

# Research on the Whole Process Risk Management of Pet Insurance

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## Abstract

At present, the development of pet insurance in China is in the primary stage. In the process of pet insurance operation, insurance companies will face the problems of difficulty in determining the rationality of pet hospital charges, imperfect pet identification technology, and low quality of pet owners, resulting in the high loss rate of pet insurance business of insurance companies. According to the white Paper on China's Pet Consumption Trend in 2021, the size of the urban pet market in 2020 is close to 300 billion yuan, and the future development prospect of pet insurance, a pet service in China, is very broad. Risk management is an important aspect of the development of pet insurance. This paper first describes the current pet insurance products in China, introduces the representative pet insurance products in the market and analyzes the pet insurance companies in the pricing, sales, underwriting and claim settlement of the pet insurance risk management, and makes suggestions according to the research conclusion.

## Keywords

Pet Insurance; Business Risk; Hierarchical Analysis.

## 1. Introduction

At present, the number of pets in China is increasing rapidly, and pets are gradually becoming an inseparable part of modern life. As the number of pets has increased significantly, there is a combination of financial pressure on pet owners for their daily expenses, such as various pet diseases and accidental injuries[1]. At this time, the emergence of pet insurance can not only relieve the economic pressure of pet owners, but also open up a new business model for China's insurance industry. China's insurance industry has been exploring the field of pet insurance for more than ten years, but it has not achieved significant success, among which the most important reason is that insurance companies have not achieved a high risk control and management level of pet insurance. Risk management is an important aspect of the development of pet insurance. The risk management of pet insurance not only includes the individual identification of pets, but also faces various risks in the process of pet insurance operation[2]. Therefore, taking the risk management as the research object, the risk management of pet insurance.

## 2. Current Situation of Pet and Pet Insurance in China

### 2.1. Pet Species in China

Pets are animals and plants kept by people for spiritual rather than economic purposes. Currently, pet cats and pet dogs are the most common people in life. With the development of social economy, China's pet industry has entered a period of rapid development, the main reasons are as follows: First, the continuous growth of per capita disposable income in China provides the material and economic basis for the development of the pet industry; Secondly, China's population and social structure changes become the rapid development of the pet

industry, more and more empty-nest people, and the importance of pets in these families, the entertainment generation needs more ways to relieve pressure, so the trend of "cat sucking" appears. According to the white paper on China's pet industry in 2021, the pet cats, the largest proportion of pets, is 59.5%, followed by pet dogs, about 54.29 million, accounting for 51.7%, including aquarium, reptiles, rodents and birds, which are represented by goldfish, reptiles mainly turtles, rodents mainly hamsters, accounting for 8.3%, 5.8%, 4.5% and 3.6%, respectively. Due to the largest number of pet cats and dogs, the consumption expenditure of pet owners on pet cats and dogs is the largest on pet food, followed by pet medical treatment. The specific consumption expenditure is as shown in the following figure:

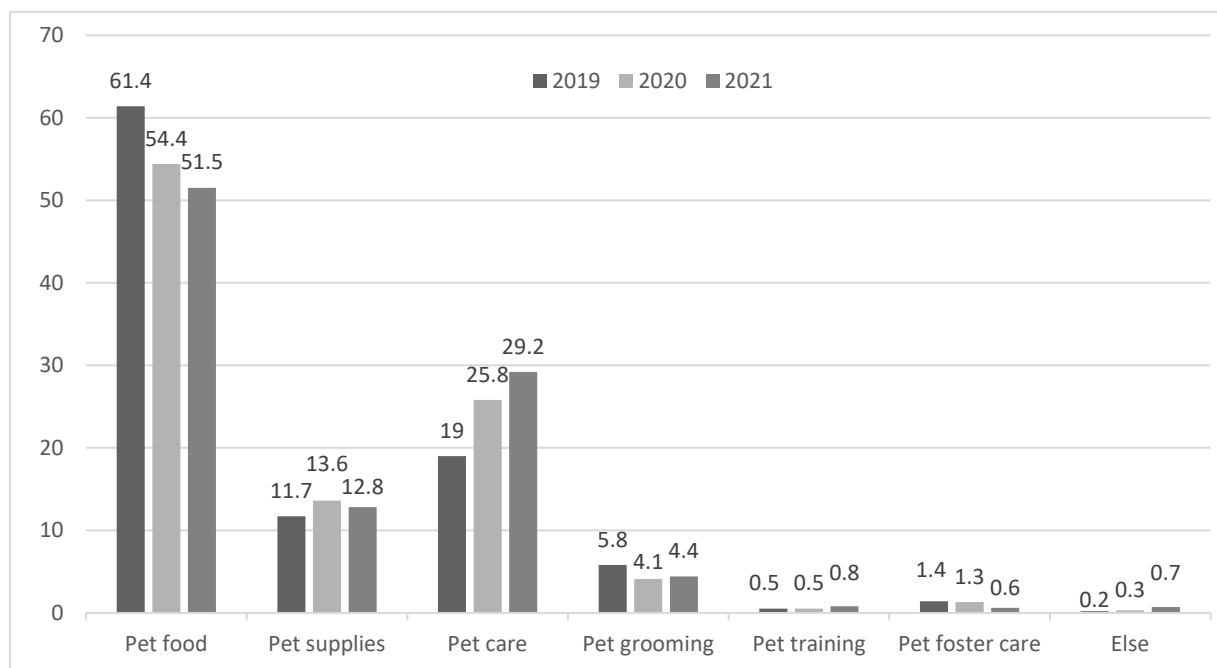


Figure 1. Changes in the consumption structure of pets (dogs and cats) (%)

## 2.2. Current Situation of Pet Insurance in China

Pet insurance is to point to when the pet is sick or accident, the insurer to the pet owner according to the contract agreed compensation amount. China's pet insurance was first in 2004, developed by Huatai Insurance Co., Ltd., pet third party liability insurance, mainly to protect the accidental injury caused by pets to others, but the market reflection is flat. Later, China's major insurance companies continue to explore and try in the field of pet insurance, gradually becoming a figure in pet medical insurance[3]. In 2021, Swiss Re conducted an in-depth research on Chinese pet owners and pet hospitals. According to the survey results, among people's related consumption of pets, pet medical services have the highest average annual consumption of 1,940 yuan per year. With the high single price of pet medical service and the relatively low frequency, it is most suitable to use insurance as the risk transfer method to play the guarantee role of insurance[4]. At the same time, the study found that pet owners have a very high consumption frequency of pet vaccines, physical examination and other aspects, which is very suitable as a value-added service of pet insurance, so as to improve the satisfaction of pet owners after buying insurance, and more importantly, it can prevent various health risks of pets and reduce the probability of pet diseases. At present, there are two main types of pet insurance products on the market, one is pet medical insurance, and the other is pet third-party liability insurance. This paper compares several representative pet insurance products, which are specifically as follows:

**Table 1.** Comparison Table of Pet Medical Insurance

	Cute pet love version	Too fond of pratt & Whitney cards	Pet medical insurance
Underwriting company	Ping an property insurance	Pacific insurance	The earth insurance
channel of distribution	official website	Official micro	Network marketing platform
scope of cover	June-8 years old dog and cat	February-8 years old	April-8 years old
Medical institutions	appoint	appoint	Direction: 60%, not guidance: 30%
Health inform	/	/	/
Disease / accident	Four kinds of infectious diseases Accidental injury category 4	All spontaneous diseases (Except for meningitis, epilepsy, etc.)	All spontaneous diseases
A single deductible	RMB 300 yuan / 30%	Starting from 200 yuan, Over 200 yuan is no deductible	two hundred yuan
Single claim limit	/	eight hundred yuan	one thousand, five hundred yuan
Annual cumulative insurance amount	Infectious disease is 2,000 yuan	eight thousand yuan	eight thousand yuan

Data Source: The official website of the insurance company.

**Table 2.** Comparison Table of Pet third-party Liability Insurance

	Pet liability insurance	Love dog responsibility guarantee	Pet master liability insurance
Underwriting company	Picc	Hua an property insurance	History belt property insurance
scope of insurance coverage	Third party personal injury or death, or direct property loss		
amount in force	one hundred thousand	one hundred thousand	thirty thousand
deductible excess	/	fifty yuan	/
Single compensation limit	fifty thousand	two thousand yuan	/
Immune certificate	/	Ask to have	Ask to have
Dog card	Ask to have	Ask to have	Ask to have
premium	forty-two yuan	one hundred yuan	ninety-nine yuan

Data Source: The official website of the insurance company.

