

Examining Landscape of Insurtechs' Adoption: Level of Moroccan Companies



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ABSTRACT: Digitalization has an impact on a wide range of financial services, including bank services, distribution, and more. Since insurance businesses are also service providers, digital solutions will only improve each component in the Moroccan insurance industry's value chain. Neither scholars nor practitioners have seen insurance industry as technology driven industry. However, the integration of digital solutions is a matter of time in the context of the digitalization of the insurance industry, incumbent insurance companies have been left behind. The aim objective of this article is to fill the gap and propose an adequate solution for Moroccan insurance companies. more particularly a conception for E- declaration of claims and E-renewal.

KEYWORDS: Insurtech- Digitalization – Insurance – Communication – E-Renewal – Claims' management

I. INTRODUCTION

Insurtech startups don't have the knowledge as incumbent insurers that have been there for years, if they join the race side by side with Insurtechs, transformation and innovation will be inevitable. Speed innovation makes it hard for regulators, since technologies are outside of the existing settlements. Even though there are limitations that slow down the Insurtech startups presented by the regulations including the necessity of a physical work space for companies to have the authorization for digital distribution, for now insurance companies must adopt the Insurtech concept themselves. Companies have thousands if not millions of clients, they must build trust, loyalty and engagement to grow and maintain their customers.

Insurance companies can make use of Digitization and technologies to propose a new approach to common failure for insurance industry. Insurance companies around the world invest in technologies and design new business models which center on the concept of customer's priority; Offering products and services relevant to all categories of client.

II. LITERATURE REVIEW

Insurtech is a concept related to startups, however Trafael Senén, said that the Insurtech revolution must include all traditional players, incumbents, insurance companies, brokers etc.

Insurtech is a concept that combines updated technologies and creative, innovative business models that permit them to enhance, change and metamorphose the insurance industry.

In Germany, USA, UK, China, India and other countries Insurtech established new concepts in tasks like distribution, proposition and contract management. There are now 63 Insurtechs unicorns globally, with only 6 created so far in 2022 compared to 26 in 2021. Insurtech startups continue to evolve from health insurance products to non-life insurance (Cappiello, 2020). Insurtech starts with one part of the chain: the distribution area and goes on after a few years to affect the entire value chain of the insurance industry.

Together big data and smartphone technology present the best contribution to develop and create new models of distribution, underwriting using technologies such as the distributed ledger phenomena: Blockchain. (GC Polyzos, 2017).

Insurtech intends to transform insurance products from expensive, not necessary products to useful cheap and simple products, to exploit the high potential of technologies. Thus, a real change of the insurance market took away the product

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centric strategy to consumer centric strategy. The thing that insurance incumbents could not do over the years. (Ó Montes, 2022).

Insurtech is the future of insurance products, it should be sold online just like many products online. With the new path of customers' demands, Insurtech is the best to provide new products. It represents the new business model of the insurance industry and incumbents just need to deal with it. Indeed, with the global pandemic of Covid 19 and the Lockdown measures (S Modgil, 2022). Before the pandemic, the idea of working from home was unaccepted, now Covid 19 opened up new opportunities and similarities that focus on flexibility and digital changes.

The phenomenon of Insurtech is the future's brightness. It provides a new path to meet consumer needs, assisting and keeping them satisfied in creative ways using technologies like Chatbots and AI. The business model of Insurtech startups is based firstly on making new efficient products that answer customer's needs (JR Chang, 2022). Secondly, Insurtechs are close to the environment, as we know Insurance is one from many industries that use a lot of paper for each process from the sale to the claim's process. Insurtech focuses on reducing and eliminating the use of paper and respecting the environment. (Aditi Thakare, 2022).

Despite the use of AI, Chatbots, Blockchain that will define a new shape of insurance products, it will free up time for insurance actors to deal closely with their clients. Technology puts at disposal of insurance companies a large portfolio that includes a solution for advisors to maintain the regulatory aspects, thus will save time to focus and deeply understand the customer's experiences. (Y Miah, 2021). As such a better comprehension of a client's needs will lead to efficiency gains.

Insurtech is a logical development to meet consumer demands, it's a prime opportunity to involve personalized services and products that the new generation wants and will buy. Technological innovations are planted to enhance and improve the different values of life. It also brought a major transformation in several spheres like automobiles, computers, medical healthcare, telecommunication and other areas. (SM Lee, 2018).

