

# Analysis of the Online and Offline Policy Issuance Process of a Life Insurance Company in Indonesia <sup>†</sup>

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**Abstract:** Insurance agents offer insurance products to prospective insureds and then submit a Life Insurance Application Letter (SPAJ). The issuance of this SPAJ is done offline. During the pandemic, this process was also carried out online. Our research questions thus arise about whether there are differences in the policy issuance processes of the two approaches. Our aim is to compare the process of issuing policies online and offline. Although the data show that the process of issuing policies is increasingly being conducted online, the results of mean different tests show that there is no significant difference between the offline and online processes.

**Keywords:** agents; offline; online; policy issuance

## 1. Introduction

The insurance business in Indonesia always increases every year. In general, there are two types of insurance, namely general insurance and life insurance. Based on data from the Indonesian Life Insurance Association, (AAJI), in the first quarter of 2022, the total number of policies increased by 17.4% to 20.87 million policies. Meanwhile, the number of insured increased by more than 11 million people or grew by 18.1%. As a form of industry responsibility to customers, in the first quarter of 2022, the life insurance industry paid a total of Rp43.35 trillion in claims and benefits to more than 5.3 million beneficiaries. Insurance itself is a process of transfer of risk. In the process of transfer of risk, there is a transfer of risk to another party using an insurance contract or insurance policy where the risk recipient is able to manage the risk. The risk manager in question is an insurance company.

When selling their products, insurance companies use several ways, namely selling directly or through intermediaries. Direct selling means that the insurance company sells its products directly without anyone's intervention. Meanwhile, if the sale is made through an intermediary, one of these is an agency system with the seller being called an agent. In this type of life insurance, before the policy is issued, there is a process of filling in the Life Insurance Application Letter (SPAJ). Filling in the SPAJ is done to obtain information on the prospective insured so that during the insurance application process, it will make it easier for the company to carry out the insurance application process, determine the coverage benefits, and the amount of premium to be paid by potential consumers. In addition to personal data, other important information is the health history of the insured candidate. Agents play an important role in filling out this SPAJ. After the SPAJ is filled, the agent then inputs the existing data into the insurance company, and if there is no problem and the premium is approved by the insured candidate, the policy is issued.

Before the pandemic occurred in 2020, the process of inputting SPAJ data to policy issuance was generally carried out manually. The agent meets the prospective insured face to face, and the filled SPAJ is given to the insurance company, the company determines how much premium must be paid, and then the policy is issued. This is still commonly done



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even though the world has now entered the industrial revolution 4.0, where the existence of information technology is a must in all jobs. In [1], it is explained that the insurance industry should take advantage of the use of information technology in all processes of its activities, including the underwriting process, claims management, customer service, etc. However, it turns out that the insurance industry still tends to be traditional [2]. Another aspect is also shown by a survey conducted by [3] in Germany, where when the first wave of COVID-19 occurred, most of the sales of insurance policies were still done face-to-face and all processes were carried out manually.

Because the pandemic turned out to be prolonged, the insurance industry inevitably had to change. The face-to-face sales process can no longer be relied on and then the sales process is carried out online [4]. The process of using information technology must be accelerated. The digitalization process is changing the relationship between companies and consumers, where the principles of openness and mutual trust must take precedence. Digitization can simplify a process and eliminate redundancy in an industry but requires special skills from workers in insurance companies [5], including in the life insurance industry. Digitalization affects the traditional business of insurance companies in various ways [6]. The development of world-class life insurance products and services by prioritizing customer centricity, customer protection, and digital experience is also Pillar 1 of the Indonesian Life Insurance Industry road map strategy framework [7]. Based on the road map strategy, various innovations are continuously carried out by insurance companies, including the process of inputting SPAJ by agents.

SPAJ input is then carried out online, which aims to make it easier for consumers because it is efficient, practical, and saves time. In the online process, the agent enters the required data in an application, and then the policy issuance process is carried out. However, manual or offline SPAJ input is still being carried out due to the lack of agents' digital capabilities and the existence of insurance products that do not meet the requirements. As a result, research questions arise about whether there are differences in the policy issuance process of the two approaches. The purpose of this study is to compare the policy issuance processes due to online and offline SPAJ data input. In general, the systematics of writing this paper includes an introduction, followed by a literature review. The data and methods used are the next discussion, followed by the results and discussion. The final part of this paper is the conclusion.

