

Research on Insurance Value Chain in the Environment of Mobile Internet

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Abstract—In the era of mobile Internet, the influence of network environment on the insurance value chain is discussed in this paper. By literature review and theoretical analysis, the author holds that mobile Internet has changed the insurance value chain from various links related to conventional product design, sales and after-sales to a series of modular packages including R&D module, marketing module and service module. Each module has its own characteristics and interacts. The characteristic of design and R&D module is the improvement of the R&D capability based on new technologies and Internet. They lead to product diversification and accelerate the speed of new product development. The characteristics of marketing module lie in the use of multi-channel marketing online and offline, the increase of product publicity and the shortening of transaction time. The characteristic of customer service module is the improvement of service efficiency and the acceleration of the speed of information transmission. The analysis shows that insurance company as a supply side needs to make practical changes to cope with the changing psychology and behavior of demand-side consumers.

Keywords—mobile Internet; insurance value chain; modularization; core value activities

I. INTRODUCTION

With the development of Internet + technology, the mobile Internet era, the mobile terminals of information dissemination, the fragmentation of consumer behavior, and the socialization of interpersonal relationships, these new environmental changes will have a profound impact on the operation of insurance companies and insurance consumers, and how to make full use of and integrate the insurance industry. Existing resources, especially marketing resources, to achieve value creation and value added in the strategic link of the value chain system is an inevitable consideration in the development of the insurance industry, that is, to study the innovation of the insurance value chain.

Internet insurance is an important part of the supply-side reform of insurance industry. The impact of the Internet on consumers is as follows: firstly, it has changed the channels of contacting insurance, and the network has become a virtual channel besides the real insurance company; secondly, it has

changed the payment mode, mobile payment makes it possible to consume at anytime and anywhere; thirdly, it has accelerated the speed of information communication and knowledge exchange; fourthly, it has disappeared. The change of fee psychology is not easy to detect, and the acceptance of insurance is uncertain. The impacts on insurance companies are as follows: first, the application of new technologies such as block chains accelerates product development and new products are emerging; second, the diversification of business entities leads to the emergence of specialized Internet insurance companies and third-party network platforms (insurance intermediaries); third, the relationship between insurance companies and insurance intermediaries will produce. Fourthly, the transaction cost of insurance will be reduced, and the synergy effect will be enhanced. In response to these new changes, the activities covered by the value chain of insurance companies will also change.

The insurance value chain referred to in this paper is a system which combines a series of value activities involved in insurance operation, such as product design and development, sales, after-sales service and so on. Under the environment of mobile internet, the insurance value chain is changing, which part is the most important one? What will the insurance value chain be like? This paper will specifically analyze the changes in the composition of the insurance value chain under the mobile Internet environment and its impact on the operation of insurance companies.

II. LITERATURE REVIEW

A. Research on the Impact of Internet on Insurance Industry

The literature mainly focuses on three aspects: first, it is on the analysis of the advantages and disadvantages of Internet insurance, such as reducing the information search cost of consumers, lowering the insurance price, improving the competitiveness of insurance companies [1]; and at the same time, increasing the risk of losing business to competitors [2]; lowering transaction costs of insurance, lowering market entry barriers, thus increasing the accessibility and purchasability of the insurance market [3]; making products more transparent; consumers more likely getting financial advice when buying; leading to market expansion, and straightening out competition among insurance companies [4]; Second, they discuss the influence of Internet on business models of insurance industry,

Annual Research Project of China Insurance Society in 2018 (ISCKT 2018-N-1-14): Research on Insurance Talents Training under the Cooperative Innovation of Industry, Education and Research; Ministry of Education Youth Project for Humanities and Social Sciences Research (13YJC630162): A Consumption Precision Positioning Model Based on Social, Location and Mobile (SoLoMo) Model; Shandong Higher Education Scientific Research Program in 2016 (J16WF51): Research on the Training Path to Promote the Employment Competitiveness of Graduates Majoring in Hotel Management in Higher Vocational Colleges.

such as website direct selling, price comparison website, reverse auction platform, mobile insurance and so on [5]. Third, they try to forecast the future of Internet insurance. Some argue that there will be the richer choice of purchase pattern (e.g. social platform website), more convenient communication and products' diversity, etc. [6]. The development of Internet insurance will change from channel change and scene creation to technology enabling. By using technology to empower all links of the insurance value chain and reducing transaction costs in the traditional insurance market, the efficiency of traditional insurance supply can be improved to meet the growing and dynamic insurance demand [7]. In the future, the division order of insurance value chain and industry chain will be deconstructed and rebuilt continuously, which will become the innovation trend of Internet insurance [8].

