Investigating the factors that affect the willingness to adopt peer-to-peer short-term insurers in South Africa

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A research report submitted to the Faculty of Commerce, Law and Management, University of the Witwatersrand, in partial fulfilment of the requirements for the degree of Master of Management in the field of Digital Business

Johannesburg, 2023

KEYWORDS

Risk management

Peer-to-peer insurance

InsurTech

Decentralization

ACKNOWLEDGMENTS:

I would like to take this opportunity to express my deepest gratitude and appreciation to the incredible individuals who have played an instrumental role in the completion of my thesis. Their unwavering love, support, and guidance have been invaluable throughout this challenging journey.

First and foremost, I would like to extend my heartfelt thanks to my girlfriend Lea Kruger. Her constant encouragement, patience, and belief in me have been a driving force behind my motivation to pursue this academic endeavour. Her unwavering support and understanding during the countless late nights and stressful moments are a testament to her exceptional character. I am truly grateful for her love, which has been a source of strength and inspiration.

I am also indebted to my loving family, whose unwavering support has been the cornerstone of my success. Their encouragement, understanding, and belief in my abilities have provided me with the courage to face any obstacle. Their unconditional love and endless sacrifices have propelled me forward, and I am forever grateful for their presence in my life.

I am immensely grateful to Dr Euphemia Godspower Akpomiemie for her exceptional guidance and expertise throughout the development of my thesis. Her deep knowledge and insightful feedback have helped shape my research and have challenged me to explore new avenues of thought. Dr Akpomiemie's dedication, patience, and mentorship have been truly invaluable, and I am deeply honored to have had the opportunity to work with such a remarkable scholar.

Furthermore, I would like to express my sincere appreciation to Dr Gert Kruger, whose assistance with statistical analyses has been crucial to the success of my thesis. His expertise, patience, and willingness to guide me through complex data analysis have been indispensable. I am grateful for his insightful input and the valuable contributions he has made to my research.

I would also like to extend my thanks to my employer, G&S Insurance Consultants, for their support throughout this academic journey. I am grateful to the directors, Gawie van der Walt and Johan Steyn, for providing me with the

opportunity to pursue my studies while working at the company. Their belief in my potential and their understanding of the importance of education have been instrumental in my ability to balance work and academia.

I am particularly grateful to Tania Dibb, the head of short-term insurance at G&S Insurance Consultants, for her unwavering support and guidance. I am deeply appreciative of her trust in my abilities and her instrumental role in facilitating an orchestrated effort to send the survey to the G&S client base. Her strategic support has been instrumental in collecting valuable data for my research.

Additionally, I would like to express my gratitude to Tannith Hattingh, the administrative personnel at G&S Insurance Consultants, for her valuable assistance and support. I am thankful for her instrumental role in sending the mail merge, which allowed for the efficient dissemination of important information to the survey participants.

Finally, I would like to extend my appreciation to all the teachers, friends, and colleagues who have provided encouragement, advice, and inspiration throughout this academic endeavour. Your words of wisdom, motivation, and shared experiences have been instrumental in shaping my research and personal growth.

Completing this thesis would not have been possible without the love, support, and guidance of these exceptional individuals. Their contributions have left an indelible mark on my journey, and I am forever grateful for their presence in my life.

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GWP: Gross Written Premiums

P2P: Peer-to-peer

TAM2: Technology Acceptance Model

TPB: Theory of Planned Behaviour

TRA: Theory of Reasoned Action

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CHAPTER 1. INTRODUCTION

1.1 Statement of purpose

This quantitative study aims to identify the propensity for clients (both legal and natural persons) to adopt peer-to-peer short-term policies as opposed to traditional, centralised short-term insurance policies.

1.2 Background of the study

1.2.1 *South African Short-Term Insurance Market Overview:*

South Africa has one of the highest insurance penetration rates in the world and accounts for more than 80% of the African continent's total gross insurance premiums (Edinger et al., 2017). The short-term insurance industry, in South Africa, reported gross written premiums (GWP) of R122 billion in 2019. This illustrates an increase of 5% when compared to the R128 billion recorded in 2022. The gross insurance liabilities also increased by 27.2% (increase net of reinsurance by 18%), partly due to higher claim provisions for business interruption. Premiums for the non-life sector showed a R2.5 billion (3.2%) increase in net earned premiums but the net claims incurred for the non-life sector also increased by R1.9 billion (4.1%). As a result, the claims incurred ratio increased from 59% in 2019 to 59.5% in 2020. The loss ratio was adversely impacted by provisions for business interruption claims, but partly offset by fewer weather-related catastrophes and lower claims frequencies experienced over several insurance classes following the impact of the COVID-19 lockdown in South Africa. Other factors such as the shift to working from home, alcohol bans and curfews also contributed to the reduction in the motor claims ratio. Following the relaxing of lockdown regulations from 1 June 2020, claims started to increase in frequency and severity to some extent, however on an overall basis remained below expected levels for most of the year (KPMG, 2021).