At present, most of the pet insurance in the market is sold through electric sales or online sales, and the number of products is small and mostly aimed at pet dogs and pet cats. Due to the lack of data experience, insurance companies strictly limit the liability of pet insurance protection. Most of them stipulate single deductible, single deductible limit and cumulative deductible limit, requiring pets to hold immunization certificate and limit pet treatment hospitals, but they do not require the health notification of pets.

## 2.3. Risk Status of Pet Insurance in China

As a small branch of property insurance, pet insurance is still in the development stage, and there are urgent problems to be solved in the business operation process of insurance companies. This paper believes that there are three operational risks, reputation risks and social risks in the pricing, sales, underwriting and claims settlement of pet insurance products. Operational risk refers to the loss of the insurance company caused by personnel, processes, systems or external events in the process of operation of the insurance company. Reputation risk refers to the potential damage to the image of the insurance company due to the management of the insurance company or external events, and the negative evaluation of the insurance company, resulting in the potential losses of the insurance company. The social risks faced by insurance companies mainly refers to the secondary risk caused by operational risks and reputation risks.

### 2.3.1. Risk Status of Pet Insurance Pricing Link

In the pricing link, the current pet insurance mostly adopts undifferentiated pricing. The pricing of pet insurance products should follow the following principles: first, the estimated insurance premium is enough to meet the expected pet insurance compensation expenditure and insurance company operating expenses; second, the insurance company guarantees that the company can obtain a certain profit margin; third, the pet insurance product price meets consumer expectations; fourth, meet the actuarial and regulatory requirements of insurance products. The pricing of insurance products should follow the law of probability theory and large number, but on the one hand, pet insurance is in the development stage in China, with fewer people buying pet insurance and small market coverage; On the other hand, the development of pet insurance faces the imperfect coordination between insurance companies and pet hospitals and the diversification of consumer demand. Pricing link is the primary link for insurance companies to operate pet insurance products. In the pricing process, the personnel fault or imperfect system will affect the reputation of the insurance company and bring potential losses to the insurance company. The risk sources in this stage are mainly as follows: the insurance actuarial personnel should price the product within a reasonable range, and too high pricing cannot attract consumers, and too low pricing leads to too high subsequent claims. In practice, senior managers of insurance companies make mistakes in making decisions, such as unreasonable design of insurance clauses and confusing the concepts of diseases and accidents. For example, there are many designated hospitals in the clauses, but in fact, the cooperation between insurance companies and pet hospitals does not reach an agreement, which results in consumer reimbursement difficulties. At present, the relevant legal system for pets in China is not perfect, and the inconsistent regulations of various regulatory authorities will affect the design of pet insurance products. If an insurance company is given administrative punishment by the China Banking and Insurance Regulatory Commission and other regulatory agencies for violating relevant laws and regulations, or the bad rumors of insurance companies are spread in the market, the reputation of insurance companies will be greatly reduced, which will seriously cause public opinion and affect the normal production and operation of insurance companies.

### 2.3.2. Risk Status of Pet Insurance Sales Link

The sales of insurance products are an important link in the operation of insurance companies and the process of customers after understanding the potential risks. Only by selling insurance products to consumers and insurance companies obtain premium income can they maintain the sustainable operation and development of insurance companies. In the sales link of pet insurance products, most of them are sold to consumers by electric sales or online sales. This sales method can improve the operating efficiency of insurance companies and reduce the operating costs, but also bring risks to insurance companies. The risk sources at this stage are

as follows: Due to the complex pet insurance terms, the insurance company practitioners may not fully inform them when communicating with customers by phone. Because the sales website of the insurance company is down, consumers cannot normally browse, buy on the website, or the network system is hacked, resulting in customer information leakage, which may bring losses to the insurance company. In order to complete the performance requirements of selling insurance policies, insurance agents may have misleading sales behavior, or even put forward promises that cannot be fulfilled, which leads to customer complaints or exposure through the media and other ways, and eventually causes social risks.

