DIGITAL PLATFORM ECOSYSTEM FOR INSURANCE INVESTMENT INDUSTRY IN MALAYSIA: A POSSIBLE CONCEPTUAL SOLUTION

MUHAMAD REZAN BIN TAMBI 1, ABDUL RAHMAN BIN AHMAD DAHLAN2

1 Kulliyyah of Information & Communication Technology, International Islamic University Malaysia.
2 Kulliyyah of Information & Communication Technology, International Islamic University Malaysia.

*Corresponding author: rezantambi@gmail.com

ABSTRACT: This paper discusses the direction of a possible conceptual Digital Platform Ecosystem in Malaysia, specifically with regards to the Insurance Investment Industry and it is a response to the current situation that clearly opens the door to high risk of losses just because the system is rigid and inconvenient to the customers. In addition, the existing system is weak and has become one of the causes that burdens the customers because they will encounter errors so often while using the system. The system also triggers challenges in the governance between brokers, customers, and reinsurers, and will result in the loss of contributors. Therefore, a lightweight and easy-to-manage digital platform should be introduced for the insurance investment industry in Malaysia in order to deal with the constant errors encountered by customers and for the agents to become more user friendly and relevant, as well as secure. Therefore, this paper identifies the challenges and proposes the possible conceptual Insurance Digital Platform Ecosystem incorporating Integrated Enterprise Risk Management (IERM) to reduce the impact of the high risks identified, including the risk of financial losses caused by clients’ frustrations.

KEY WORDS: Insurance, Portal, Digital Platform Ecosystem, Enterprise Risk Management

1. INTRODUCTION

PQRS (name has been changed to protect the identity) is an insurance broker and reinsurance company that provides a risk transfer service through Insurance and Takaful, which covers life and general. PQRS collaborates with AIA Berhad, AIA Takaful Berhad, Hong Leong Assurance Berhad, Hong Leong MSIG Takaful Berhad, Allianz Life Insurance Malaysia Bhd, Etiqa Life Insurance Bhd, Etiqa General Takaful Bhd, Great Eastern Life Assurance (Malaysia) Bhd, Takaful Ikhlas Berhad and other major insurance and takaful companies. Through personal experience and feedback from PQRS’s clients, it is found that bad online experience has been one of the biggest complaints received since the offline processes shifted to online means due to the Covid-19 pandemic.

The first Takaful Company in Malaysia was established in 1985 after the enactment of the Takaful Act 1984. This takaful is an insurance concept based on
Shariah law. Basically, the concept of takaful is based on cooperation, responsibility, and protection, or in other words it provides protection on common assets and offers risk sharing among members. It involves coverage in home, motor and personal takaful coverage.

Insurance is a type of financial tool that you can purchase to safeguard yourself from accidents. This means it provides financial protection in case an unfortunate event were to happen to an individual, family member or property, especially since it is a financial protection. It consists of a life cover which refers to health cover as well as investment and finally general insurance which covers motor vehicles, home, tourism and even personal property.

In early 2020, various sectors of the economy have been affected by the Covid-19 pandemic and the Takaful and insurance markets are no exception. According to economist and freelance writer, Mushtak Parker, the growth of the takaful market in Malaysia remains stable. Meanwhile, according to records from Fitch Ratings' international rating, Bashar Al Natoor, he stated that the growth of the Takaful industry in Malaysia is driven by the formation of an ecosystem in the Islamic financial economy. He also said that the growth of this industry is faster than the conventional insurance sector in 2019. This is due to the policy of increasing the client awareness in Malaysia (Bernama, 2020).

The outbreak of the Covid-19 pandemic in the past year has put great pressure on the entire world community and it is clear that our country, Malaysia, is no exception. The outbreak of Covid-19 has claimed nearly 4.94 million lives worldwide and 28,354 people in Malaysia. There is no denying that almost hundreds of thousands of total businesses had to be closed to date because the situation has not fully recovered. Bank Negara Malaysia (BNM) has also announced the measures to regulate and support institutions to assist small and medium enterprises (SMEs) as well as affected and needy companies in controlling the economy. BNM has given flexibility to any financial or banking institution to respond in order to assist and administer financially in the face of this extraordinary situation. Not to be outdone, Takaful and Insurance institutions have also been instructed in carrying out joint responsibilities to address the spread of the Covid-19 pandemic (BNM, 2020).