The trade and consumer credit class of business were impacted severely by the pandemic. This was illustrated by defaults on credit that subsequently caused significant insurance losses. Additionally, directors' and officers' liability insurance claims have increased in claims frequency and severity. Likewise, events such as the #MeToo and Black Lives Matter campaigns in addition to the COVID-19 pandemic have led to specific claims against companies. Furthermore, there was an increase in claims and regulatory enquiries, which subsequently led to a notable increase in the number of claims and

regulatory enquiries involving directors and officers (Knoesen, 2021). In South Africa, these trends are driven by several factors such as: exceptionally difficult trading conditions, a highly regulated environment which often comes with personal liability, an increase in stakeholder activism, new risks like COVID-19 and cyber liability, and finally, a shrinking pool of experienced non-executive directors (KPMG, 2021).

Due to these difficult trading conditions, Insurtech companies have identified an opportunity to capture a segment of the short-term insurance market in South Africa, by demonstrating the value of digital innovations in the provision of insurance products (Olesen et al., 2019).

1.2.2 *An Overview of Traditional Short-Term Insurance*

Short-term insurance refers to a policy that offers temporary protection for a specified period. This type of insurance is designed to provide coverage against potential loss or damage to personal property, such as vehicles, household items, and other belongings. It covers events like accidents, theft, or damage to the insured items (Government Gazette, 1998).

A short-term insurance policy develops a bilateral contractual agreement between a policyholder and an insurer under the traditional centralized model of insurance (Abdikerimova & Feng, 2019). The insurer accepts a premium from the policyholder in exchange for paying a benefit based on specific contingencies (Government Gazette, 1998). In order to multiply the bilateral relationship and serve thousands of clients, the insurer serves as the core. The ability of an insurer to aggregate risks emanating from bilateral contracts therefore making the cost of insurance predictable and controllable is the essence of the traditional insurance business (Abdikerimova & Feng, 2019).

Traditional insurance systems however have several drawbacks. A notable drawback is the cost to obtain the promissory benefit (i.e., pooled premiums) which is frequently far larger than the insurance benefit itself. This is as the cost of solvency capital, regulatory compliance, overhead cost, commission, and other complex fee structures are frequently built into the ratemaking process (Carlin, 2009). Another drawback is that insurance companies hold the majority of the market power. Therefore, to increase their profit margins, insurers are known to manipulate coverage and exemptions while drafting

insurance terms. Subsequently, high risk individuals frequently do not have coverage, and cannot use risk-sharing arrangements (Chollet, 2002) as they are often faced with exclusion clauses from most traditional short-term insurance providers to ensure provider profitability. Furthermore, since insurance operations are frequently opaque and the nature of insurance is challenging for the general populace to grasp, there is a lack of trust in the insurance business (Agyei et al., 2020). The reason for this is partly because of the common misconceptions that an insurer will stop at nothing to reject a claim. Lastly, the standard commission-based selling strategy employed by brokers prioritize the broker's own financial interests over the interests of their clients (Guiso, 2012).

1.2.3 *Peer-to-peer insurance: Decentralized Insurance*

The demand for more accessible, low-cost services in the financial industry has brought about numerous technology-driven tools initiated by Fintech companies (International Monetary Fund, 2019). Arumugam and Cusick (2008) came to the conclusion that the peer-to-peer concept could possibly spread to the insurance market. They consider it likely that individuals would seek insurance that ally with family members and friends instead of turning to insurance companies (Gomber et al., 2017). Moenninghoff and Wieandt (2012) argue that such alliances reduce information asymmetry and moral hazard.

Therefore, the insurance sector has not been left out of the technology drive that is changing the way consumers and companies relate with each other. Insurtech, technology innovation in insurance, has introduced tools for policyholders to have easy access to insurance coverage at lower costs than traditional policies allow. The incorporation of fintech concepts like the crowdsourcing platform and social networking led to the peer-to-peer (P2P) Insurance movement (Frankenfield, 2022).

In P2P a network of participants combines their premiums in a common fund to support individuals who sustain losses. It is a technologically advanced resurrection of the traditional idea of mutual aid (Abdikerimova & Feng, 2019). Participants in P2P networks have a financial responsibility for one another, as opposed to traditional insurance where the insurer bears all risk. There is thus no role or a limited role for a central authority as every participant is both an "insurer" and an "insured". When small claims occur in the group, the common fund is used to provide compensation. If there is a surplus at the end of the year, everyone receives a refund. The insurer is called upon to provide indemnity

only if claims exceed the capacity of the common fund. This thus means that a decrease in insurance events (claim events) enhances the payback amount to the client, as any capital reserves available in the premium pool (common pool) after the cover period has passed is redistributed to the insured parties (Abdikerimova & Feng, 2019). Furthermore, the P2P insurance model increases transparency to policyholders when compared to traditional insurance as a result of internet technologies (Levantesi & Piscopo, 2022).

