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RELEVANCE OF SCHUMPETERIAN SHOCKS IN DIGITAL LITERACY TO INSURTECH ADOPTION FOR POLICE AND MILITARY FORCES' MEMBER WELL-BEING

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Abstract- The purpose of this study is to analyze the effects of the disruptive effect (Schumpeterian shock's metaphor) in technological innovation on the well-being of the police and military forces by assessing their digital literacy in adopting Insurtech. This study is intended to observe consumers' behavior, particularly their well-being limited to pension ages (so-called Elderly Well-Being). An empirical study analyzes a sample of respondents using a Structural Equation Modeling - Partial Least Square approach, combined with secondary data to enrich the analysis. The authors utilize 600 samples of police and military personnel of the pension age throughout Indonesia. The result demonstrated that digital literacy has a significant influence on well-being and further, when it is mediated by Insurtech Adoption, the effect is improved significantly more than double impact. This study that focuses on the pension ages of military or police forces has found that they are favorably impacted by Schumpeterian Shock because the majority of them are already digitally literate in anticipating dynamic capability to improve the well-being of the elderly. This study carries implications for businesses, signaling that it is opportune to extend efforts beyond operational efficiency to create new value for customers, particularly in areas related to well-being.

Keywords - digital literacy, elderly, insurtech, military, well- being

I. INTRODUCTION

The phrase "Schumpeterian shock" describes the revolutionary shifts or disruptive effects that the theories of economist Joseph Schumpeter have on the economy overall. Schumpeterian shocks are frequently linked to the creative destruction process, in which the introduction of novel ideas, innovations, or business models upends old marketplaces and causes formerly dominant sectors or practices to fade into oblivion. Lastly, Schumpeter's reputation as a "prophet of innovation" has been firmly established [1].

One of the most important aspects of the analysis in Schumpeter's theory is the distinction between exogenous and endogenous factors of the economic system. It is also capable of reconfiguration and change because Schumpeter's metaphor of 'creative destruction' is embedded in innovation [2].

When examining the insurance industry, historically there is an emerging concept of social insurance, discovered by Rubinow (well-known as The Father of Social Insurance), who stated that "we must all agree that security and protection of the life of the essence of the power and function of the state". It was believed that the role of the state of protect society through the theory of police power [3]. It then evolved into a form of social insurance framework designed to protect and enhance the well-being of certain citizens in a country, mandatory for government support, including military support. Centrally managed by government-sponsored programs and mandatory applied [4], it must be efficient and accessible but with no obligation to create and expand the market or it has a so-called captive market. The military segment is part of the beneficiary of this program. This advantage is the background of this study focusing on examining how digital literacy of military pensions could affect their well-being, moderated by Insurtech as one of the innovations that emerged by Schumpeterian Shock.

Concerning the social insurance industry as a business that manages a captive market, the sustained competitive advantage is more into how to implement a strategy to improve efficiency and effectiveness [5] and also improve customer satisfaction [6].

Barney (1991) explained that the definition of sustained does not mean it will last forever but may be challenged when unanticipated changes in the economic structure of an industry occur, including changes in government regulations [7]. Social insurance companies should not be complacent with the fact that they have a captive market, and should instead focus on providing innovative products and services that meet the needs of businesses.

The aim of this study is to investigate the impact of the disruptive effect (metaphorically termed as 'Schumpeterian shock') in technological innovation, specifically focusing on the shift in the well-being of retired police and military personnel, by assessing their digital literacy in the adoption of Insurtech. By identifying the digital literacy of military and police pensions is examined whether it has an influence on their adoption of insurtech, potentially contributing to an improvement in their well-being, commonly referred to as elderly well-being.

The cost and acceptability of digital health technologies are critical for the elderly population; nonetheless, they confront several problems while utilizing such devices and applications [8]. As a result, the necessity of the day is to design and create digital healthcare technology, particularly for the aged. Because insurance, particularly social insurance products, is intimately tied to healthcare, this reasoning framework would be useful in conducting the research.

A previous study by Dao (2018) also pointed out the positive correlation between owning/using smartphones and the use of social media, and the positive correlation between staying socially connected and the alleviation of loneliness [9]. These findings suggest that elderly respondents who use technology may also benefit socially and psychologically from the use of technology. Teaching the elderly to be technologically literate and working to ensure the elderly have access to technology may have important social, psychological, and health benefits for our population. In this study, it is emphasized as a term for elderly well-being.