A decade is the age of this newborn, for a phenomenon that has not been for a long time and proved in many countries in a short period what it can achieve in a technologically advanced world. Insurance must accept it not reject it (Nemanja Milanovic, 2021). The fast changes of the world since the last few years make it a necessity for companies to offer assignments via a swipe of a finger or a simple click using a smartphone on any digital device. Consumers are searching for all the solutions completed with a voice command or by a click in a few minutes.

Making investments in technology will dramatically drop the transformation rapidly and deliver significant brightness for the future? Today, the speed of technological advancement is fast and quick and has changed our lives specially to handle the COVID 19 pandemic with its disasters such as Chatbots, machine learning, artificial intelligence, adversarial networks and practical augmented reality (IT, A.M 2022). Similar to Fintechs, Insurtech is actually a new concept that has been used for a decade now. Insurtech is the use of technology that seeks to automate insurance services and products and also to improve the industry to keep pace with the revolution of the word. It is really necessary to direct the efforts on Insurtech and the advancement that will be achieved in the insurance industry. So why is the Insurtech revolution fundamental and what prompted it?

Insurtechs are making a lot of improvements, they use technology to upgrade efficiency and meet better consumer's expectations. Insurtechs also present an opportunity for insurance companies to redefine their role in the economy and in society. New innovative strategies mean new business models which means new knowledge investigated is made before selecting digital technologies. (I Sosa, 2022).

Insurtech refers to the changes brought by the use of technology in several aspects of the insurance value chain and also in startups that offer new products. Fintech is the most used to refer to applications, machine learning Chatbots etc. Indeed, Insurtech is the same thing except for insurance companies, starting with marketing, distribution, services and claims (Marano, 2019).

Insurers need to come by the consumers' needs and expectations whenever and wherever. Digital technology is the solution to streamline the processes and transform the customer experience. At the age of 11, Insurtechs have gone so far, besides sales channels, their major focus is digitalization in the objective of consumer's satisfaction. Insurtech turned out to be a lifestyle service via digital technologies such as Blockchain AI, cyber security which escalated trust and reduced price (Bishwajit Nayak, 2019). We are still talking about a childhood phase of Insurtech; many startups and incumbents are banding together. According to a PWC report, 90% of the insurers surveyed fear the loss of business to start-ups, with about 70 % of insurance companies saying they have already taken action to face any new opportunity or challenge presented by Fintechs.

Insurtech companies can be of two types, the first one emphasizes their work on the front end while others seek on the back end, like price risk and claims processes. Indeed, the insurance industry is a highly regulated industry even Insurance incumbents perceive the high weight of innovation still they face many obstacles. Unlike other sectors, the insurance industry

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nurtures many red flags. Technology used in the innovation of that sensitive sector must respect the law which protects personal security and privacy. The world today is trying to recover from the pandemic of COVID 19.

As underlying technologies side by side machine learning and Blockchain will continue driving innovation to nourish customer's relationships. The insurance industry is changing because of Insurtech. Amanda Blanc said the insurance companies that will survive are the one who sees the technology as an opportunity not a threat, and uses it to interact with consumers the way they want and pre-empt their demands. It's crucial to figure out ideas and movements behind the new revolution of the insurance sector. The insurance industry is a get fit or fail industry, it is a sector with intense pressure, which means the players must embrace, seek and absorb changes. Data is providing new opportunities as competitive advantages and allow them to manage risk proactively. After 2 decades of internet innovation, the insurance industry is the one industry among other economies left behind, Insurtech comes to change that, using new technologies and innovative techniques to engage with consumer demands. (Huckstep, 2017). We have witnessed the last few years the entrepreneurs bring ideas, creativity and new ways of working, and partnerships transform industries.

Insurance companies support ideas and accept change for the reason that the insurance industry is almost in front of a metamorphosis that leads to an unrecognizable model in the next few years. According to Whitney Arthofer, conventional models of brokers and incumbents are about to disentangle and we can take a look at the symptoms. The "Insurtech new revolution can be seen as Insurtech vs legacy" Robin Roberson. (P Brüggemann T. C., 2018).

Distribution is the major concern of Insurtech innovations; With the entrance of mobile internet, many solutions have been developed which are difficult to implant within insurance hard locked systems and operations.

AI, Blockchain and recent technologies lead to a modern understanding of the insurance industry, insurance companies have oriented their focus in technologies like big data, and Blockchain (Erdem, 2019). The heart of the insurance sector is quality information and data (B Nicoletti 2016). Unstructured Data is important to increase consumer engagement and Favors personalized Insurance services (Accenture., 2017) such as the other industries use AI and technologies in fraud detection, automated trading and other back-end purposes like chatbot in Favor of customer services tasks (M Riikinen H. S., 2018).