As a result of the Covid-19 outbreak, the community is once again aware of the importance and appropriateness of having a life insurance policy and takaful certificate in providing financial protection. BNM has also set some institutions to defer payment of life policy premiums and family takaful certificates for three months without compromising coverage. This is in no way detrimental to any institution as the cumulative amount of premiums deferred and premium relief is below the minimum level (BNM, n.d).

A report from Astro Awani online dated June 3, 2020 stated a study from Ernst & Young which found that “the COVID-19 pandemic that hit the country caused many companies to begin to realize the importance of digital transformation in their enterprises”. In the field of technology today, most companies already have IT support staff as well as sophisticated equipment (Astro Awani, 2020). However, training, collaboration and a simple interface will help make the process faster and easier for the users to use. This will also form the basis for a faster transition in the
face of living the new norms, which will include significant investments in today’s digital infrastructure.

2. CHALLENGES AND ISSUES

The issue of losses within the insurance industry comes from several problems and among them is the loopholes in the industry’s Digital Platform Ecosystem (Eling & Lehmann, 2018). This obviously will lead to huge losses. The Digital Platform Ecosystem in question is poor when it comes to the governance. Other than the landscape of client concerns over the spread of the Covid-19 pandemic, Insurance and Takaful companies should be more sensitive and efficient in dealing with major financial losses due to a weak Digital Platform Ecosystem. From a psychological point of view, this proves that the direction of the investment itself has hinted at ambiguity that does not convince clients or contributors. Referring to Jiang (2021), the lifestyle of technology nowadays makes clients feel more comfortable as it is easy to use. However, it also relies on the user interface of the portal to improve the user experience while using the insurance digital platform, hence reducing the risk of unsatisfied clients. Psychologically, the application of information systems for the users is influenced by the smoothness of the system. So, it is not surprising if a difficult and burdensome system will make clients lose interest in taking up the policy which contributes to major financial losses especially during this pandemic.

Fig. 1 and Fig. 2 below show an example of user experiences in using the portal provided by an insurance company, and in this particular example the portal is under Hong Leong MSIG Takaful used by PQRS.

![Diagram](image)

**Fig. 1. Current User Experience (Client)**

The responsibility of a contributor is to make contributions on a monthly or annual basis. However, the process of making payments online often causes problems for customers as it gives bad user experience that leads to clients abandoning the system all together and contributes to the loss of clients. As in the figure above, it is a representation of the payment process. When the process is carried out, more than often an error occurs, then the customers will contact the agent and this situation is usually unable to be resolved by the agent as the agent will have the same problem with the system. As a result, the agent will contact the IT division in the Headquarters, and this process will take at least 24 hours to resolve. This situation clearly puts pressure on the clients to make payment and
end up causing the client's frustrations. No changes in the process have made clients to withdraw themselves from the policy and to find an insurance provider with a more user friendly and easier payment platform.

![Fig. 2. Current User Experience (Agent)](image)

The process model above clearly shows the process of securing a client's signature. The problem occurs when the agent wants to make a confirmation process (signature) from the client. After the agent entered the page to create a remote signature, the client and the agent are not allowed to press the back or refresh button. If one of them does so, then the agent will have to refill the form from the beginning. During this pandemic, according to the Malaysian government guidelines, face to face meetings are not encouraged hence remote signature is the way to go. Nonetheless, this existing technology is most likely a pilot (experimental) system and often, errors occur. This is something that should not happen and companies must be ready to provide a robust system to avoid more financial losses and frustrations among clients as well as agents, which may impact the major financial losses due to the withdrawal from them.

![Fig. 3. Risk Matrix](image)

A risk matrix is a tool that is used at some point during the risk evaluation process. It defines the level of danger by means of considering the chance or probability of an event against the likelihood of the final result in the business if it were to occur. A risk matrix is an illustration of dangers to assist organizations in decision making and mitigation in order to reduce the impact of a risk. Fig. 3 above shows the Risk Matrix on the issue of bad user experience using the portal by PQRS. Losses in terms of existing and potential clients are at a Medium high. Mitigation must take place in order to avoid the risk from happening.
3. OBJECTIVES

Nowadays, in the era of digitalization, it clearly gives a more critical emphasis in the face of rapid technological development. This development has already diverged into the boundless, simple and mobile virtual space. Therefore, this article discusses several suggestions relating to the use of technology to make it user friendly especially in the Insurance industry. Thus the objective of this article is to enhance user experience in the digitalization of Insurance platforms by way of:

1. Recommending a better Digital Platform Ecosystem for Insurance company which incorporates the Integrated Enterprise Risk Management (IERM); and
2. A comparison with India’s current framework in digitalizing a simpler and more assessable user payment gateway.