One example of an established provider and creator of P2P insurance is friendsurance.com founded in 2010. On this platform, individuals can ally to reduce insurance costs at the same level of protection (Friendsurance, 2016). Each member of the group has to have an insurable interest and pay a certain amount of money to the platform. This monetary contribution is split up in two parts: one part that is forwarded to the insurance company and another part that is stored in an account which is available to the group. In case of small insurance events, the damage is remedied using money from the group account. Hence, the insurance company can avoid high administration expenses for small insurance cases. In case of serious big insurance cases, the insurance company steps in and arranges the monetary compensation for claims. If no or only few cases of insurance occur, the group is repaid a part of the money that has been stored in the group account. This principle can lead to lower insurance contributions for the insured (Gomber et al., 2017). The platform receives a compensation for handling small cases of insurance from the insurance company that is involved (Friendsurance, 2016). Finally, disintermediation makes it possible to be responsive towards new consumers' needs. The majority of P2P insurance platforms are hosted by technology companies that compete for clients by offering customized solutions and shifting customer expectations (Abdikerimova & Feng, 2019).

In contrast to the frequently obscure operation of traditional insurance, benefit payments to the policyholders' own social networks are clear; thus, policyholders have a better grasp of the platform's function. From an insurance entity perspective, the cost of administration and regulation is reduced as a result of decentralization. This is as the common fund is typically based on a pay-as-you-go approach in P2P models that do not require capital reserves. The traditional insurance model, in contrast, is a partially financed, pre-paid system where actual claims may exceed premiums. To cover unforeseen claims, an insurer must have enough reserves and cash. As traditional insurers are held as liquid

assets and are not used for other corporate purposes, their cost of capital may be expensive, and these expenses are ultimately transferred to the policyholders. Since there is no traditional insurer in P2P insurance, there is no risk or profit margin factored into the premium price, which again lowers the cost of the plan (Donnelly et al., 2014).

To reiterate, traditional short-term insurance business models thrive on the economic principle that the premiums of a large number of non-claiming policyholders sufficiently cover the pay-outs to the comparatively smaller number of policyholders who claim, with the premium levels modelled to the guaranteed financial advantage of the insurer (Tayengwa, 2017). P2P insurance on the other hand, mitigates the conflict that inherently arises between a traditional insurer and a policyholder when an insurer keeps the premiums that it does not pay out in claims (Gomber et al., 2017).

1.2.4 *South African Short-Term Insurance Trends: Client Sentiments*

McKinsey's quarterly Financial Insights Pulse Survey of South African financial decision makers, conducted in July 2020, reveals a sharp shift in consumer attitudes and behaviour with 45% of respondents expect to engage in fewer physical in-branch or face-to face interactions, and 42% expect to make greater use of mobile and online channels (Bagus et al., 2020).

It is proposed that this is as the COVID-19 pandemic has further accelerated the demand for digital and remote channels, and this trend is expected to persist beyond the crisis. Online and mobile banking usage in several African countries is projected to increase by 20 to 40 percent, while mobile payments are anticipated to significantly rise, particularly in regions where mobile usage is currently below average (Bagus et al., 2020).

It is expected that insurers will continue prioritizing digital transformation for customers and intermediaries. Leading incumbents have been seen moving decisively on their direct digital-sales channels while also boosting agent productivity through better digital tooling and customer self-service. In South Africa, success has been seen with digital pure-play insurers, such as Naked -, Pineapple-, MiWay Blink- and Sanlam Indie insurance (Bagus et al., 2020).

1.3 Research problem

Previous research has shown a limited focus on the adoption of digital insurance concepts within the realm of short-term insurance (Gomber et al., 2017). Although some studies have explored certain aspects, there remain several gaps in the literature. Specifically, previous research has failed to comprehensively investigate the business case for alternative short-term insurance models, considering the increasing demand for cost-effective financial products (Ellingrud et al., 2022; KPMG, 2021; Manchester, 2021).

Furthermore, the potential research avenues become even more promising with access to user data from digital insurance platforms (Gomber et al., 2017). These two key components—understanding the adoption of digital insurance concepts and exploring alternative short-term insurance models—present numerous areas worthy of investigation.

1.4 Research objectives

To contextually review the factors that influence the substitution of traditional short-term insurance providers for peer-to-peer short-term insurance providers.

1.5 Rationale

A paradigm shift and technological revolution brought about by the fourth industrial revolution have significantly impacted the insurance business, creating a compelling need to explore new approaches (Alt et al., 2018). The growing demand for cost-effective insurance products that mitigate both moral and financial hazards associated with traditional models has intensified the need to establish a viable business case for peer-to-peer insurers (Levantesi & Piscopo, 2022). In order to contribute to the justification for insurers and clients to embrace peer-to-peer insurance policies, it is crucial to gain a comprehensive understanding of the factors influencing the adoption of such models (Charm et al., 2020). To achieve this, the study employs the technological acceptance model as an empirical framework for evaluating the factors that influence the adoption of peer-to-peer insurance policies. Through this investigation, the study aims to shed light on the feasibility, advantages, and potential benefits of implementing digital peer-to-peer insurance models within the short-term insurance industry. By uncovering the key drivers

and barriers to adoption, the study seeks to provide valuable insights for both insurers and clients, ultimately fostering informed decision-making in the realm of short-term insurance.