B. Research on Value Chain in Insurance Companies

In the analysis of applying traditional value chain theory to insurance business practice, Eling and Lehmann (2018) analyzed the impact of digital transformation on insurance industry based on Porter (1985) value chain theory [9], and pointed out four main tasks facing the industry: enhancing customer experience, improving business processes, providing new products and preparing for them. Compete with other industries [10]. Marlborough (2001) divides the value chain of life insurance companies into sales, underwriting, policy issues, customer interaction (e.g. call center), claims, policy recording process, accounting, capital, product development and the role of statutory actuary [11]. Taylor et al. (2002) illustrated the role of life insurance value chain by referring to three main categories: production, distribution and retail [12]. Dommissie and Oosthuizen (2004) merged the above important value chain links and established value chain deconstruction theory [13], i.e. Operations, Asset Management, Risk Management, Product Development and Packaging. The components of the combined value chain model consisting of ENT & Packaging and Distribution will change. For example, the distribution part will be transformed from the tied agent to the individual advisors, i.e. the deconstruction of the value chain, and will be applied to the UK retail life insurance company. The competitive strategy of new entrants is analyzed, but only the technical factors related to the Internet are involved. Huang et al. (2018) took the development of German insurance science and technology as an example and expounded the deconstruction of insurance science and technology on insurance value chain. He believed that the impact of insurance science and technology covered both monetary and non-monetary aspects, and would have an impact on product design, process optimization, cost reduction, efficiency and competitiveness [14].

A lot of domestic literatures discuss the application of value chain in the operation of insurance companies. Sutton (2016) pointed out the problems related to the disruption of the value chain of the life insurance industry, including the innovation of insurance products, the customer service function of providing secondary support to distributors and effective investment strategies [15]; Liu, Zhao and Wang (2017) used the theory of value network and value chain to analyze the value creation mechanism and ecosystem of insurance intermediary service companies based on Internet platform. To build the core

competitiveness of insurance intermediary service platform, we put forward relevant development proposals [16]; Jin (2017) analyzed the overseas insurance business value chain of domestic customers and put forward relevant proposals [17]; Zhao (2016) described the value chain management status of insurance group asset management company [18].

C. A Brief Review

The research on value chain theory shows that a relatively complete value chain theory system has been formed and applied to the analysis of manufacturing industry. From the point of view of existing literature, there are few studies considering the impact of Internet development and new technology application on the theory and practice of insurance value chain. This paper will discuss the impact of the current mobile Internet era on the value chain of insurance industry in the light of the current stage of Internet development.

III. MOBILE INTERNET + INSURANCE VALUE CHAIN ACTIVITIES ANALYSIS

A. The Content of the Traditional Insurance Value Chain

Based on the theory of value chain and the practice of insurance industry, it can be found that the core chain includes product design and development, product marketing (publicity and verification) and claims settlement, and the auxiliary chain includes employee management and customer service. The subjects involved include insurance companies, insurance intermediaries and insurance consumers. The marketing function departments of insurance companies and insurance intermediaries altogether constitute a marketing system. Insurance consumers are the target of marketing (including individuals and groups). Product design and research and development (R&D) are the front end and foundation of the value chain. Marketing system is the core of the value chain, and consumers are the back end of value chain. Each link is connected by various information flows, including product information, promotion information, service information, cash flow information and so on (Shown in Fig. 1).