4. LITERATURE REVIEW

Insurance is a means for people to secure their wealth and property against unforeseen events. It is defined by a contract, or policy, in which an agreement is made where a premium is paid for the possibility that a remission is paid in return, if and when an uncertain event occurs. Insurance policies can become very complicated, even more so, their administration. Insurance companies have to deliver their services to many different parties that are involved in the insurance process. They are therefore eager to relocate their transactions to an online system and automate as much of it as possible.

Insurance is a potential for people to secure their wealth and property towards unforeseen events. Insurance policies can become very complex and their administration is not as easy as well. Insurance businesses have to deliver their services to the various people involved in the insurance plan process. Following the current advancement in online platforms, people are eager to relocate their transactions from offline to a digital system, (A.D.G Van Helbergen, 2009).

According to the Head of Global Applications and Interim CIO at Munich Re Group, Mr Olaf Frank, “Customers are unlikely to do business with any company that doesn’t give them a good experience.” Other than that, the Head of Marketing for Tryg, the second-largest supplier in the Nordic market for general insurance, emphasized the importance of delivering a positive and personalized user experience. Moreover Amélie Oudéa-Castera, Chief Marketing and Digital Officer at AXA Group said that “Insurance can be cool. It doesn’t have to be boring. If you are obsessed with customer (user) experience, you have a future” (Kucheriavy, 2018).

According to Forrester in a 2016 survey, 53% of online adults are likely to desert their online purchases on the off chance that they can’t discover a fast response to their inquiry and 73% said that a good online customer service is when companies valued the customers’ time. Further, the survey found that there is an increase from 67% in 2012 to 81% in 2015 for the use of ‘help’ or FAQs on a company’s website, as web and mobile self-service interactions have overtaken all other channels (Leggett, 2017).

A latest client survey in Spain found that the digital access to insurance has elevated nearly 30 percent since the beginning of the pandemic. At the same time, the same survey additionally determined that the level of client fulfillment with
insurance delivery digitally is the lowest compared to other sectors. The main reason for dissatisfaction is due to the “hard-to-use tools.” In January 2020, a survey conducted with the US insurance agents showed that nearly 50 percent of insurance agents were disappointed with the level and functions of signature capabilities used by their primary insurance company, as many customers restrain themselves from a physical medical-underwriting process due to the fear of the infection relating to COVID-19 (Kaesler et al., 2020).

According to the research conducted by the Henry J. Kaiser Family Foundation, “the average revenue collected by health insurance companies for plans in 2016 was: (1) Self-coverage: $536 per month or $6,435 per year, and (2) Family coverage: $1,512 per month or $18,142 per year” (KFF, 2016). It is said that with an estimated 50-100 website visitors, those visits could account for about $1 million in revenue. In this digital era, an insurance website function is to “close” potential customers. If the prospects do not finish filing the application, it’s because the signup process is either broken, befuddling, or troublesome to maneuver (Davis, 2017).

Based on a survey conducted by Swiss Re Institute with respondents from Malaysia, the more customers are familiar with digital platforms, the more insurers gain traction in selling customized policies. On top of that, a carefully designed experience-based payment mode platform raises costumers’ interest further even for non-frequent app users (Swiss Re Institute, 2020). According to Swiss Re’s Client Markets, Life & Health Southeast Asia head Jolene Loh, “In 2021, it will be a priority for insurers to carefully calibrate their digital strategies to capitalize on the opportunities offered by digital platforms. Leveraging Swiss Re’s underwriting expertise and risk management experience, not only can Malaysian insurers and platform partners learn but also apply their consumer insights to enable more customers to narrow” (Swiss Re study, 2020).

Due to the pandemic, insurance providers have suffered major losses as a result of Covid-19 related pay-outs. A bad User Interface (UI) design or User Experience (UX) design can have unintentional consequences that stay with a business for years (Machin, 2021). For example, the Citibank’s interface crisis which resulted in a $900 Million crisis. In August 2020, the U.S. cosmetics company, Revlon, suddenly prepaid the balance of a massive $900 million loan to Citibank, declaring the company entirely debt free. The cause of the crisis was a confounding UI making it a dangerous client experience loop that had passed the human review process for three times. As a result of the mistake, Citibank is still now appealing to the court trying to retrieve hundreds of millions in overpayment to Revlon (Forbes, 2021).