Schumpeterian shocks bring a very innovative technology, which is relentless technology advancement, ever-rising consumer expectations, and competitive chaos (resulting from the dissolution of industry boundaries) are reshaping the very definition of insurance. In the EY Global Insurance Report of 2023 is mentioned that more people want stronger protections for what they value most. They seek financial security and greater peace of mind in the face of different, more severe – and frankly, more frightening – threats. Insurers have always prided themselves on delivering exactly such protection and security, but consumers today care less about who delivers the value they're looking for than about receiving the value in a simple, efficient way [10]. These are also some examples of real forms of quality life or well-being.

The majority of senior citizens view advances in technology in a positive light, as they believe such advancements will produce a better quality of life for themselves and for society in general (as another example of elderly well-being). This relates directly to a belief that it is possible for the elderly to adopt the advanced skills needed to utilize new technologies.

II. LITERATURE REVIEW

The emergence of insurtech in recent years has helped insurance companies to improve their customers' experience, develop new products, lower costs, and enhance underwriting and actuarial processes. In competitive pressures, changing customer expectations and the rise of digitalization and mobile use have prompted both traditional insurers and innovative start-up companies to embrace technology in recent years [11].

New technologies are permeating almost every aspect of our daily lives. Disruptive technologies are those capable of fundamentally changing various aspects of the economy, society, or our personal lives. Currently no more option but to

continually gain a deeper understanding of the world in which we operate. We need to understand where new technologies are leading us, explore our alternatives, and determine how we can collaborate with society [12].

The Schumpeterian view is the adoption of new technologies that may require a creative destruction idea [13]. Emergent innovations in creative destruction propagate and are supported by social, cultural, and technological institutions, making earlier ideas obsolete. It precedes a companion process of creative destruction, popularized by Schumpeter [2].

Along with that, the entire economic and social development so far has been characterized by a certain type of technology [14]. Disruptive technologies are the engine of digital transformation. They transform industries, society, and governments by introducing the digital lifestyle and eliminating well-established business models. Recent developments and adaptations, such as mobile payments, robo advisors, peer-to-peer, and blockchain, are some of the most promising drivers in the insurance industry [15]. This utilization of technology to improve efficiency and savings in underwriting, risk pooling, and claims management from the current insurance model has come to be known as "InsurTech", deriving inspiration from the more well- established concept of "FinTech" [16].

Academic attention has been given to digitalization in the insurance industry on the implications to the insurance value chain and its impact on the insurability of risks [17]. It is mentioned that digitalization is the integration of the analog and digital worlds with new technologies that enhance customer interaction, data availability, and business processes [17]. However, changes in insurance occur very slowly and the insurance sector is considered to be conservative, although the digital era brings a radical shift in the nature and scope of risks to society [14].

The degree of changes in the insurance industry is reported by Deloitte's Tech Trends 2023 report which spotlights the accelerating technology trends most likely to cause disruption over the next 18–24 months. It is surveyed by the relevance and the readiness scale [18]. Competitive pressures, changing customer expectations, and the rise of digitalization and mobile use have prompted both traditional insurers and innovative start-up companies to embrace technology in recent years. This use of technology to drive innovation within insurance is known as insurtech [11]. Indeed, InsurTech has affected the entire value chain of insurance, and concerning the social insurance industry as a business that manages a captive market, the sustained competitive advantage is more into how to implement a strategy to improve efficiency and effectiveness [5] and also improve customer satisfaction [6].

Another impediment to boosting customer satisfaction is psychological hurdles caused by inadequate education levels and experiences. The majority of the elderly are unfamiliar with using digital gadgets (smartphones) [19], which is one of the key reasons for smartphones' perceived complexity and expensive cost.

Digital literacy has been defined as having access to a broad range of practices and cultural resources that are able to apply to digital tools and the ability to make and share meaning in different modes and formats; to create, collaborate, and communicate effectively and to understand how and when digital technologies can best be used to support these processes [20] in order to enable constructive social action [21]. Both definitions emphasize in ability to search, assess, and synthesize from digital resources that are incorporated within the term digital literacy: photo-visual, reproduction, branching, information, and socio-emotional [22].

Digital literacy is capable of reducing the cost of knowledge and effective information acquisition, strengthening risk appetite, increasing the efficiency of resource endowment allocation, and achieving a sense of access. Developing digital literacy skills is essential for twenty-first-century learning, working, and living [23].

Digital literacy is directly correlated with the willingness and ability of the rural elderly to continue to use digital resources after they have reached out to the Internet which can provide them with something to learn, something to enjoy, and something to do in their digital lives [24].