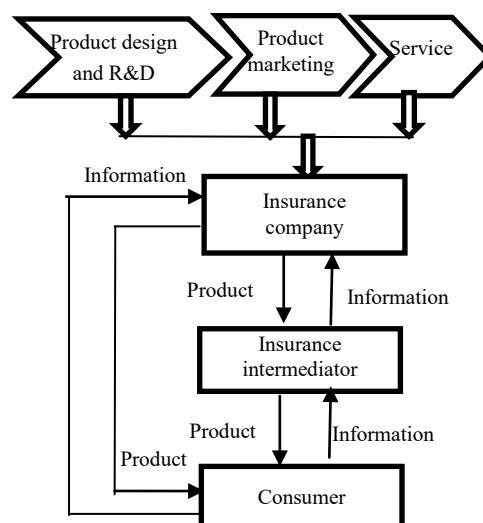


Fig. 1. Traditional insurance value chain

B. The Modularization of Insurance Value Chain in the Era of Mobile Internet

Under the Internet environment, the network platform as a new marketing channel enters the value chain, and the professional Internet insurance company becomes a new business entity in the value chain. For insurance companies, online and offline channels are used at the same time. Online payment updates the traditional way of consumer payment, bringing opportunities for consumers to choose diversified channels. In the era of mobile internet, the fragmentation of communication channels and consumer behavior, the mobilization of information dissemination, the convenience of Internet at anytime and anywhere, the flexibility of mobile payment and the social networking of interpersonal relationships all have significant impacts on the product marketing of insurance companies and the purchase of insurance products.

According to the composition of insurance value chain activities, the modularization of its core links in the mobile Internet environment is analyzed, and three modules of product design and R&D module, marketing module and service module are formed as shown in Fig. 2. Each module has its own characteristics, and each module influences each other.

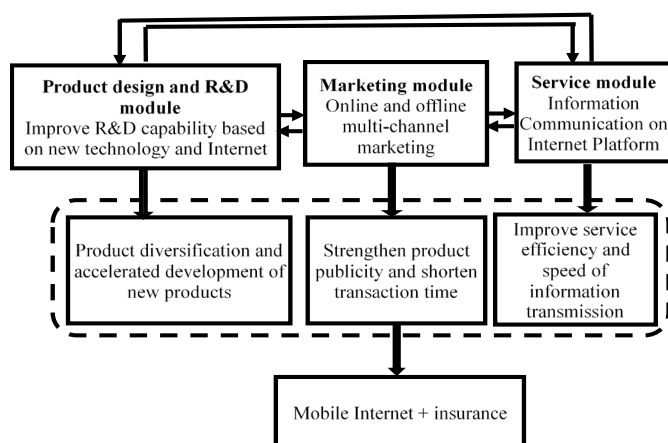


Fig. 2. Mobile Internet + insurance value chain modularization innovation mechanism

1) Design and R&D module of insurance products

In the design and R&D module of insurance products, the R&D function based on new technology and Internet has been improved. The characteristics of insurance products are diversification of products and accelerated development of new products. This module requires insurance companies to develop personalized products that meet the needs of consumers based on consumer demand. With the maturity of consumer psychology and the enhancement of consumer consciousness, the acceptance of insurance is getting higher and higher, and the insurance protection function and risk diversification mechanism will be fully embodied. But at the same time, the demand of consumers for capital-guaranteed investment income cannot be ignored. In order to meet the needs of consumers in the new situation, both security products and investment products should be designed well. How to balance the quantity between these two types of products and to reflect

the fundamental role of insurance, is the problem for future insurance companies in product design and R&D module to solve. It is the strategic orientation of the insurance industry to research and develop products to meet the special needs of specific customer groups and implement precision marketing.