1.6 Delimitations of the study

This study excludes long-term insurers who exclusively provide long-term insurance products as well as long-term insurance clients who do not have short-term insurance product portfolios. The exclusion of the life insurance sector is deliberate, as the primary objective is to investigate the adoption of peer-to-peer insurance policies within the short-term insurance domain. This decision is based on the fact that, in the South African context, peer-to-peer insurance models are currently implemented exclusively within the short-term insurance sector and not in the long-term insurance sector. Therefore, the study aims to specifically examine the adoption of peer-to-peer insurance in the context where it is currently being implemented, which is the short-term insurance industry.

It is important to note that the study focuses on individuals residing in South Africa who have an interest in acquiring or have already acquired a short-term insurance policy. Additionally, it is essential to clarify that when referring to peer-to-peer insurance schemes, the scope does not encompass all decentralised insurance schemes, such as reciprocal aid. Rather, it specifically pertains to the defined parameters outlined below, which are applicable within the short-term insurance context.

1.7 Definition of terms

Peer-to-peer insurance: a form of decentralized risk sharing network in which participants pool their resources and risk together to compensate those who suffer losses, where the insurer is called upon to provide indemnity only if claims exceed the capacity of the common fund (Abdikerimova & Feng, 2019; Levantesi & Piscopo, 2022).

Short-Term Insurance Policy: an engineering policy, guarantee policy, liability policy, miscellaneous policy, motor policy, accident and health policy, property policy or transportation policy or a contract comprising a combination of any of those policies; and

includes a contract whereby any such contract is renewed or varied (Government Gazette, 1998).

Traditional Short-Term Insurer/Centralized Insurer: A common insurance fund where all policyholders' premiums are collected and out of which insurance benefits are paid to claimants. In other words, premiums collected from insureds without any loss are used by the insurer to subsidize the cost of benefits paid to other insureds with losses (Abdikerimova & Feng, 2019).

Technology Acceptance Model (TAM2)/ Influencing factors of adoption: An extension of Ajzen and Fishbein's theory of reasoned action (TRA) and Davis' Technology Acceptance Model (TAM) that posits that there are several factors that determine whether a system will be used by its potential users. These are encompassed by social influence processes (subjective norm, voluntariness, and image), cognitive instrumental processes (job relevance, output quality, result demonstrability, and perceived ease of use) perceived usefulness and the intention to use (Venkatesh & Davis, 2000).

1.8 Assumptions

A key tenet of the Technology Acceptance Model (TAM2) is that the influence usage behaviour is fully mediated by the belief constructs of perceived ease of use (PEOU), perceived usefulness (PU) and Subjective Norms (SN). This study assumes this to be true.

This study also assumes that the majority of traditional insurance providers operate as an information system through platforms and physical actors to support the comparison between peer-to-peer and traditional insurance providers using the TAM2 model. i.e., this study assumes the inverse relationships of TAM2 to be true.

1.9 Chapter Outline

Chapter one provides an overview of the digital financial service and short-term insurance landscape, as well as providing a detailed context on the peer-to-peer and short-term insurance ecosystem in South Africa. It explained the problem, the research gaps in the field, objectives and how the findings of this study could be of assistance.

Chapter two presents a literature review, which commences with definitions of the various concepts and theoretical frameworks within the digital financial services discipline, from peer-reviewed articles and legislation. Models attempting to examine adoption and substitution of systems were also compared in this chapter.

Chapter three presents the methodology used in this study. Data collections process and analysis are also discussed, as well as the intended methods to ensure validity and reliability of the data.

Chapter four presents a sample profile, confirmatory factor analysis (including the factor estimates, model fit, post hoc model performance and the path diagram) as well as a structural equation model.

Chapter five provides a detailed discussion of the findings of the data analysis in lieu of the hypotheses.

Chapter six provides the conclusion of the study in terms of the achievement of the research question as well as recommendations for future studies.

CHAPTER 2. LITERATURE REVIEW AND THEORETICAL FRAMEWORK

2.1 Introduction

The following section provides a critical review of literature regarding peer-to-peer insurance and adoption concepts, rendering critique on the primary literature, main concepts/theories as well as providing the propositions posed to address the research objectives.

2.2 Background discussion

2.2.1 *Short-Term Insurance*

As an international rule of thumb, a monthly premium or contribution is paid to an insurance firm as part of a contract for short-term insurance, which provides coverage of risk/liability. The purpose of the policy benefit is to reinstate the insured to pre-loss circumstance. One can get insurance to protect your personal property, such as a home, car, or cell phone, as well as health and capacity to work to name a few. Additionally, the coverage can protect individuals from legal culpability for harm caused to others, such as when the insured's car injures someone unintentionally. The premium is paid in advance for the upcoming month. If the insured decides they no longer need an insurance policy, it can be cancelled. In that case, the insured's coverage will expire at the end of the month after the final premium payment. From a South African context, the Prudential Authority (PA), in accordance with the Insurance Act, Act No. 18 of 2017, and the Financial Sector Conduct Authority (FSCA), in accordance with the Short-Term Insurance Act, Act No. 53 of 1998, both regulate short-term insurance (Financial Service Conduct Authority, 2020).

For the purposes of this study, short term insurance is regarded as an engineering policy, guarantee policy, liability policy, miscellaneous policy, motor policy, accident and health policy, property policy or transportation policy or a contract comprising a combination of any of those policies; and includes a contract whereby any such contract is renewed or varied as defined by the Short-Term Insurance Act, Act No. 53 of 1998 (Government Gazette, 1998).