### **2.3.3. Risk Status of Pet Insurance Underwriting Link**

Insurance companies in the pet insurance business, of their underwriting ability to risk control, namely the risk of pet and pet insurance contract liability control, usually limit pet insurance liability, odds, differential rate control moral risk, psychological risk, human risk, but pet risk screening is difficult, it is easy to face adverse selection, namely a large number of high-risk users. The risk sources of insurance companies in the process of pet insurance underwriting mainly include: due to the single risk control technology, the identification of pets only stays in a certain link of individual pets, and it is difficult to establish a separate information file for each pet. The importance of underwriting personnel in the underwriting process is self-evident. Due to the lack of experience of underwriting personnel or the collusion of underwriting personnel and pet owners to cover the pets with high risk according to the normal target, the business will be too risky. Insurance underwriting is a process, in which there may be risks that the insurance premiums paid by customers cannot be collected normally due to loopholes in the existence of the transaction process, or the irregular underwriting process leads to the high cost of underwriting business. The insurance company usually makes normal underwriting, conditional underwriting or rejection notice of the target. If the insurance company does not deal with the refusal of insurance properly, it will affect the reputation of the insurance company, and even cause serious social risks.

### **2.3.4. Risk Status of the Pet Insurance Claim Settlement Link**

Pet insurance claims is the most direct link consumer perception pet insurance products and services, so in the process of claims, the insurance company to protect the rights and interests of the insured as much as possible, when the insured loss is the insured most in need of help, the insurance company timely claims will keep pet get great satisfaction, and improve the image of the insurance company, but pet insurance claims link also cause pet complaints or frequent moral risk, this will bring great business risk to the insurance company. In the process of claim settlement, the main risk sources of pet insurance include: it is difficult to realize the subsequent claims settlement due to the improper conclusion of insurance contracts or the imperfect claim settlement process, causing consumer complaints. Insurance fraud is caused by the lack of experience of the inaccurate claim amount or the moral hazard of the compensation and pet owners. At present, the pet medical industry is not standardized. The common pet hospitals are "mom-and-pop stores", which are easy to cause excessive medical treatment and unnecessary costs. In the process of treatment, there may also be pet accidents caused by the negligence of pet doctors. If the insurance company fails to fulfill its obligations in the contract, issuing the notice of refusal or fails to fulfill the previous service commitment leads to the damage to the interests of consumers and causes civil litigation, if not handled properly, it will obviously damage the reputation of the insurance company. When the insurance company has exaggerated losses, imposter, fictitious accidents and other insurance fraud cases, the public will doubt the business management ability of the insurance company, damage the reputation of the insurance company, and even cause serious social public opinion impact.

### 3. Determine the Index Weight by Tomographic Analysis Method

#### 3.1. Construction of the Risk Evaluation Index System for Pet Insurance Operation

The objective layer of the hierarchical analysis method is the goal of solving the problem, and the criterion layer is the criterion of solving the problem. This paper believes that the insurance company in the process of pet insurance product pricing, sales, underwriting and claims, mainly produce operational risk, reputation risk and social risk, so this target layer is pet insurance risk assessment, 1 standard layer for the pricing, sales, underwriting and claims of insurance company management, two standard refers to the operational risk, reputation risk and social risk. Therefore, the following index system is established to evaluate the risks in the process of pet insurance operation. The specific evaluation framework is as follows:

**Table 3.** Risk Evaluation Framework of Pet Insurance Operation

Target layer	Level 1 indicators	Secondary indicators
Pet insurance operation risk evaluation	Pricing link B1	Operational risk, C11
		Reputation Risk C12
		Social Risk C13
	Sales link B2	Operational risk C21
		Reputation Risk C22
		The Social Risk C23
	Underwriting B3	Operational risk, C31
		Reputation Risk C32
		The Social Risk, C33
	Claims section B4	Operational risk C41
		Reputation Risk C42
		Social Risk C43

#### 3.2. Calculation and Inspection of the Pet Insurance Operation Risk Evaluation Model

In this paper, the judgment matrix of the criterion layer relative to the target layer is as follows:

$$A1 = \begin{pmatrix} B1/B1 & B1/B2 & B1/B3 & B1/B4 \\ B2/B1 & B2/B2 & B2/B3 & B2/B4 \\ B3/B1 & B3/B2 & B3/B3 & B3/B4 \\ B4/B1 & B4/B2 & B4/B3 & B4/B4 \end{pmatrix}$$