2) Insurance product marketing module

In the insurance product marketing module, the characteristics of mobile Internet are manifested in online and offline multi-channel marketing, which is characterized by increased product publicity and shortened transaction time. For insurance companies, how to innovate product advertisement and image advertisement should be considered when publicizing insurance commodities. As internal customers of insurance companies, marketers are important human resources, and how to improve their competence is an important part of staff management to address the problems of low quality of current agents. How to deal with the relationship with insurance intermediaries will affect the dominance of insurance companies in the value chain. When the roles of insurance agents and insurance brokers are constantly strengthened, the control of insurance companies over marketing channels will be challenged. In addition, the research and development of products also need cooperation with insurance intermediaries. Because insurance agents and brokers are the direct contact groups with consumers, they know consumers' psychology and changing needs better and can provide targeted and practical help for product design and R&D.

3) Customer service module

In the customer service module, the information communication of the Internet platform is the prominent influence aspect of the mobile Internet. The characteristics of this module are the improvement of service efficiency and the speed of information transmission. More mature consumers pay more attention to other people's feedback information and make purchase decisions, although there are many factors affecting the purchase decision of insurance products (such as price, income, reputation, etc.). In the era of mobile internet, due to the development of Internet technology, the speed of information transmission is accelerated, various kinds of information are filled with the whole shopping environment, the amount of information consumers can access is highly increased, and the resolution ability is also gradually improved. The impact of information quality on consumers' purchase insurance decision-making cannot be questioned. With the help of word-of-mouth transmission, consumers may be more inclined to listen to trusted family or friends' suggestions. The transmission of online insurance information is not easy to distinguish whether it is trustworthy. The improvement of service efficiency comes from mobile Internet technology, which accelerates the transmission of information in insurance and claims. The response of insurance companies is also synchronously improved. In this module, maintaining long-term relationship with customers, reducing the refund rate or increasing the renewal rate, improving customer experience, and improving customer stickiness are the important contents that insurance companies, insurance intermediaries and online platforms need to pay attention to.

4) Relations among modules

Product design and R&D module, marketing module and service module are not isolated, there is interactions between them. Based on mobile Internet and other new technologies, the design and R&D of innovative insurance products should also meet the individual needs of consumers, i.e., through the real-time and rapid transmission of information, using service module to understand consumer demand information, which is feedback to product design and development module; while the is the product of product design and development module. Whether product design and R&D module is appropriate, whether it achieves the profit goal, whether it needs to be adjusted, and so on, also need to be clear about the experience information of consumers who have used the product (information of service module). This is the interaction of information between product design and R&D module and service module.

All kinds of products designed by product design and R&D module need to be sold by means of marketing module. Marketing information of marketing module is fed back to product design and R&D module through service module, which also helps to improve product design and R&D. The relationship between marketing module and service module is realized through product sales and after-sales service information. Feedback realization is mainly the transfer of information flow, cash flow and service value.

IV. CONCLUSION

The conclusion of this study is as follows:

In the mobile Internet era, the traditional insurance value chain activities will be transformed into modular insurance value chain. Each module has its characteristics and they are related to each other.

In the mobile Internet environment, the design and R&D module of products that meet consumer demand will remain the focus and maintaining good customer relationship has become the service strategy for sustainable development of insurance companies.

The formation of new consumption habits, changes in payment methods, anytime, anywhere online, instantaneous payment and so on will change consumption habits, but the same is still the insurance to fulfil its commitment to consumers, that is, once the risk occurs, to pay for it. How to guide consumers to buy insurance online, in addition to the promotion of businesses, there are other ways, such as word-of-mouth, event marketing and so on.

All in all, insurance company as a supply side should focus on these three core value activities in the environment of mobile Internet and try to find out the most useful strategies to meet the changing demand of consumers in a demand side.

ACKNOWLEDGMENT

The author thanks the following organizations for their project fund supports: Annual Research Project of China Insurance Society in 2018 (ISCKT 2018-N-1-14): Research on

Insurance Talents Training under the Cooperative Innovation of Industry, Education and Research; Ministry of Education Youth Project for Humanities and Social Sciences Research (13YJC630162): A Consumption Precision Positioning Model Based on Social, Location and Mobile (SoLoMo) Model; Shandong Higher Education Scientific Research Project in 2016 (J16WF51): Research on the Training Path to Promote the Employment Competitiveness of Graduates Majoring in Hotel Management in Higher Vocational Colleges.

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