The world of insurance is usually quite exclusive because companies are very protective of their trade secrets. As a result, not much is known about insurance software implementations as most of them are custom-made (A.D.G Van Helbergen, 2009). Apparently, it is well known that the software capacity of financial institutions are universally crippled by two things, which are (1) backward compatibility with legacy software, and (2) the strict monetary computer program authorizing benchmarks at both the national and international levels. In arrangement to conduct any kind of program improvement across a multinational
financial institution, about billions of certifications, server upgrades, training, testing and insurance plan need to be considered (Forbes, 2021).

According to a study, when compared to their competitors, the top companies leading in UX outperformed the Standard & Poor's 500 Index by 35%. It is presumed in the survey that in the year 2020, user experience will be the key brand differentiator (Picoul, 2021). Another study shows that 80% customers are willing to spend more money for an improved customer experience (Capgemini, 2017). Therefore, Insurance companies should really focus on the user experience and interface to ensure the sustainability of their businesses.

Malaysia should follow suit the digital transformation in India where Red Seer Consulting said in its report that digital payments in India are expected to grow over three-folds by 2025 as a result of the implementation of the government policies that include financial and growing digitization of merchants as part of their India Stacks initiatives. In 2019-2020, the country’s digital payment market accumulated about Rs 2,162 trillion (Redseer, 2020). One of the biggest reasons why it is such a success in India, considering its big population, is the existence of their government efforts through its National Payments Corporation of India, a specialized division of Reserve Bank of India which is under the jurisdiction of Ministry of Finance (Buteau et al., 2021). They introduce digital payment through the Bharat Bill Payment System using the BHIM app, carriers that provide more accessible digital platforms even for those in rural areas. Even now these carriers in Digital Insurance are making products in the most simple and clear way for the customers to understand (Et. al., 2021).

Now, India is proposing through its recently drafted Personal Data Protection Bill, an exemption for financial data from being categorized as sensitive personal data. This would be following similar data protection laws currently used in both European and Britain where it excludes central banks from classifying financial data as sensitive data. This is to assist the implementation within the consent layer of India Stack, which will function as “blind” bridges between Financial Information Users (FIUs) and Financial Information Providers (FIPs) where conditional on clients giving unequivocal permission, fetch and provide information between Financial Service Providers (FSPs).

Prassadh Shanmugam, Director and CEO of Information Systems Private Ltd (KGISL) states that delivering a better experience for customers and increasing the efficiency of insurance processes are the key pillars in insurance technology. Further, According to Research and Markets, the insurance technology market will grow US$21.72 billion between 2020 and 2024. Therefore, insurers should improve their respective Digital Platform Ecosystem to mitigate the impact of financial losses due to a weak digital platform (Insurtech, 2021).

Due to the impact of the weak Digital Platform Ecosystem, it is important for insurance providers to mitigate the risk of major financial losses as a smooth-running insurance platform contributing billions to the industry (Insurtech, 2021). As the impact of technology increases, the technology risk also increases (Kent, 2016). Giudici (2018) in his paper stated that “regulations across the globe have a great emphasis on risk management practices which require authenticated data across organizations”. The author further illustrated that the risk management
requirements of the industry will be brought forward by the big data analytics, artificial intelligence and block chain ledgers.

5. ANALYSIS, DISCUSSION, AND RECOMMENDATION

Based on the above literature review and interviews, organizational designs must become more strategy-focused to facilitate an Integrated Enterprise Risk Management (IERM) based solutions and initiatives (Pohle et. al., 2005). ERM is defined as “the identification and assessment of the collective risks that affect firm value, and the implementation of a firm-wide strategy to manage those risks” (Meulbroek, 2002). ERM enables organizations to receive advantage from an integrated approach to overseeing hazard that shifts the center of the risk management function from basically protective to progressively hostile and vital.

An interview have been conducted with Mr Steven Phong, CEO and founder of Wealth3Sixty Sdn Bhd, a key player in the Insurance Industry. When being asked on the risk impact of a digital platform in the financial industry especially for the insurance field, Mr Phong said that the customer experience is very important, particularly when we are in the midst of a pandemic that requires us to digitalize our methods from the traditional approaches. Mr Phong believes in changes for a better as stated in his company motto, “If you want more, better and different from the current, you have to be willing to change.”