Insurers have been accused of being slow to adapt to new technologies and it is clear that Big Data is already and has further potential to revolutionize the insurance business. Areas such as telematics, wearables, and IoT are providing a plethora of data which, when combined with advances made in AI, are enabling a much more personalized product to be developed for the consumer. Furthermore, a very different customer relationship is starting to emerge, from these data sources, allowing the insurer to engage more meaningfully with policyholders [16]

Emerging insurtech which is spreading along the entire insurance industry value chain, has now begun to digitize its value chain and is already planning to go beyond a simple digitization of the existing value chain [25]. The digitizing value chain is built with a variety of technologies that are also designed for a variety of purposes. When the purpose is to significantly change the existing situation (status quo) or to compete effectively, having enough available capital is necessary. When the purpose is to sustain the current market or respond to threats in the market, then the availability of capital may be limited as illustrated in Fig.1.

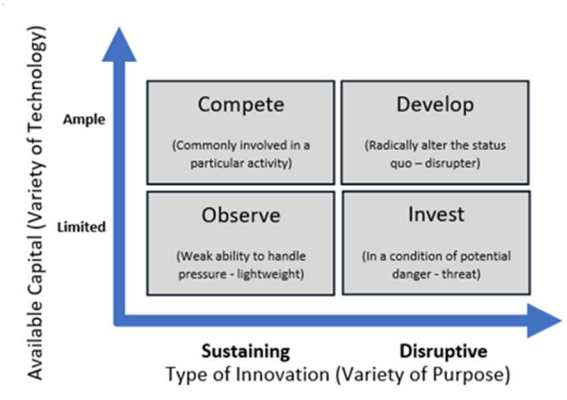

Fig.1. Insurtech Matrix [25]

In the lives of the elderly are influenced by recent developments in technology, and most elderly could benefit even more if they were not being excluded from the advancements and were better informed about them [26]. Lemon argue that there is a positive relationship between social activity and life satisfaction in old age [27]. Longino and Kart also found that those with greater life satisfaction are the ones who participate in activities involving a close network of friends and relatives [28].

Concerning about well-being, we will have no option but to continually understand where new technologies are leading us, explore our alternatives, and determine how we can collaborate with society [12]. In the last decades has the empirical study of well-being become a systematic scientific endeavor. The subjective well-being of societies was concluded that one society can have greater of that [29]. The specific behavior that is felt by veterans (elderly) on the use of technology in the form of the internet has been proven to have an impact in reducing loneliness (social isolation) which will increase psychosocial functioning. Further explained that by introducing and teaching the use of the internet for three months, veterans (elderly) showed a slight change in self-esteem, positive affect, personal well-being, optimism, and social connectedness [30].

Elderly well-being that is influenced by technology adoption is also explained in previous research on transformative service research. With qualitative methodology, it can be proven that in addition to resistance, the elderly also feel happy with the support of their families in using technology. In the end, the well-being that arises is enjoyment, personal growth, mastery, autonomy, and social connectedness [31].

A research project of NINFA (iNtelligent Integrated Network For Aged people), conducted by Cinini A, Cutugno P, Ferraris C et al (2021) concluded some important aspects of the relationship between elderly people and new technologies concerning engagement and acceptability, assessment of well-being, and of the modifications of motor, cognitive, and language functions [32].

Similar research focus in China is addressing the increasing demand for a better life has become a central objective in China's development agenda, as emphasized in the document announced during the 19th National Congress of the Party. Subjective well-being encompassing physical health, psychological well-being, and life satisfaction, serves as a key indicator of a better life [33].

Organizations also understand the importance of creating cultures of well-being that both mitigate burnout and create conditions that support well-being and human flourishing. Factors contributing to well-being include health, purpose, relationships, community, safety and security, and the environment [34].

III. MATERIAL AND METHODOLOGY

Due to the population size being known, the approach of this study is a non-probability method. The sample size is 100 clients, one for each Big Island residence in Indonesia, for a total sample of 600. The Structural Equation technique of Partial Least Squares (SEM-PLS) is used in this

analysis, and the samples are drawn using the purposive random sampling technique in the pension age (on the date of sampling). Table 1 shows the population and sample sizes.

TABLE I. POPULATION OF MILITARY AND POLICE MEMBERS IN THE PENSION AGE, TAKEN FROM SOCIAL INSURANCE COMPANY FOR MILITARY AND POLICE MEMBERS OF INDONESIA 2022

No	Pension Distribution			
	Location (Island)	***Sample***	***Population***	***Percentage***
1	Sumatera	100	69.385	14,7%
2	Jawa	100	306.014	64,8%
3	Kalimantan	100	25.324	5,4%
4	Sulawesi	100	34.779	7.4%
5	Bali-Nusa Tenggara	100	23.249	4,9%
6	Papua and Maluku	100	13.169	2,8%

This study is applied to the defined segment of policy and military forces members who are already in pension age. The pension ages are different among each grade between 53 to 58 years old and above. The demographic of respondents are as follows:

TABLE II. DEMOGRAPHICS OF RESPONDENTS BY UNIT AND GENDER

Unit	Portion	Gender	Portion
Police	46%	Male	70%
Army	43%	Female	30%
Navy	7%		
Air-Force	4%		

The composition of the Force Unit is nearing that of the population. The Police and the Army have the most personnel number. Gender is also equivalent to the composition of the population, which is dominated by male forces.