2.2.2 *Traditional/Centralised Short-Term Insurance*

Insurance policies are an archaic concept dating back to the 16th century (Klein, 2001). Modern insurance policies create a bilateral contractual agreement between a policyholder and an insurer under the traditional model of insurance. The insurer receives a premium from the policyholder in exchange for agreeing to pay a benefit based on specific scenarios. In order to multiply the bilateral relationship and serve thousands of clients, the insurer serves as the hub. The capacity to pay is the essence of the traditional insurance concept (Abdikerimova & Feng, 2019; Feng et al., 2022; Financial Service Conduct Authority, 2020; Government Gazette, 1998; Levantesi & Piscopo, 2022). It is for this reason that this study adopts the definition for traditional/centralised short-term insurance as a common insurance fund where all policyholders' premiums are collected and out of which insurance benefits are paid to claimants. In other words, premiums collected from insureds without any loss are used by the insurer to subsidize the cost of benefits paid to other insureds with losses (Abdikerimova & Feng, 2019).

2.2.3 *Peer-to-peer Short-Term Insurance*

In attempting to grasp the quintessence of a peer-to-peer insurance scheme, various sources have been considered. It is important to note that the concept of peer-to-peer insurance was developed by Friendsurance formally known as Alecto GmbH in 2010 (Abdikerimova & Feng, 2019; Friendsurance, 2022; Levantesi & Piscopo, 2022).

Despite the enhanced disruption and acclaim of peer-to-peer insurance schemes, which have created a fast-changing short-term insurance landscape, limited literature on the theoretical underpinnings of P2P exists (Abdikerimova & Feng, 2019; Levantesi & Piscopo, 2022). The lack of theoretical underpinning could be due to the fact that P2P insurance schemes are described as "insurance mutual aid in a modern and digital guise" (Levantesi & Piscopo, 2022, pg 48). This simply means that P2P insurance models are a revival of the traditional mutual aid insurance concept in that it follows a centuries-old practice, developed by ancient societies, where members care for each other's financial needs in the event of misfortune (Abdikerimova & Feng, 2019; Levantesi & Piscopo, 2022). However, with the aid of internet technology, P2P insurance schemes allow individuals from different risk classes, who are familiar with one another (usually a group of 10 family and friends), to pool their resources and subsequently compensate each other for losses, cutting down on the cost of insurance (Abdikerimova & Feng, 2019). As mentioned

previously, the reference to P2P insurance schemes do not involve all forms of decentralized insurance models (Levantesi & Piscopo, 2022). Building upon previous research, the definition of peer-to-peer insurance schemes can be understood as decentralized risk-sharing networks, where participants pool their resources and risks to compensate those who suffer losses. The insurer is only obligated to provide indemnity in the event that claims surpass the capacity of the collective fund, which is comprised of the participants' pooled premiums (Abdikerimova & Feng, 2019; Levantesi & Piscopo, 2022). A common insurance fund where all policyholders' premiums are collected and out of which insurance benefits are paid to claimants. In other words, premiums collected from insureds without any loss are used by the insurer to subsidize the cost of benefits paid to other insureds with losses (Abdikerimova & Feng, 2019).

2.3 Factors that influence the substitution of traditional short-term insurance with peer-to-peer short-term insurance

The purpose of this study is to examine the factors that impact clients' intentions to switch from traditional short-term insurance products to peer-to-peer insurance alternatives. Guided by the Technology Adoption Model 2 (TAM2) theory, the following concepts and hypotheses have been established.

2.3.1 Perceived ease of use:

The first factor taken into consideration that influences the propensity to replace conventional insurance systems is the perceived ease of use of peer-to-peer insurance platforms and the low perceived ease of use of the traditional insurance platform offering. This is since, in accordance with earlier studies, a person's intention to replace a certain technology depends on how much effort the aforementioned system requires (Adams et al., 1992; Davis, 1989; Hendrickson et al., 1993; Segars & Grover, 1993; Subramanian, 1994; Szajna, 1994).

H_1: Perceived ease of use is a factor that influences the intention to (dis)continued the use of traditional insurance systems.

2.3.2 Perceived usefulness:

The second factor considered that has an impact on the desire to replace conventional insurance systems is the perceived utility. This is due to the fact that empirical research has demonstrated that an individual's intention to replace a technology depends on how strongly they believe that substitution of the aforementioned system (in this case traditional insurance products) would enhance the effectiveness of that system outcome (the acquisition, adaptation and claims of short term insurance) (Adams et al., 1992; Davis, 1989; Hendrickson et al., 1993; Segars & Grover, 1993; Subramanian, 1994; Szajna, 1994).

H_2: Perceived usefulness is a factor that influences the intention to (dis)continued the use of traditional insurance systems.

2.3.3 Subjective norm:

Subjective norm is another factor used to considered when gauging the intention to replace traditional insurance systems. This is as, according to research, a person's view that the majority of the people who are significant to them believe they should not engage in the behaviour in question that reduces their intention to do so (Venkatesh & Davis, 2000). Therefore, it is hypothesized that subjective norm could be a factor that influences the intention to switch from traditional to digitally inclined insurance products.