## 2. Material and Methods

### 2.1. Insurance

By definition, insurance or coverage is an agreement, by which an insurer binds himself to an insured, by receiving a premium, to compensate him for a loss, damage, or loss of expected profit, which he may suffer due to an uncertain event. In [8], insurance is an agreement between two parties, namely the insurance company and the policyholder, which is the basis for receiving premiums by the insurance company in return for:

- a Providing compensation to the insured or policyholder due to loss, damage, costs incurred, loss of profit, or legal liability to third parties that may be suffered by the insured or policyholder due to the occurrence of an uncertain event.
- b Providing payments based on the death of the insured or payments based on the life of the insured with benefits whose amount has been determined and/or based on the results of fund management.

From the above definition, there are two types of insurance, namely life insurance and general insurance. In life insurance, the object being insured is a person or life. While in general insurance, the object that is insured is goods or objects. In practice, insurance is carried out with six principles, which are Utmost Good Faith, Indemnity, Insurable Interest, Subrogation, Proximate Cause, and Contribution.

According to [9], an insurance policy is legal evidence of an insurance coverage agreement between the insurer and the insured. The definition shows that an insurance policy is an agreement in which the form of the contract is different from the general

agreement format. The agreement in the insurance policy is unilateral and there is no bargaining. The insurer, namely the insurance company, promises to replace a number of losses that may be suffered by the insured. However, the insurer cannot force the policyholder to pay the insurance premium. In Indonesia, there is a minimum standard for each outstanding insurance policy price. For this reason, insurance business actors just follow the outlines that have been determined. As a result, the price of insurance policies in Indonesia is not so meaningful between each insurance company.

As in general companies, insurance companies produce, offer, and sell goods to their consumers for profit. The insurance business, including life insurance, must have a marketing strategy so that the policy can be sold to prospective insureds. So far, insurance companies or insurers use two sales methods, namely, directly where the insurer sells their own products without intervention and indirectly where the insurer uses intermediaries, for example through the agency system, bancassurance, brokers, and other intermediaries [10].

Life Insurance Application Letter (SPAJ) is a document that will be issued by an insurance company in the event of a request for an insurance policy purchase by a prospective insured. The SPAJ contains overall information about the prospective insured, policyholder, and insurer. Insured information is the latest medical history, the daily life pattern of the insured candidate, as well as detailed personal data information. The SPAJ also contains provisions that apply to the insurance claim process. For this reason, the prospective insured must know and read these provisions before the policy is issued or when the SPAJ is approved. This is so that the agreement in the insurance policy can run well and smoothly.

If, in the future, it is found that there was forgery when filling out the SPAJ data, the consequences will be applied according to the previously agreed agreement. Examples of impacts that will be received if there is falsification of personal data are rejected claims, policy closure without negotiation, non-refundable premium payments in the event of policy closure, and legal sanctions that apply according to the agreement.

## 2.2. Data

The data used are secondary data obtained from a life insurance company in Indonesia that has the values of Focus on Customer, Agility, Solution, Trust, and Teamwork [11]. The data being studied are data on policies that have been published, sold, and paid for by consumers, but the policy has not been received by the prospective insured. This company has carried out this process of inputting SPAJ to issue new online policies since January 2021. This is marked by the launch of the Online Submission Agency (OnSub) application. As a result, the data used in this study are only 16, namely monthly data for the period January 2021 to April 2022.

## 2.3. Methods

The method used is a descriptive approach and a two-mean difference test with independent samples. Descriptive statistics are used to describe or provide an overview of the object under study through sample or population data [12]. The two-mean difference test was used to compare the mean of 2 groups of data. The data group in question is the number of policies issued due to the online and offline SPAJ input process. The data in this study are independent data, namely two groups of data that are independent of each other. To find out whether there is a difference in the average number of policies issued due to the online and offline SPAJ input process, the following hypothesis is used:

**H<sub>0</sub>.** *There is no difference in the mean of policies issued due to the online and offline SPAJ input process.*

**H<sub>1</sub>.** *There is a difference in the mean of policies issued due to the online and offline SPAJ input process.*

The significance level used is  $\alpha = 5\%$  and the data processing process uses Minitab 19 with t test. The hypothesis test above is a two-tailed test with the test criteria that if  $t\text{-count} \leq t\text{-table}$ , then  $H_0$  is not rejected while if  $t\text{-count} > t\text{-table}$ , then  $H_0$  is rejected. If using the

test criteria from the level of significance, then the significance of  $p > 0.05$  means that there is no difference, and the significance of  $p < 0.05$  means that there is a difference at the 5% significance level.