TABLE III. DEMOGRAPHICS OF RESPONDENTS BY GRADE

Grade	Portion
Senior Officer	1%
Intermediate Officer	14%
Junior Officer	24%
Commissioned Officer	52%
Non-Commissioned Officer	10%

Research model for this study uses three variables, Digital Literacy as an independent variable, Insurtech Adoption as mediating variable and Elderly Well-Being as dependent variable. Regarding the number of population is defined and scattered in many provinces, the authors made a grouping of them by domicile in the Big Island as seen in Table I. In order to have reliability and validity data, a small sample of 30 respondents was tested and the result is reliable and valid.

Further analysis is to test those small number of samples in each big island, and the result is as seen in Table IV., The result of reliability and validity test for each variable, Digital Literacy, Insurtech Adoption and Elderly Well- Being are perfect. All variables are reliable due to the value of composite reliability being higher than 0,6.

TABLE IV. RELIABILITY ANALYSIS

Variable	*Composite Reliability*	*Decision*
Digital Literacy	0,976	Reliable
Insurtech Adoption	0,988	Reliable
Elderly Well-Being	0,987	Reliable

The hypothesis is constructed in the following manner: H0: The indicator cannot measure all aspects (it is invalid), H1: The indicator can measure all aspects (it is legitimate), and the reference for the rejection area or Reject Ho when the loading factor is greater than 0.7. The validity test result assesses the loading factor (λ), and for each indication of latent variable is more than 0.7. The validity test results show that all variables are legitimate.

The test was carried out once the validity and reliability tests were completed, and it gathered very positive replies from police and military forces members on each of the islands. The total number of people who responded was 4258. Purposive random sampling was used to choose 100 samples from each island, and tests were performed on each path, as shown in Table V. It describes all variable pathways that are significant, including the mediating variable path.

The hypotheses are defined as follows:

H0: Indicator (h) Elderly Well-Being is not significant. H1: Indicator (h) Elderly Well-Being is significant.

H0: Indicator (i) Insurtech Adoption is not significant. H1: Indicator (i) Insurtech Adoption is significant.

H0: Indicator (j) Digital Literacy is not significant. H1: Indicator (j) Digital Literacy is significant.

When the T-statistic is higher than T(0,05;597) with a value of 1,645 or the P-value is lower than the significant threshold (α), which is utilized at 5%, then the data processing results are taken into consideration or Reject Ho. The findings for each path have been analyzed, and the T-statistics are all quite high, as shown in Table V.

TABLE V. RESULT OF T-STATISTIC AND P-VALUE ANALYSIS

Path	T-*Statistic*	P-*Value*
Digital Literacy (X) → *Elderly Well-Being* (Y)	4,820	0,000
Digital Literacy (X) → *Insurtech Adoption* (Z)	40,136	0,000
Insurtech Adoption (Z) → *Elderly Well-Being* (Y)	10,482	0,000
Digital Literacy (X) → *Insurtech Adoption* (Z) → *Elderly Well-Being* (Y)	10,784	0,000

According to data in Table V, the path from Digital Literacy to Elderly Well-Being is significant, despite having a T-statistic value of 4,820. When that path is mediated by the variable Insurtech Adoption, the T-statistic more than doubles, from 4,820 to 10,784. It follows that the variable

Insurtech Adoption has a significant impact on moderating the relationship between Digital Literacy and Elderly Well-Being.

Another piece of evidence is that the advantage of insurtech is generally described in terms of company performance, efficiency, and operational effectiveness; nevertheless, this model demonstrated a new beneficial influence in addition to those conventional benefits. Because of the high T-statistic value of 10,482, Insurtech Adoption can have a considerable influence on Elderly Well-Being.

To summarize, all factors examined are displayed in Fig.2. The findings of this study model are quite apparent, and the authors are certain that Insurtech Adoption is enhancing the influence of Digital Literacy on Elderly Well-Being. The police and military forces were also affected by the Schumpeterian Shock, which made them more mindful of their digital literacy.