H_3: Subjective norm is a factor that influences the intention to (dis)continued the use of traditional insurance systems.

2.3.4 Perceived risk:

According to Bauer (1960), perceived risk is the uncertainty and unpleasant outcomes connected to consumers' expectations. It represents how unpredictable consumers believe results will be when researching and selecting information about goods and/or services before making any purchasing decisions (Blankertz & Cox, 1969). A significant motivator in many online financial transactions is perceived risk (Aldammagh et al., 2021; Kesharwani & Singh Bisht, 2012). Customers will feel increased risk if there is any discrepancy between their actual purchasing experiences and their intended purchases, and this perceived risk will depend on how subjectively ambiguous the results are i.e., affecting the intention to adopt digital insurance products. Due to the physical and temporal

distance between customers and online businesses as well as the unpredictable nature of internet services, there is inherent uncertainty surrounding online transactions (Al-Gahtani, 2011). As such it is believed that perceived risk would have a significant impact on the intention to substitute traditional insurance product offerings with the peer-to-peer insurance product offering.

H_4: Perceived risk is a factor that influences the intention to (dis)continued the use of traditional insurance systems.

2.3.5 Perceived trust:

According to research, it is expected that lower levels of intended use are connected to lower levels of trust, as well as specific beliefs about the e-vendor (in this instance, the insurance company) (Gefen et al., 2003; Schefter & Reichheld, 2014; ben Uche et al., 2021). Online customer interactions with insurers, like other commercial activities, demand that the customer deal with the social complexity inherent in the transaction and employ psychological measures to decrease it (Gefen et al., 2003; Koch et al., 2011). Trust is a crucial prerequisite for involvement in commerce in general. It is easier for merchants to act opportunistically in online environments hence perceived trust is a key factor in the intention to substitute the traditional insurance product offering with a peer-to-peer insurance (Reichheld and Schefter 2000).

H_5: Perceived trust is a factor that influences the intention to (dis)continued the use of traditional insurance systems.

2.4 ANALYTICAL FRAMEWORK

The following section discusses an integrated overview of the theoretical and empirical concepts of this study through the discussion of the theoretical and conceptual frameworks used in this study.

2.4.1 *Theoretical Framework: TAM2*

Over three decades, significant advancements have been achieved in the explanation and forecasting of user adoption of information technology (Adams, Nelson & Todd 1992; Davis 1989; Hendrickson, Massey & Cronan 1993; Segars & Grover 1993; Subramanian 1994;

Szajna 1994; Venkatesh 1999; Venkatesh & Davis, 2000). Particularly, the Technology Acceptance Model (TAM) which has gained a lot of theoretical and empirical support (Davis 1989, Davis et al. 1989). Numerous empirical investigations have discovered that TAM reliably explains a significant percentage of the variance in usage intentions and behaviour (usually about 40%), and that TAM compares favourably with competing theories like the Theory of Reasoned Action (TRA) and the Theory of Planned Behaviour (TPB) (Venkatesh & Davis, 2000). According to TAM, a person's perceived usefulness of a system, which is defined as how much they think using the system will improve their job performance, as well as perceived ease of use, which is defined as how much they think using the system will be effortless; are the two beliefs that most strongly influence their decision to use a system.

According to TAM theory, perceived utility and perceived ease of use operate as a mediator between external variables (such as system attributes, the development process, and training) and intention to use. As per TAM, perceived usability has an impact on perceived usefulness as well because, all else being equal, the more user-friendly a system is, the more valuable it can be.

TAM has solidified its position as a reliable, potent, and economical model for predicting user acceptance. Perceived usefulness has consistently been a significant predictor of usage intentions across the several empirical tests of TAM, with standardized regression coefficients often hovering around 0.6. Since perceived usefulness is such a crucial factor in determining usage intentions, it's critical to comprehend the factors that influence this construct and how those factors evolve as users get more experience with the system (Venkatesh & Davis, 2000).

An additional predictor of intention in TAM, perceived ease of use, has a less consistent impact on intention across trials. While some research has been done to model the factors that influence perceived usability (Venkatesh and Davis 1996), the factors that influence perceived usefulness have received less attention. One could create organizational interventions that would boost user adoption and utilization of new technologies if one had a better grasp of the factors that determine perceived usefulness (Venkatesh & Davis, 2000).

This then created the need to extend TAM to include additional significant drivers of TAM's perceived usefulness and use intention dimensions in order to better understand

how these determinants' effects evolve as users get more experience using the target system. Additional theoretical frameworks from social influence processes (subjective norm and image) and cognitive instrumental processes (relevance, result demonstrability, and perceived ease of use) are incorporated into TAM2, which is further elaborated on below (Venkatesh & Davis, 2000).

Social Influence Processes:

Subjective norm and image are interconnected social forces that have an impact on a person when they have the choice to adopt or reject a new system, and these forces are reflected in TAM2 (Venkatesh & Davis, 2000).