Therefore, we suggest a few recommendations to improve Digital Platform Ecosystem embedded with IERM especially in Malaysia’s insurance investment industry. Our first recommendation is to conduct a usability test on the UI by measuring variables such as contemplation time, credibility and desirability, and ease the use of rating tasks. The testing process, as a risk mitigation measure, will be able to pinpoint the users’ struggles and with improvements, clients’ confidence level in the interface presented to them will increase.

Second, the improvement on the look and feel of the website itself must be improved. This acts as a risk mitigation measure to ensure that users feel more comfortable to navigate and use Digital Platform Ecosystem through a user-friendly portal. Fig. 4 and 5 below show the example of an interface from Hong Leong MSIG Takaful Portal. A primitive user interface as shown below can be very unappealing. As shown in the figures, the login page is very basic whereas all the information in the portal is crammed together on top of being organized with outdated layout and fonts. These pages are also better accessed using Microsoft Internet Explorer. According to a survey, Google Chrome surpassed Internet Explorer as the most popular browser and Internet Explorer has worked the same in 2008 as it did in 1998 without innovating their features, competing with the other search engines (Springer, 2021).

Third, the government must introduce a more flexible governance in modernizing user interfaces and the overall user experience within the Digital Platform Ecosystem of the insurance banking industry. Strict old school guidelines are not contributing to the modernization of the user interface within – mainly the Malaysia insurance industry. A modification in the Personal Data Protection Act 2010 by not including financial data as sensitive data as what India is proposing may be a big game changer. Considering that a lot of our laws are quite similar to India, the adoption of the provision might be very promising. As such will take a longer road
because it requires amendments, an establishment of a system by our Ministry of Finance similar to the Bharat Bill Payment System in India would be a good solution. Nonetheless, we have to admit that India is much advanced in terms of technology but we in Malaysia have the expertise in AI and big data as well, and therefore should engage with the key IT players to assist in reducing the issue of risks of involving clients’ data on the Digital Platform Ecosystem.

Fig.4. Login page to Portal

Next, looking at customers relying heavily on finding self-guided answers for their problems, as a risk mitigation measure, the portal must update their FAQ page by (a) gathering information and feedback from the customers, and (b) providing detailed solutions back to the user in a way that helps them understand their options.

Fig.5. Hong Leong MSIG Takaful Portal
Lastly, as COVID-19 is here to stay as the new normal, all the processes must transition from offline to the online Insurance Digital Platform Ecosystem. For some agents, they are still promoting legacy products that from time to time are forced to use offline execution, such as physical signatures and medical underwriting. As a risk mitigation measure, these agents need to attend upskilling training programmes in using the Digital Platform Ecosystem as well as providing online help desk. Within the span of two years, for example, the insurance providers and agents should be able to improve on the usage of the Digital Platform Ecosystem to expedite the process.

6. CONCLUSION REMARKS

Investing in a better digital system management Insurance Digital Platform Ecosystem embedded with IERM has several important benefits for insurers. These include expanding flexibility through a possibly delayed or multiwave emergency, reacting rapidly to current and future clients and specialists’ request, and expanding operator efficiency. Before investing in a digital system management Insurance Digital Platform Ecosystem, insurance providers must evaluate and distinguish holes within the perfect client and agent route for their particular trade. The findings will help them to develop a better interface through the Digital Platform Ecosystem and IERM which is custom made to their assets and weaknesses to fill in the gaps.

Existing clients usually will be in contact with their agents. Any problems in their user experience will be informed to the agents. Therefore, Insurance providers ought to moreover construct a feedback component to encourage refining the show building through subjective input from the operators as well as transformation information. Setting up a farther organization can be done rapidly through a pilot-test-and-learn approach, getting inaccessible operators to associate with clients, and refining the method based on feedback. All feedback must be taken into consideration and not to be put aside.

All insurance providers in Malaysia must see technology and digital advancement as the essence of their existing company value and make modifications accordingly in that direction. These modifications are especially important in enabling agents to operate more digitally in the post pandemic world. Through multiple surveys, the agents look forward for the digitization of signatures, application and submission forms, and client onboarding which should be improved by the implementation of Insurance Digital Platform Ecosystem. Leveraging on working with digital platform ecosystems and implementation through IERM will give the insurance providers an access to millions of potential customers that are often under-protected.

ACKNOWLEDGEMENT

We thank all the anonymous referees for their useful suggestions and a special thank you to Mr Steven Phong for allowing us to pick his brain for this paper.
REFERENCES