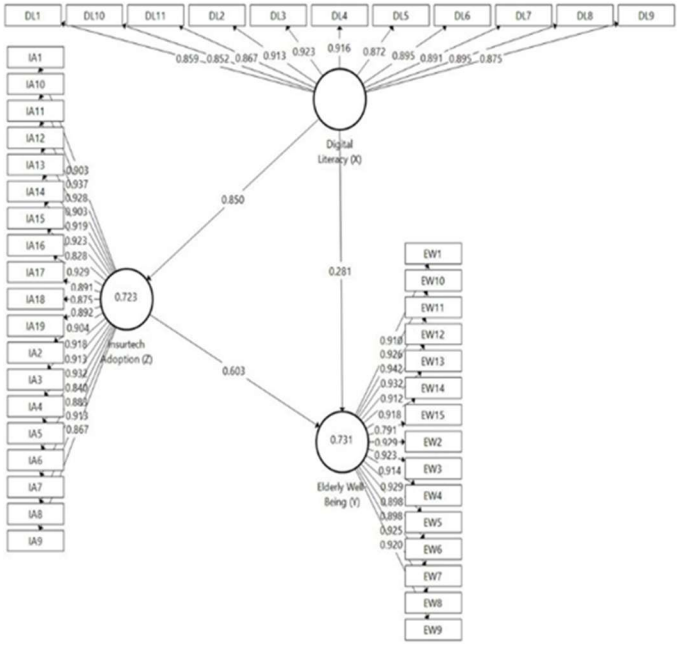

Fig.2. Path Test Result on T-Statistic

To ensure this result deeper, the authors also used secondary data from the Social Insurance Company, which specializes in serving Police and Military Force to validate this predominance which will be detailed in the discussion.

TABLE VI. POSITIVE RESPONSE OF VARIABLE DIGITAL LITERACY AND ELDERLY WELL-BEING (SURVEY OF SOCIAL INSURANCE FOR POLICE AND MILITARY FORCES, 2022)

	Digital Literacy	***Elderly Well-Being***
Air Force	47.53%	66.88%
Navy	53.46%	68.48%
Army	47.63%	65.87%
Police	62.55%	76.23%

IV. RESULT AND DISCUSSION

Further investigation reveals that the Police Force elderly has a greater effect on the variable of Digital Literacy, which directly affects Elderly Well-Being. The Police Force clearly responded favorably to Digital Literacy at 62.55% and 76.23% for the Elderly Well-Being variable, as shown in Table IV. On the other hand, the Army and Air Force units responded similarly, with 47% to 67% favorably answering the factors of Elderly Well-Being and Digital Literacy.

The Police Force elderly showed their impact on the disruptive effect of Schumpeterian Shock, particularly in digital innovation. Although the Police and Military Forces have good signals in

anticipating the dynamic capabilities, the Police Force elderly have more of it which makes them more literate in digital than the Military Forces.

This endogenous aspect as explained in important aspects of the analysis in Schumpeter's theory [2], is seen more embedded in the Police Force rather than in the Military Force. The exogenous aspect is felt by the insurance industry through disruptive innovation as we already recognized the term insurtech. Another detailed background is understandable by examining the survey results.

Referring to Table VI, the Police Forces have been examined by many activities to understand their digital literacy. The majority of the sample or 62,55% feel comfortable utilizing features such as the camera, organizing photos and videos, recording, making phone and video calls, accessing maps, utilizing search features on the internet, engaging with social media, conducting online transactions, and managing network connections. A summary of the result is shown in Table VII.

As we understand Digital literacy refers to the multiplicity of literacies associated with the use of digital technologies, the indicators are created and related to insurtech applications. Actually, these technologies are a subset of electronic technologies that include hardware and software used by individuals but this study is more focused on the insurtech application.

The segment in this study is also limited to the elderly who are already in the pension age, this will be different with the digital literacy for productive ages or young age with the new literacy standard. New literacies emphasize social practices that are shaped by emerging technologies, within educational contexts, digital literacy is a broader term that embraces technical, cognitive, and social-emotional perspectives of learning with digital technologies, both online and offline. The fundamental difference for new literacies is adapting literacy, while digital literacy is developmental, that is, progressively builds on foundational and achieved skills and knowledge. Theoretically, a digitally literate individual should be able to adapt to new and emerging technologies quickly and pick up easily new semiotic language for communication as they arise. The more digitally literate the individual, the easier it is for the individual to adapt, that is switch to the new literacies mode [35].

According to Table VII, all unit of Military Force is not familiar or literate with connectivity setting, except Police Forces. And for some units in the Military Force are also not literate with Maps operations and online transactions, while other indicators of digital literacy as features on the insurtech are perceived well. The most possible of this low literacy is about social-emotional perspectives of certain individuals in those units.