Subjective Norm:

Venkatesh and Davis (2000) tapped into social influences via subjective norm, which is defined as a "person's perception that most people who are important to him think he should or should not perform the behaviour in question," in line with TRA, which served as a major theoretical underpinning for the initial development of TAM (Fishbein and Ajzen 1975, p. 302). Subjective norm is incorporated into TAM2 as a direct determinant to behavioural intention in TRA (Fishbein and Ajzen 1975) and the ensuing TPB as a direct predictor of behavioural intention (Ajzen 1991). The justification for a direct relationship between subjective norm and intention is that people may choose to engage in a behaviour even if they do not personally approve of it or its effects if they believe one or more significant referents believe they should and are sufficiently motivated to do so (Venkatesh & Davis, 2000).

Image and Social Influence:

According to TAM2, subjective norm will have a positive impact on an individual’s image as engaging in behaviour that is perceived as promoting status, by significant members of a person's social group, would improve their status in this group. Greater productivity is generally supported by heightened status' increased power and influence. Thus, over and beyond any performance advantages directly attributed to system use, an individual may believe that using a system will result in increases in system performance indirectly due to image enhancement. The influence of subjective norm on image and the effect of image on perceived utility together in TAM2 capture this identification effect (Venkatesh & Davis, 2000).

Cognitive instrumental processes:

In addition to the social influence processes that affect perceived usefulness and usage intention that were previously discussed, TAM2 theorized three cognitive instrumental determinants of perceived usefulness, namely: relevance, result demonstrability, and perceived ease of use (Venkatesh & Davis, 2000).

Relevance:

A potential user's assessment of relevance, which TAM2 defines as a person's view of the extent to which the target system is appropriate to their need, is a crucial part of the matching process covered above. In other words, the importance of the set of tasks the system is able to support within one's context is a function of the relevance. TAM2 thus makes a cognitive conclusion that, in contrast to social influence mechanisms, relevance has a direct impact on perceived usefulness (Venkatesh & Davis, 2000).

Result demonstrability:

According to TAM2, the "tangibility of the results of applying the invention," (Moore & Benbasat, 1991, p. 203), will have a direct impact on perceived usefulness. This suggests that if the correlation between usage and beneficial outcomes is obvious, people can be anticipated to have more favourable judgments of a system's usefulness (Venkatesh & Davis, 2000).

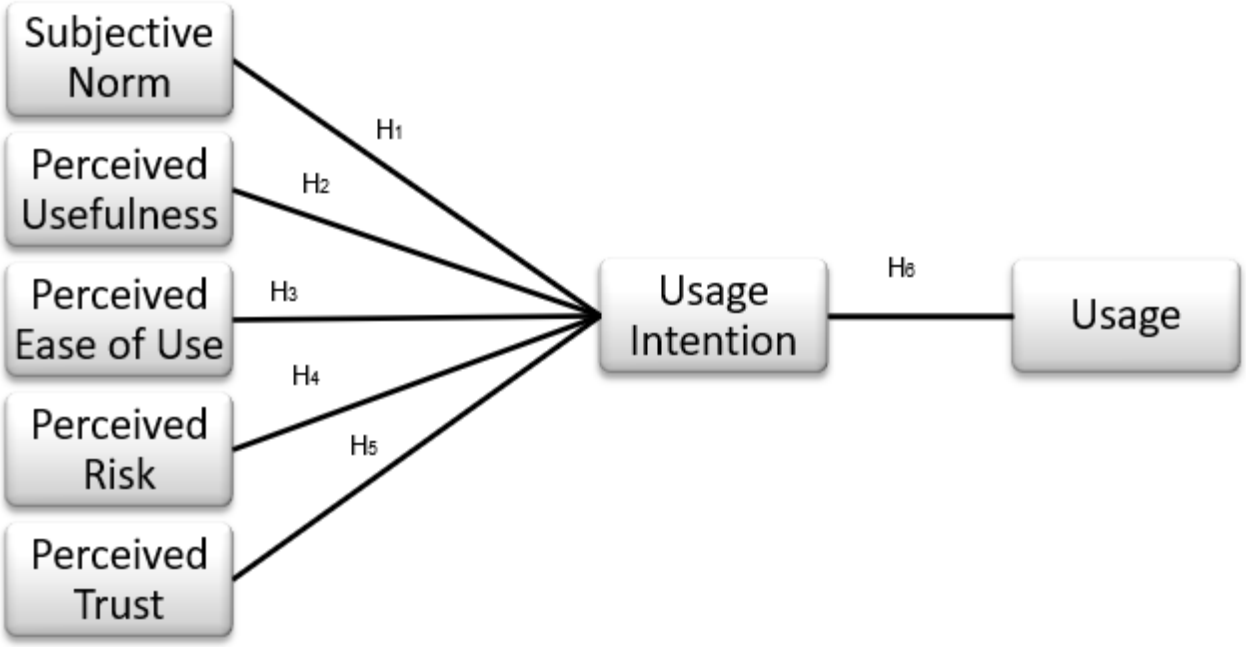
Perceived ease of use:

Perceived ease of use is still a key factor in determining perceived usefulness in TAM2 (Davis et al. 1989). This is because, in general, the easier a system is to use, the more it can improve system performance. TAM2 states that the social impact and cognitive instrumental processes within TAM2 are conceptually separate from, and complimentary to, the mechanisms by which ease of use impressions are thought to form and evolve (Venkatesh & Davis, 2000).