After constructing the matrix, the judgment matrix was assigned according to the scoring results of the expert questionnaire. This paper gives questionnaires to 20 experts such as insurance practitioners and pet owners. Taking the questionnaire data of expert 1 as an example, the judgment matrix of the first-level index B in the pet insurance management risk index system is specifically as follows:

$$A1 = \begin{pmatrix} B1/B1 & B1/B2 & B1/B3 & B1/B4 \\ B2/B1 & B2/B2 & B2/B3 & B2/B4 \\ B3/B1 & B3/B2 & B3/B3 & B3/B4 \\ B4/B1 & B4/B2 & B4/B3 & B4/B4 \end{pmatrix} = \begin{pmatrix} 1 & 0.5 & 0.3333 & 0.5 \\ 2 & 1 & 0.5 & 0.3333 \\ 3 & 2 & 1 & 0.3333 \\ 2 & 3 & 3 & 1 \end{pmatrix}$$

Entering the data into the AHP software, expert 1 believes that the weight of the first-level index on the pet insurance risk is:  $W1=0.1254$ ,  $W2=0.1653$ ,  $W3=0.2609$ ,  $W4=0.4484$ , respectively. Among them, the consistency index, the  $C.R.= 0.0977 < 0.1$ , so the judgment matrix  $A1$  passed the consistency test. Similarly, the first-level index weight values of the other 19 experts were calculated respectively, specifically as follows:

**Table 4.** The judgment matrix of experts and their tests

	W1	W2	W3	W4	$\lambda m$	C.R.
Questionnaire 1	0.1254	0.1653	0.2609	0.4484	4.2610	0.0977
Questionnaire 2	0.3838	0.0792	0.1213	0.4156	4.0751	0.0281
Questionnaire 3	0.3129	0.3873	0.2327	0.0671	4.0488	0.0183
Questionnaire 4	0.0794	0.4705	0.1286	0.3215	4.2620	0.0981
Questionnaire 5	0.0717	0.5101	0.1139	0.3043	4.1830	0.0685
Questionnaire 6	0.0660	0.5230	0.1207	0.2903	4.2582	0.0967
Questionnaire 7	0.0605	0.5366	0.1177	0.2853	4.2088	0.0782
Questionnaire 8	0.2023	0.0811	0.1190	0.5976	4.1085	0.0406
Questionnaire 9	0.2313	0.0721	0.1125	0.5841	4.1841	0.0690
Questionnaire 10	0.2362	0.0635	0.1080	0.5923	4.1738	0.0651
Questionnaire 11	0.2400	0.0571	0.1046	0.5984	4.1718	0.0644
Questionnaire 12	0.2684	0.0544	0.0936	0.5836	4.2082	0.0780
Questionnaire 13	0.3554	0.0530	0.0858	0.5058	4.0814	0.0305
Questionnaire 14	0.3776	0.0496	0.1235	0.4493	4.1660	0.0622
Questionnaire 15	0.2733	0.0560	0.1083	0.5624	4.1772	0.0664
Questionnaire 16	0.1238	0.0830	0.2408	0.5524	4.2365	0.0886
Questionnaire 17	0.1663	0.0739	0.1953	0.5645	4.1452	0.0544
Questionnaire 18	0.3084	0.0644	0.1193	0.5079	4.0215	0.0080
Questionnaire 19	0.3782	0.0748	0.1537	0.3933	4.0601	0.0225
Questionnaire 20	0.3141	0.0947	0.1667	0.4244	4.1185	0.0444

By calculating the average weight of the first-level index of 20 experts on the risk evaluation of pet insurance business operation, the comprehensive weight of the first-level index can be obtained:

$$w_{B1} = 0.2198 \quad w_{B2} = 0.13 \quad w_{B3} = 0.2138 \quad w_{B4} = 0.4364$$

The calculation method of the secondary index weight is the same as the calculation method of the first-level index weight. The weight value of the secondary index of the 20 experts is shown in the following table:

**Table 5. Second-level index judgment matrix of each expert**

	C11	C12	C13	C21	C22	C23	C31	C32	C33	C41	C42	C43
Questionnaire 1	0.0373	0.0205	0.0676	0.0181	0.0511	0.0961	0.0835	0.0320	0.1453	0.1074	0.0616	0.2795
Questionnaire 2	0.1141	0.0629	0.2069	0.0087	0.0245	0.0461	0.0388	0.0149	0.0676	0.0995	0.0571	0.2590
Questionnaire 3	0.0930	0.0512	0.1686	0.0424	0.1197	0.2251	0.0745	0.0285	0.1296	0.0161	0.0092	0.0418
Questionnaire 4	0.0236	0.0130	0.0428	0.0516	0.1455	0.2735	0.0412	0.0158	0.0716	0.0770	0.0441	0.2003
Questionnaire 5	0.0213	0.0117	0.0386	0.0559	0.1577	0.2965	0.0365	0.0140	0.0634	0.0729	0.0418	0.1897
Questionnaire 6	0.0196	0.0108	0.0356	0.0573	0.1617	0.3040	0.0386	0.0148	0.0672	0.0695	0.0399	0.1809
Questionnaire 7	0.0180	0.0099	0.0326	0.0588	0.1659	0.3119	0.0377	0.0144	0.0655	0.0683	0.0392	0.1778
Questionnaire 8	0.0601	0.3310	0.1090	0.0089	0.0251	0.0471	0.0381	0.0146	0.0663	0.1431	0.0820	0.3724
Questionnaire 9	0.0688	0.3790	0.1247	0.0079	0.0223	0.0419	0.0360	0.0138	0.0627	0.1399	0.0802	0.3640
Questionnaire 10	0.0702	0.0387	0.1273	0.0070	0.0196	0.0369	0.0346	0.0132	0.0602	0.1418	0.0813	0.3691
Questionnaire 11	0.0713	0.0393	0.1293	0.0063	0.0177	0.0332	0.0335	0.0128	0.0583	0.1433	0.0821	0.3729
Questionnaire 12	0.0798	0.0440	0.1447	0.0060	0.0168	0.0316	0.0300	0.1150	0.0521	0.1398	0.0801	0.3637
Questionnaire 13	0.1056	0.0582	0.1915	0.0058	0.0164	0.0308	0.0275	0.0105	0.0478	0.1211	0.0694	0.3152
Questionnaire 14	0.1123	0.0618	0.2035	0.0054	0.0153	0.0288	0.0395	0.0151	0.0688	0.1076	0.0617	0.2800
Questionnaire 15	0.0812	0.0448	0.1473	0.0061	0.0173	0.0325	0.0347	0.0133	0.0604	0.1347	0.0772	0.3505
Questionnaire 16	0.0368	0.0203	0.0667	0.0091	0.0257	0.0483	0.0771	0.0295	0.1341	0.1323	0.0758	0.3443
Questionnaire 17	0.0494	0.0272	0.0896	0.0081	0.0228	0.0430	0.0625	0.0239	0.1088	0.1352	0.0775	0.3518
Questionnaire 18	0.0917	0.0505	0.1662	0.0071	0.0199	0.0374	0.0382	0.0146	0.0655	0.1216	0.0697	0.3165
Questionnaire 19	0.1124	0.0619	0.2038	0.0082	0.0231	0.0435	0.0492	0.0189	0.0857	0.0942	0.0540	0.2451
Questionnaire 20	0.0934	0.0514	0.1693	0.0104	0.0293	0.0551	0.0534	0.2040	0.0929	0.1016	0.583	0.2645

**Table 6. 20 expert-level index weights**

Level 1 indicators	weight	Secondary indicators	Within-group weights
B1	0.2198	C11	0.1185
		C12	0.0359
		C13	0.0653
B2	0.1300	C21	0.0143
		C22	0.0402
		C23	0.0756
B3	0.2138	C31	0.0685
		C32	0.1180
		C33	0.1191
B4	0.4364	C41	0.1045
		C42	0.3223
		C43	0.2720



The C.R. of the second-level index judgment matrix of 20 experts Values were all less than 0.1, meaning that the consistency test was passed. Also, by calculating the average of the secondary index weight of 20 experts, the weight of the secondary index can be obtained. The specific contents are shown in Table 6.