AI is changing the process of claims management, as well as reducing time, costs as well as improving customer experience (UX). Machine learning is one of the technologies that ameliorate the claim process by repairing historical data, images and sensors.

The opportunities presented by the Blockchain technology in the industry are limitless (V Gatteschi F. L., 2018). Many insurance companies evaluate the perspective of the Blockchain in the insurance sector (F Püttgen, 2017). Smart contracts based on transparency as decentralized, automated contracts associated with Blockchain (P Koepl, 2016). Insurtech is the application and use of technologies in distribution, pricing, claims management and the market targets. Insurtech refers to the new ecosystem of the industry (S Cao, 2020). According to (Forum, 2015). Technology first emerged in the comer trading, and baking industry, the few last years it expanded to the insurance sector.

Unlike Fintech, Insurtech is an innovation phenomenon of a stagnated market exploiting new modern technologies (Emanuel Stoeckli, 2018). Fintech is about solutions that integrate information technology in order to provide innovative solutions. Since 2010, the annual financing augmented the total of the financing insurance industry in 2017 WAS nearly US\$ 2.3 billion (D Oyon, 2017). In the first half of 2022, Insurtechs funding dropped to 4.6 billion U.S. dollars, down from 17.2 billion U.S. dollars in 2021.

Recent studies highlight the slow reaction of traditional insurers to adopt technologies unlike Insurtech startups that disrupt the value chain and adopt a business model based on and the interaction customer experience. Insurtech offers: best customer experience, improvement of existing business process, developing advanced insurance products. It's up to establishing an infusion of technology into commercial insurance services etc. Real time data is available for insurance which means granulated insights into risk management in real time.

In such a landscape where data security is threatened and consumers' trust is hard to gain, insurance companies leverage AI and Chatbots with virtual assistants to integrate ponderous processes in consumer's lives. Insurtech are the newer insurance players, they are proposing flexibility, anytime, anywhere in other words Insurtech increases transparency and autonomy, pay as you drive or insurance as a service is a modern update that gives the consumer the ability to insure what they use (S Kaesler, 2018)

Name	Year	Location		What They Do
Zego	2016	London, Kingdom	United	Offers Commercial Car Insurance. The Platform Includes a Range of Options, Including Private Car,

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				Scooter, And Courier Van Insurance. They Also Offer Fleet Coverage for Corporate Clients. The Pricing Model Is Based on Usage.
Marshmallow	2017	London, Kingdom	United	Is A Car Insurance Provider? The Company's Algorithm Considers International Driving Records in Order to Offer Competitive Prices to Drivers with Limited Driving Records in Their Current Country of Residence.
Getsafe	2015	Heidelberg, Germany		Is A Digital-First Insurance Company Offering Liability, Property, And Car Insurance. Insurance Products Can Be Purchased and Managed Via Their Mobile App.
Ladder	2015	Palo Alto, California		Is an Online Platform for Term Life Insurance Policies? The Application Process Happens Online with Instant Approvals. Plans Can Also Be Modified Based on Needs Over Time.
Cuvva	2014	London, Kingdom	United	Is A Car Insurance App That Offers Temporary Cover (From 1 Hour to 28 Days) Along with More Traditional Monthly Plans? The Startup Also Provides In-App Customer Support with 1 Minute Average Response Time.
Insurify	2013	Location: Cambridge, Ma		Is an Insurance Quote Comparison Website? The Resource Helps Compare Car, Home, And Life Insurance Quotes in The U.S. For Each Company, Insurify Delivers a Composite Score Based on The Insurance Company's Quality and Reliability.
The Zebra	2012	Location: Austin, Tx		Is an Insurance Comparison Platform? The Website Helps Compare Car and Home Insurance Quotes from More Than 100 Companies.
Policygenius	2014	Location: New York, Ny		Is an Online Insurance Marketplace? The Broker Helps Compare Quotes and Shop for Life, Home, Vehicle, And Disability Insurance.
Zhongan	2013	China		The First Insurance That Provides Online Services and Products Only