TABLE VII. RESULT SURVEY OF THE DIGITAL LITERACY

Code	*Indicator*	*Air Force*	*Navy*	*Army*	*Police*
DL1	Camera Operations	Literate	Literate	Literate	Literate
DL 2	Video Recording	Literate	Literate	Literate	Literate

DL 3	Voice Recording	Literate	Literate	Literate	Literate
DL 4	Text Messaging	Literate	Literate	Literate	Literate
DL 5	Voice Calling	Literate	Literate	Literate	Literate
DL 6	Video Calling	Literate	Literate	Literate	Literate
DL 7	Maps Operations	Low	Literate	Low	Literate
DL 8	Searching Features	Literate	Literate	Literate	Literate
DL 9	Social Media Applications	Literate	Literate	Literate	Literate
DL 10	Online Transaction	Low	Literate	Low	Literate
DL 11	Connectivity Setting	Low	Low	Low	Literate

A similar result is also shown by digging through the well- being variable. Most of the Police Force or 76.23% positively responded to all well-being-related questions. When probed regarding comfort in daily activities, a sense of joy and enthusiasm, feeling healthy, having control in decision- making, freedom of expression, as well as an inclination to learn new things, acquire new skills, cope with life challenges, and connect with relatives and other social environments, while also feeling financially secure, they responded positively.

According to WHO research, the majority of individuals in today's globe may anticipate living over the age of sixty; as a result, the proportion of elderly people in the worldwide population rises. According to the WHO estimate, one in six persons would be sixty years of age or older by 2030 [8] .The ratio is three times greater when examining the Police and Military force component, with around 30% of the population being elderly. Thus, there will be a greater focus on well- being.

Different gap shown in the range of 9% to 12% digital literacy between The Police Forces and The Military Forces. Which is According to (Boni) Li and Perkins, aging individuals prefer to define their lives based on their previous experiences, successes, education, and even age, which unavoidably influences how they adjust to life as they become older [26]. As a result, it has a direct impact on the attitudes of the elderly toward embracing and adopting new technologies [26]

Those gaps are demonstrated when we learn the Police Force's roles and responsibilities. The Police Force's role is to connect with the public and to promote the usage of technological systems. In contrast to the Military, the primary focus of the military lies in the preservation of national sovereignty and the defense of the nation and territorial integrity which have greater emphasis on the operation of critical infrastructure systems.

The authors also used secondary data to ensure that the usage of Insurtech Adoption is the most relevant mediating variable. It is based on a sample study of different islands done by the Social

Insurance Company in 2022, which discovered that one of the essential assessments of the demand is e-claim.

TABLE VIII. RESULT SURVEY OF THE IMPORTANCE OF E-CLAIM APPLICATION (SURVEY OF SOCIAL INSURANCE FOR POLICE AND MILITARY FORCES, 2022)

Representation of Island					
Scale of Importance	***Sumatera***	***Jawa***	***Kalimantan***	***Sulawesi***	***Papua***
Not Important	5%	11%	4%	8%	13%
Moderately Important	18%	17%	5%	21%	15%
Very Important	78%	73%	91%	70%	73%

One of the common features of insurtech, according to a social insurance business, is e-claim. According to the findings, the majority of respondents on all islands felt that filing an e-claim is very important. From all of Indonesia's major islands, respondents in Kalimantan had the greatest positive response rate (91%). It is natural, given that Kalimantan is Indonesia's largest island, that technology be used to link the elderly connectedness in order to improve their well-being. The other island had 70%-78% positive responses on the necessity of e-claims.

According to Tables I and VIII, we can see that the police and military forces, with a population of 25 thousand, have the greatest demand for e-claim, with a 91% priority scale. This profile can help the social insurance to prioritize Kalimantan Island in order to meet this demand.

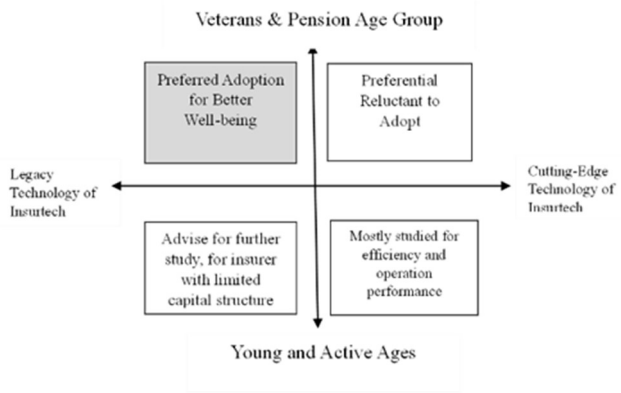

Fig.3. Matrix of Insurtech Adoption for Group Age for Pension [36]

Furthermore, as shown in Fig. 1 and Fig. 3, the implications of organizations using insurtech should take into account a number of issues. These are the goals of innovation, capital, and consumer segmentation. When the goal is not to compete but to support veterans or retirees, the firm may utilize limited funds to design an insurtech with legacy technology to service the clients.