## 4. Conclusion

This paper uses hierarchical analysis method to evaluate the operating risk of pet insurance companies. For the primary index, the risk weight value of pet insurance pricing link is 0.2198, the risk weight value of sales link is 0.1300, the risk weight value of underwriting link is 0.2138, and the risk weight value of claim link is 0.4364, among them, the risk weight value of pet insurance claims link is the biggest, and claims risk > pricing risk > underwriting risk > sales risk, so claims is the key link of risk management. For the secondary indicators, In the pricing process, The greatest weight of operational risk, The weight value is 0.1185, So in the pet insurance pricing process, We should focus on the occurrence of operational risks; In the sales segment, Most of the weight of the social risk, The weight value is 0.0756, So in the pet insurance sales process, We should focus on the occurrence of social risks; In the underwriting process, Most of the weight of the social risk, The weight value is 0.1191, So in the pet insurance underwriting process, We should focus on the occurrence of social risks; In the claims settlement process, Reputation risk is the most heavily weighted, The weight value is 0.3223, So in the pet insurance claims process, Emphasis should be placed on the occurrence of reputational risk. With the increase of per capita disposable income in China and the increase of public awareness of buying pet insurance, pet insurance will usher in an important opportunity period in China in the future. For insurance companies, they should seize the opportunity to strengthen the public publicity on pet insurance by adopting insurance product publicity meetings and advertising publicity, increase the target of pet insurance underwriting, control the risk of pet insurance underwriting, and finally increase the premium income. On the one hand, establish an internal control system, establish the risk management objectives of each link, standardize the process of each business link, and improve the level of risk control. On the other hand, we should create pet insurance products with full guarantee, adequate service and reasonable prices. Based on the basis of risk management, we seek consumers' demand and preference for the insurance products, improve the guarantee and richness of pet insurance products, and use technology to closely connect consumers, so that consumers can truly recognize the value of pet insurance products, so that pets can better accompany the growth of individuals and families.

### 4.1. Promote the Risk Management of the Pet Insurance Claims Settlement Link

The claim settlement link is the most critical link for pet owners to perceive pet insurance and affect the sustainable operation of insurance companies. On the one hand, insurance companies should adhere to the principle of insurance claims, and timely deal with the claims within the scope of insurance liability, to meet consumers' expectations of pet insurance products. Timely claims can improve consumers' satisfaction with insurance products and insurance companies, and then become loyal customers of insurance companies, and establish a good image for insurance companies. On the other hand, insurance companies should improve the professionalism of pet insurance claims, build pet hospital network, attach importance to long-term cooperation with pet hospitals, avoid excessive medical treatment in pet hospitals; form the operation specification of key nodes of pet claims, build pet insurance fraud risk management system, and prevent insurance fraud events with very similar pets. Insurance companies should strengthen the risk management of the pet insurance claims link, to avoid the claims cost is too high to maintain the business, and at the same time, to avoid the unreasonable claims of consumer complaints affecting the reputation of the insurance company.

## 4.2. Focus on the Operational Risks of the Pet Insurance Pricing Link

The operational risks of insurance companies in the pricing link can be specifically manifested as the risk of underpricing of pet insurance products, and the risk of internal and external pet insurance fraud of insurance companies. Insurance actuarial personnel should price products within a reasonable range. Excessive pricing cannot attract consumers. Too low pricing will lead to excessive subsequent claims. Current many consumers think that pet insurance products cost performance is not high, claims restrictions, covered by less pet hospitals, etc., the main reason is the lack of data experience, and under the absence of regulatory process, pet disease insurance event is very common, so in product design, insurance actuarial personnel will artificially higher expected loss rate, lead to insurance actuarial personnel of pet insurance pricing is not reasonable. Therefore, insurance companies should cooperate with pet hospitals to promote the construction of pet medical standards, constantly accumulate relevant data, and learn from the advanced experience of pet insurance in developed countries, set reasonable prices on the premise of meeting the regulatory requirements, and create pet insurance products with full guarantee, adequate service and reasonable price.

## 4.3. Strengthen the Prevention of Social Risks of Pet Insurance

Due to the particularity of insurance companies and insurance products, the pet insurance terms are not clearly explained; the insurance agent has misleading sales; the underwriting process is not standard; difficult claims, complicated procedures, consumer dissatisfaction and surrender or complaints about the insurance products or services, which will greatly affect the daily operation of insurance companies, so insurance companies should strengthen the prevention of social risks, especially in the sales link and underwriting links caused by operational risks and reputation risks. On the one hand, establish an internal control system, establish the risk management objectives of each link, standardize the process of each business link, and improve the level of risk control. On the other hand, based on risk management, we should seek consumers' demand and preferences for the insurance products, improve the guarantee and richness of pet insurance products, and use technology to closely connect consumers, so that consumers can truly recognize the value of pet insurance products, and enable pets to better accompany the growth of individuals and families.

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