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			Via a Web Platform.
Metromile		California	They Introduce the Per-Mile Insurance Concept Which Is Based on the Fact That Risk Depends on the Time Using the Vehicle. If The Consumer Is Not Using the Car, That Means the Compensation Is Reduced.
Lemonade	2015	New York	They offer several insurance products: auto, home and pet insurance. The process is entirely online including checking the best insurance coverage to claims' declaration and filing. Which make it unique among other companies.
Cj Cube	2019		It Is a Startup That Provides Insurance Data Management. They Share Real Time Information Among Insurance Providers Through a Centralized Software. They Provide Immutable Historical Snapshots Accessible Only for Concerned Parties Only for.
Shift Technology	2014		They Provide a Solution Ai-Native SaaS for Fraud Detection in Claims Declaration. This Solution Automate Claims Declaration
Wefox	2015		Wefox Is the First Digital Insurance Provider in Europe.
Shift Technologies	2013	France	The French Company Offers Software as A Service (SaaS) For Fraud Detection; Based on Machine Learning, Ai and Big Data.
Snapshot	2010	Chicago	Snapshot Is A SaaS Platform for Claim's Declaration Online. The Customers Can Take Pictures of Car Damage and Submit It Online to Reduce Time. They Also Use Data-Driven Technology: To Boost Customer Engagement, To Improve Claims Processing. And Communication
Goji	2013	Boston	Insurtech Specializes in Finding the Best Insurance for They Best Price. It Allows the Customer to Choose the Insurance Coverage in A Short Time.

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Metromile	2011	San Francisco	Metromile Is a Car Insurance Provider. They Use Technologies: Machine Learning, Ai and Data Science to Make Car Insurance User-Friendlier and to Accelerate Claims Processing with Access to The Car Location in Case of Stolen Cars, and 24/7 Support.
Digit		Bangalore	It Is a General Insurance Company That Offers a Portfolio of Insurance Products Including Car Insurance. Their Protection From 1day to 180 Days

III. PROBLEMATIC AND METHODOLOGY

The entire all basically, the major objective of insurance companies is to improve the customer experience. the key today is innovation in all aspects of insurance industry, but legacy systems and regulations hamper innovation in this industry and limit the adoption of new technologies. in ultimately, that's the main problem. it's really not easy to digitize complex products such as insurance services. Or even more to satisfy customers in such a complex industry. in effect, businesses can use chatbots and ai to support customers. The problem is based on two fundamental aspects, the aspect legal framework that boosts innovation and the integration of digital and dematerialization of auto insurance services, namely the renewal contracts and claims reporting. "how to dematerialize the process of claim declaration and renewal of auto insurance contract within the framework of the regulations in force". this work was carried out in two main stages: the first stage was consisted in detecting the problems, which was finalized by an analysis of the needs and the identification of the main problems. the second stage focused on proposing and designing a concrete solution and adapted to the issue of the digitization of claims declarations and renewal of contracts.

ultimately, this work aims to be a valuable resource for insurance professionals, policy makers and anyone interested in the digitization of services in this area.

IV. MODELLING AND PROPOSAL OF ADEQUATE SOLUTION TO THE MOROCCAN INSURANCE SECTOR:

A. Dematerialization of the contract renewal procedure: Auto-Insurance

The renewal of an auto insurance contract consists of two levels:

- **1st level:** This level will start with the authentication of the user then the server will send it to the final price simulation page and if the user will accept the price the system will send it to the payment process. Otherwise, the user is already a customer, he will only type his contract number and then the system will send to the simulation and payment stages.
- **2nd level:** After the customer accepts the insurance price, he must provide the credit card information (number-expiry date-cvc) then the system will validate this information. If the payment is validated the system will generate a payment file, then it will generate a provisional Pdf (alternative to the contract valid for two days) until the customer receives the contract.