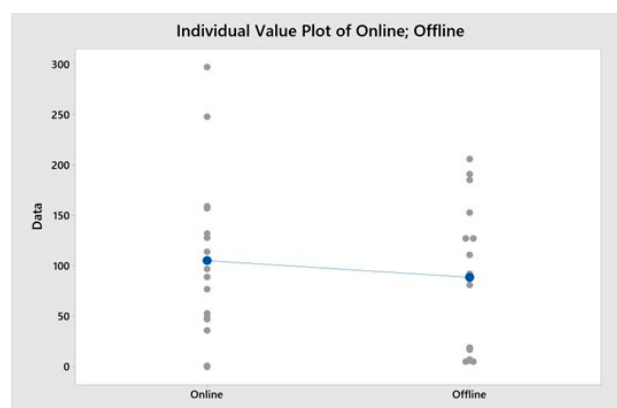
### 3. Results

The prospective insured who are interested in buying the product will be assisted by agents until the policy is issued and accepted by the insured. The agent fills out the SPAJ after conducting an interview with the prospective insured to obtain personal data of the prospective insured and supporting documents such as ID card, family card, account book, proof of first premium deposit, signed product simulation, and statement form for purchasing insurance products. After the SPAJ input process is complete, the company will issue a policy. In insurance companies, this process involves agents, agency support, agency helpdesk, and the company’s underwriting department. Descriptive statistics that describe the number of policies issued due to the online and offline SPAJ input process can be seen in Table 1.

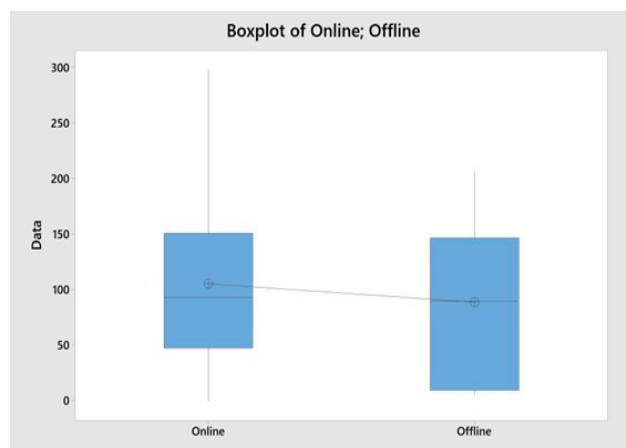
**Table 1.** Descriptive Statistics of Policies Issued with Online and Offline Processes.

Variable	N	Mean	SE Mean	StD ev	Minimum	Q1	Median	Q3	Maximum
Online	16	105.3	20.5	82.1	0.0	47.5	93.0	150.8	297.0
Offline	16	88.7	18.1	72.4	5.0	9.5	89.5	146.5	206.0

In Table 1 above, it can be seen that the amount of data that was observed was 16. The average number or mean of policies issued due to the online SPAJ input process was 105.3 with a minimum value of 0 and a maximum value of 297. This indicates that there are times when the online SPAJ input process is not carried out. Meanwhile, the mean of policies issued due to the offline SPAJ input process is 88.7 with a minimum score of 5 and a maximum value of 206. In other words, up to the 16th month, the offline SPAJ inputting process is still being carried out. The figures shown in Figures 1 and 2 also show a similar situation where the mean of policies issued due to the online SPAJ input process is greater than offline. The range of the online SPAJ inputting process is also wider than that offline, but the number of policies issued is because the offline SPAJ inputting process is more about around the mean values which are marked in the blue dots.