V. CONCLUSION

An examination of the sample's general demographic profile found that 46% of survey respondents were from the Police Force, 43% were from the Army, 7% were from the Navy, and 4% were from the Air Force, based on 600 samples of police and military personnel collected throughout six Indonesian islands.

According to secondary and empirical studies, Digital Literacy has a favorable impact on Elderly Well-Being and becomes much more important when mediated by Insurtech Adoption in both Police and Military forces. This data argues that Insurtech adoption is having a limited impact on efficiency or organizational performance. Instead, this study provides a novelty that Insurtech Adoption can increase the well-being of the elderly.

According to the path testing results, although Digital Literacy has a considerable influence on Elderly Well-Being it will have more impact when it is mediated by Insurtech Adoption. They have proved that Schumpeterian Shock has a positive influence on them because the majority of them are already digitally literate and ready to adopt insurtech.

This discovery further supports Dao's earlier study (2018), which indicated that elderly individuals who own or use technology may experience more positive health outcomes compared to those who do not. This underscores the significance of employing technology in this context, emphasizing that utilizing technology, beyond traditional or legacy forms, is crucial for enhancing the well-being of the elderly [9].

This research lends support to the study conducted by Cinini A, Cutugno P, Ferraris C et al (2021) above, regarding the connection between elderly individuals and emerging technologies, covering aspects of engagement, acceptability, and the evaluation of well-being [32]. It is now affirmed that this association is not merely a relationship but significantly impacts overall well-being.

This study carries implications for businesses, signaling that it is opportune to extend efforts beyond operational efficiency to create new value for customers, particularly in areas related to well-being. As elucidated in PWC Report, the digital investments of insurers should surpass mere digitization and legacy modernization endeavors [37]. Instead, there is a need to forge new offerings and cultivate distinctive capabilities that can propel growth and foster innovation. A substantial part of the current digital initiatives in the insurance sector is still geared towards enhancing operational efficiency. It is crucial to recognize this study result has shown a significant impact of insurtech on well-being, urging a shift towards the application of new customer-centric values rather than a sole focus on efficiency."

VI. REFERENCE

[1] T. McCraw, "Prophet of Innovation: Joseph Schumpeter and Creative Destruction," Belknap Press of Harvard University Press, Cambridge, 2007.

[2] A. Croitoru, "Schumpeter, J.A., 1934 (2008), The Theory of Economic Development: An Inquiry into Profits, Capital, Credit, Interest and the Business Cycle, New Brunswick (U.S.A) and London

(U.K.): Transaction Publishers," Journal of Comparative Research in Anthropology and Sociology, vol. III, pp. 137-148, 2012.

[3] P. Elkin, "The Father of American Social Insurance: I.M. Rubinow," American Risk and Insurance Association, 1956.

[4] M. Feldstein, "Rethinking Social Insurance," NBER Working Paper No. 11250, 2005.

[5] J. B. Barney, "Resource-based theories of competitive advantage: A ten-year retrospective on the resource-based view," Journal of Management, pp. 643-650, 2001.

[6] A. Zimmermann, R. Schmidt, K. Sandkuhl, D. Jugel, J. Bogner and

M. Möhring, "Evolution of Enterprise Architecture for Digital," in Proceedings - IEEE International Enterprise Distributed Object Computing Workshop, EDOCW, 2018.

[7] B. Jay, "Firm Resources and Sustained Competitive Advantage,"

Journal of Management, vol. XVII, pp. 99-120, 1991.

[8] S. Nautiyal, A. Shrivastava, C. Deka and P. Chauhan, "Role of Digital Healthcare in the Well-being of Elderly People: A Systematic Review," ACM International Conference Proceeding Series, pp. 30- 41, 2022.

[9] V. H. Dao, "Technology and Elderly Well-Being," The University of Houston-Clear Lake, 2018.

[10] I. Santenac, E. Majkowski, P. Manchester and A. S.-Y. Bong, "EY EMEIA Insurance Sector Leader and Global Insurance Consulting Leader," Global Insurance Outlook, 2023.

[11] M. Farrel, "Insurtech - what is it and what does it mean for insurance

- article in Economic Observatory," Economics Observatory, 24 Oktober 2022. [Online]. Available: https://www.economicsobservatory.com/insurtech-what-is-it-and- what-does-it-mean-for-insurance. [Accessed 23 July 2023].

[12] A. J. d. H. Guevara and J. L. A. d. Silva, "Internet of Things (IOT) Opportunities and Impacts of Well-Being on Citizens and Society," Journal on Innovation and Sustainability RISUS, vol. X, no. 3, 2019.