B. Dematerialization of the claims reporting process:

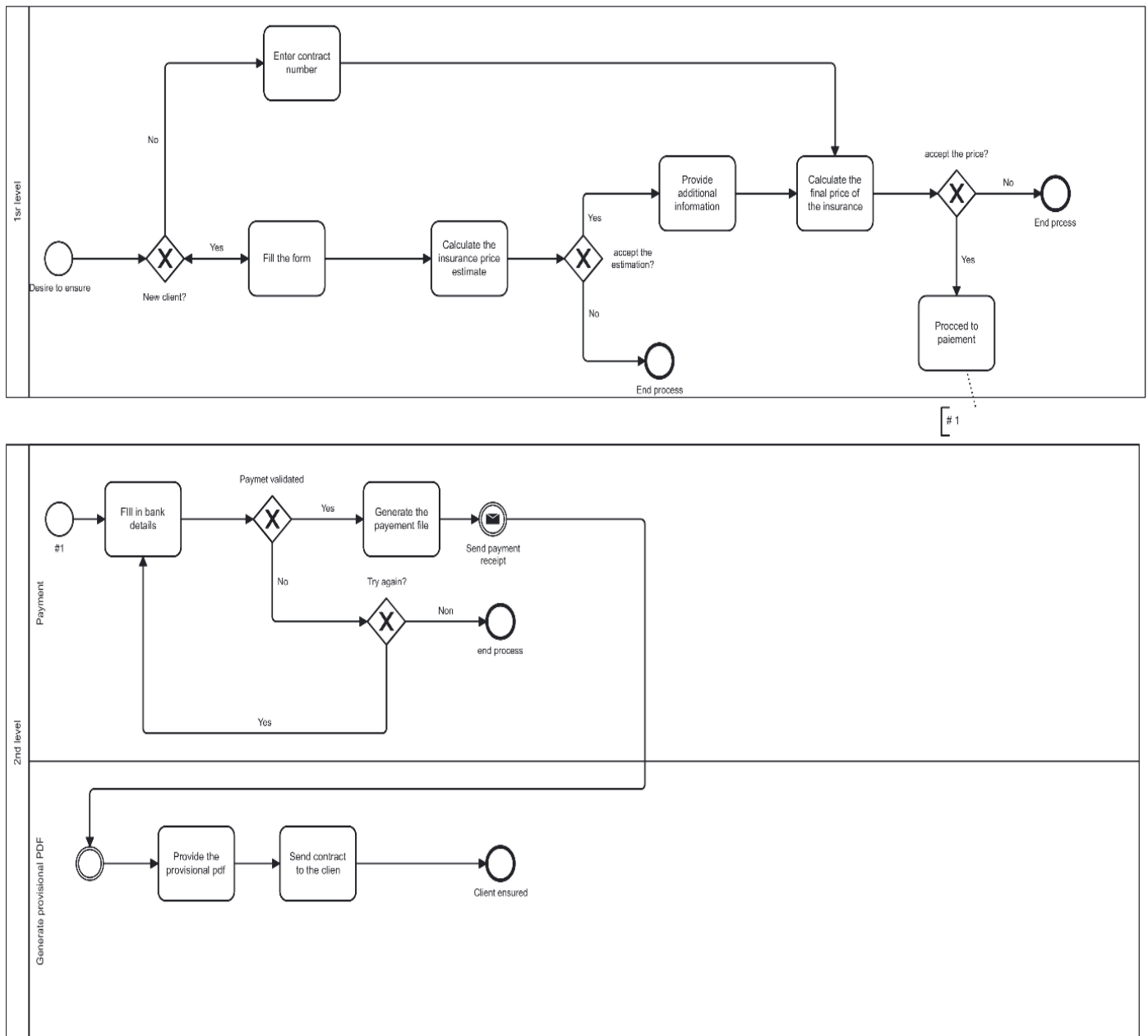
In this part we will examine how BPMN modelling can be used to represent and improve the claims process dematerialized. We will analyse potential benefits such as reducing processing times, automation of tasks, improved traceability information and the simplification of interactions between policyholders, experts claims and other stakeholders

The claim declaration consists of two phases:

- **1st declaration phase (customer):** Begins with customer authentication, then the valid server if the authentication information is valid, after the validation the server will provide the disaster declaration page and the client must provide specific information about the incident such as the description of the incident, the date and time, the causes, the address where the accident took place product....Then the customer must upload the images of the accident and the amicable report with the name of the observer who was present in the incident then the customer must submit the declaration.

