of P Property Insurance Company [D]. Guangxi University, 2022-06-01
- [7] Zhou Xiuhua. Exploration of Innovation in Financial Control System of Enterprise Groups [J]. *Financial and Accounting Newsletter*, 2016-06-20
- [8] Tang Yaqing. On the Innovation of Modern Enterprise Management System [J]. *Heilongjiang Science and Technology Information*, 2016-01-05
- [9] Li Huijin. Research on the Construction of Innovation and Entrepreneurship Public Service System [J]. *Journal of Kaifeng Education College*, 2017-11-20
- [10] Li Xiaofeng. On Establishing the Operating Mechanism of Insurance Companies [J]. *Insurance Research*, 2001-02-15
- [11] Xue Baohui. An Analysis of Enterprise Management System Innovation [J]. *Science Chinese*, 2016-06-25