[13] F. Canova, D. L. Salido and C. Michelacci, "The Labor Market Effects of Technology Shocks*," 2006.

[14] V. Njegomir, J. Demko-Rihter and T. Bojanić, "Disruptive Technologies in the Operation of Insurance Industry," Tehnicki Vjesnik, vol. 28, no. 5, pp. 1797-1805, 2021.

[15] M. Greineder, T. Riasanow, M. Böhm and H. Krcmar, "The Generic InsurTech Ecosystem and its Strategic Implications for the Digital Transformation of the Insurance Industry," in 40th GI EMISA, Tutzing, Germany, 2019.

[16] T. Lynn, J. G. Mooney, P. Rosati and M. Cummins, Disrupting Finance FinTech and Strategy in the 21st Century, Palgrave Studies in Digital Business and Enabling Technologies, 2019.

[17] M. Eling and M. Lehmann, "The Impact of Digitalization on the Insurance Value Chain and the Insurability of Risks," Geneva Papers on Risk and Insurance: Issues and Practice, pp. 359-396, 2018.

[18] Deloitte, "Tech Trends 2023: An insurance industry perspective," Deloitte, 2023.

[19] G. Ying and L. Zonghua, "Application and Development of Smart Pension Products in China," Advances in Social Science, Education and Humanities Research, vol. 466, pp. 287-291, 2020.

[20] C. Hague and S. Payton, "Digital Literacy Across the Curriculum,"

Futurelab, vol. IV, pp. 1-63, 2010.

[21] A. Martin, "DigEuLit-a European Framework for Digital Literacy: a Progress Report," Journal of eLiteracy, vol. II, pp. 130-136, 2005.

[22] Y. Eshet-Alkalai, "Digital Literacy: A Conceptual Framework for Survival Skills in the Digital Era," Journal of Educational Multimedia and Hypermedia, vol. XIII, no. 1, pp. 93-106, 2004.

[23] N. Churchill, "Development of students' digital literacy skills through digital storytelling with mobile devices," Educational Media International, pp. 271-284, 2020.

[24] Y. Zhang, "Measuring and applying digital literacy: Implications for access for the elderly in rural China," Education and Information Technologies, vol. XXIII, no. 8, pp. 9509-9528, 2023.

[25] A. Braun and F. Schreiber, The Current InsurTech Landscape : Business Models and Disruptive Potential, Institute of Insurance Economics I.VW-HSG, University of ST Gallen, 2017.

[26] Y. (Boni) Li and A. Perkins, "The impact of technological developments on the daily life of the elderly," Technology in Society,

vol. XXIX, no. 3, pp. 361-368, 2007.

[27] B. W. Lemon, V. L. Bengtson and J. A. Peterson, "An Exploration of

the Activity Theory of Aging: Activity Types and Life Satisfaction Among In-movers to a Retirement Community," Journal of Gerontology, vol. XXVII, no. 4, pp. 511-523, 1972.

[28] C. F. Longino and C. S. Kart, "Explicating Activity Theory: A Formal Replication 1," Journal of Gerontology, vol. 37, no. 6, pp. 713-722, 1982.

[29] E. Diener and E. M. Suh, Culture and Subjective Well-Being, 2000.

[30] D. Mellor, L. Firth and K. Moore, "Can the Internet Improve the Well- being of the Elderly?," Ageing International, vol. XXXII, no. 1, pp. 25-42, 2008.

[31] C. Bianchi, "Exploring how internet services can enhance elderly well-being," Journal of Services Marketing, vol. XXXV, no. 5, pp. 585-603, 2021.

[32] A. Cinini, P. Cutugno, C. Ferraris, M. Ferretti, L. Marconi, G. Morgavi and R. Nerino, "Final results of the NINFA project: impact of new technologies in the daily life of elderly people," Aging Clinical and Experimental Research, vol. 33, no. 5, pp. 1213-1222, 2021.

[33] X. Lei, Y. Shen and L. Yang, "Digital financial inclusion and subjective well-being – Evidence from China health and retirement longitudinal study," China Economic Review 81, 2023.

[34] M. J. Kreitzer, "WellBeing at the Workplace: The Urgency and Opportunity," Innovative Staff Development in Healthcare, pp. 143- 155, 2022.

[35] W. Ng, "Can we teach digital natives digital literacy?," Computers and Education, pp. 1065-1078, 2012.

[36] S. A. Muktirizka, M. Arief and Y. D. Pradipto, "Recognizing the Influence of Insurtech Adoption on the Well-Being of Military Veterans," Migration Letter, vol. XX, pp. 997-1007, 2023.

[37] P. I. Report, "Insurance reimagined: Spotlight on trust, convergence and transformation," PwC Insurance , 2022.