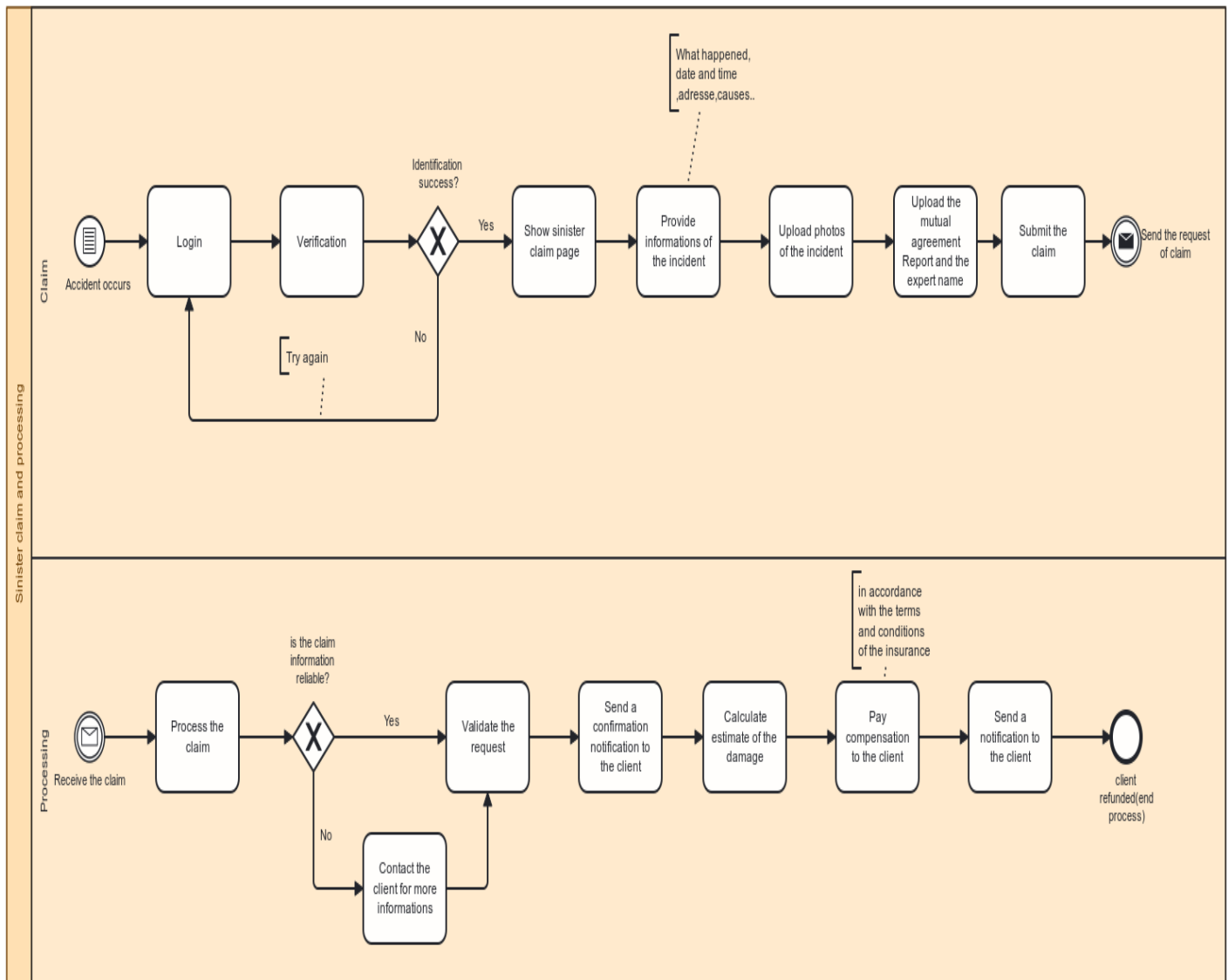
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- 2nd phase (processing):** Begins with the receipt of the declaration then the insurance validates if the information is reliable and if the information was not sufficient insurance will contact the customer to provide further details. After the validation the customer receives a notification confirms that his request is accepted then the insurance calculates the estimate of the damage and pays the indemnity to the customer.



BPMN conceptual model authors' conception

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BPMN conceptual model authors' conception

CONCLUSIONS

In summary, the digitization of insurance services for the renewal of contract and claims reporting has significant benefits. It offers policyholders significant benefits, such as faster, simpler processes and practices, which enhance their overall experience. By automating these procedures, processing times are reduced, which contributes to increase customer satisfaction.

It is essential to strike an appropriate balance between automation and personalized assistance. Although digitalization offers many advantages, some policyholders may prefer human interaction and assistance customized to suit their individual preferences. It is therefore important that insurance companies continue to provide accessible human communication channels, such as available agents by phone or online chat services, for those who need additional assistance or who prefer direct contact.

The digitization of insurance services represents a major step forward for assured, offering faster processes, increased simplicity and significant convenience. This leads to a smooth customer experience; a reduction processing times and an overall improvement in satisfaction.

However, it is crucial that insurance companies maintain a balanced approach, ensuring that the individual preferences of assured by also offering personalized assistance when necessary.

Thus, the digitalization of insurance services can truly benefit everyone stakeholders involved and contribute to a more efficient and focused insurance industry on customer satisfaction.

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