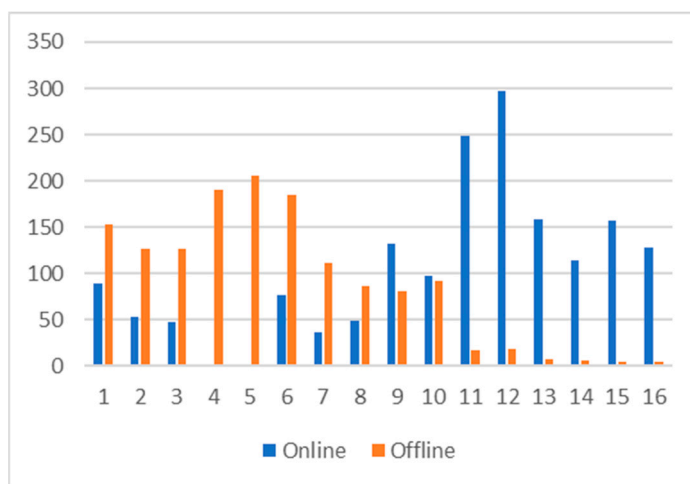


**Figure 1.** Individual Value Plot of Issued Policies with Online and Offline Processes.



**Figure 2.** Boxplot of Issued Policies with Online and Offline Processes.

A comparison of policies issued through the online and offline SPAJ input process can be seen in Figure 3. In Figure 3 it can be seen that in the 1st month to the 10th month, many policies were issued by the offline SPAJ input process. In the 4th and 5th months since the online SPAJ entry process was implemented by the company, there were no policies issued because the SPAJ was inputted online. During these months, policies were issued due to the offline SPAJ input process. In the 6th month and the following month, the policy issued due to online SPAJ input is carried out again. Starting from the 11th month, more policies were issued due to the online SPAJ input process compared to offline. In the 12th month, the policies issued due to the online SPAJ input process reached the highest value. Since the 11th month, policies issued due to online SPAJ input tend to be used more.



**Figure 3.** Comparison of Issued Policies with Online and Offline Processes.

The table of the results of the mean difference test of the number of policies issued due to the online and offline SPAJ input process using the t-test can be seen in Table 2. From Table 2 it can be seen that the t-count obtained is 0.61. With t-table it is 1.69913, then t-count t-table. The result is that  $H_0$  is not rejected. In other words, there is no difference in the mean of policies issued due to the online and offline SPAJ input process. This is also reinforced by the significance level of the  $p$  value which is much greater than the specified  $p$  value, which is 0.550 compared to 0.05.

**Table 2.** Result of the Mean Value Difference Test.

Null Hypothesis $H_0: \mu_1 - \mu_2 = 0$		
Alternative Hypothesis $H_1: \mu_1 - \mu_2 \neq 0$		
t-Value	DF	p-Value
0.61	29	0.550

Although since the 11th month, policies issued due to online SPAJ input tend to be used more, and during the 16 months the mean of policies issued because the online SPAJ input process is greater than offline, the results of the different tests show that there is no difference the mean of policies issued due to the online and offline SPAJ input process. This could be due to the small amount of observational data. Different results may occur if the amount of data being observed is more. Plus the trend from the data for the last 6 months is that more and more policies are issued due to online SPAJ input.

**4. Discussion**

Prior to 2021, the SPAJ input process until the issuance of an insurance policy at a life insurance company was done manually or offline. Along with the pandemic, the company created an application so that the process of inputting SPAJ by agents until the issuance of insurance policies can be done online. Since then the SPAJ input process has been carried out in two ways, offline and online. From observations made from 2021 to April 2022, it was found that the mean number of policies issued due to the online SPAJ input process was greater than offline. However, the results of the different tests show that there is no difference in the mean number of policies issued due to the online and offline SPAJ input process. This could be due to the small amount of observational data. Different results may occur if the amount of data being observed is more. Plus the trend from the data for the last 6 months is that more and more policies are issued due to online SPAJ input. Along with the agent’s information technology capabilities that are getting better as well as efficient and user-friendly application features, the online SPAJ input process will be used more often, due to the following things that can be considered, namely

1. More and more agents have good information technology skills.
2. Using the application is easier, more efficient, and directly integrated with the company’s digitization system. For example, when filling in the identity again, the system will immediately adjust to the identity card that was previously inputted, so that the number of input errors will be smaller.
3. In the process of filling out the SPAJ until the issuance of the policy, the agent receives a real-time confirmation as long as all data is correctly filled in. On the other hand, the offline manual system takes up to 3 working days for the policy to be issued.
4. Much higher data accuracy due to human error or other errors can be detected from the start.
5. Agents can explain the product in more detail to the prospective insured by using the illustration and calculation features that have been included in the application service.

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