2.4.2 Conceptual Framework

The conceptual framework is a graphical or narrative form showing the key variables or constructs to be studied and the presumed relationship between them (Miles & Huberman, 1994). This sets the stage for the specific research questions. The conceptual framework of this study is informed by the theoretical framework(s) that are relevant to the adoption of peer-to-peer insurance.

Figure 1: *Adaptation of TAM2*



2.5 Chapter summary

This provided a critical review of literature regarding peer-to-peer insurance and adoption. The chapter detailed the main concepts/theories that underpin this research as well providing the hypotheses posed to address the research objectives.

CHAPTER 3. RESEARCH METHODOLOGY

The research approach, research design, data collection methods, sampling method, and sample size employed in this study are all described in depth in this chapter. This chapter also covers the ethical considerations that arise during the research process, as well as the method of data collecting, -processing, and -analysis.

3.1 Research approach

Research approaches are strategies and guidelines for conducting studies that cover anything from general hypotheses to specific techniques for gathering, analysing, and interpreting data. The choice of research method employed is based on the philosophical presuppositions, the research design, and the specific data collecting, analysis, and interpretation techniques used in this study. The kind of research topic or issue being addressed, individual experiences, and this study's target audiences have all been taken into consideration when the research approach was chosen (Creswell, 2012).

For the purpose of this study, a quantitative research strategy was employed to determine generalisations for the South African Short-Term Insurance population. This is a means for testing objective theories, in this case TAM2, by examining the relationship among variables. These variables, namely subjective norm, perceived ease of use and perceived usefulness, in turn, can be measured, typically on instruments, so that numbered data can be analysed using statistical procedures. Like qualitative researchers, those who engage in this form of inquiry have assumptions about testing theories deductively, as indicated in chapter 1, building in protections against bias, controlling for alternative explanations, and being able to generalize and replicate the findings (Creswell, 2012).

3.2 Research design

The research design chosen is correlational research which produces a description of the relationship between two variables but do not attempt to explain the relationship. This was chosen as correlational research is ideal for gathering data quickly from natural setting assisting the researcher to generalize findings to real-life situations accurately (Creswell, 2012).

3.3 Data collection methods

In quantitative research, information is gathered through experiments or clinical trials, observation and recording of clearly defined events, obtaining pertinent data from information system management, conducting surveys with closed-ended questions, such as face-to-face or telephone interviews, internet or computer administered questionnaires, and conducting well-defined experiments. A survey (i.e., survey research) which analyses a sample of a population to produce a quantitative or numerical description of trends, attitudes, or opinions within that community, specifically the South African short-term insurance population is employed. It covers cross-sectional and longitudinal studies that generalize findings from a sample to the entire population by employing questionnaires or structured interviews as the data gathering method (Babbie, 1990). The instrument of choice being questionnaires for the purposes of this study.

3.4 Population and sample

The methodology and all other factors that must be followed when choosing a sample from the population in general and the target group are referred to as the sample design for this study. This enables a study to specify evaluations to be used to deduce the population factors that must be considered to establish an accurate sample population; this can affect the validity of the results obtained and must therefore be carefully taken into consideration (Kabir, 2016; Du Plooy-Cilliers et al., 2015). In this study, the population of interest, the process used to choose the sample, and the sample size all make up the sample design.

3.4.1 *Population*

A list that identifies elements like geographic places, institutions, people, and family units and is easily accessible for determining the research being undertaken is the referred to as the sample frame, from which the population of interest is derived (Kumar, 2019; Wiid & Diggines, 2018). South Africa served as the study's geographic focus, with a focus on regions with the necessary infrastructure to access short-term insurance offerings. Short-term insurance clients serve as the study’s focus and was used to determine intention to use short-term insurance systems and/or substitute traditional insurance modes of short-term insurance for peer-to-peer insurance systems.

3.4.2 *Sample and sampling method*

Sampling methods can be divided into two categories: probability sampling and non-probability sampling. In the probability sampling approach, every member of the population has a chance of being picked, but the population elements in the non-probability sampling method do not have a known probability of being elected (Wiid & Diggines, 2015). The convenience sampling approach of non-probability sampling was employed this study. Convenience sampling is a technique that requires the sample to be easily accessible and nearby when it is chosen from the population (Bhattacherjee 2012). This is the case as institutional data from an insurance firm in Alberton was used to contact short-term insurance clients to complete the online survey. For the purposes of this study, the sample size refers to the total number of respondents (Du Plooy- Cilliers et al., 2015). According to this study, a good sample has two qualities: it should be adequate and representative (Singh, 1986). This study determined the best compromise between costs and a large enough sample size while trying to draw a sample using a statistical method Smart Partial Least Squares, which was used to calculate the desired sample size (Wiid & Diggines, 2015). Despite the magnitude of the population of interest for this investigation, the technique and instruments used in this study support a sample size of at least 100 as being adequate for the analysis via the 2-step approach (Anderson & Gerbing, 1988).

3.5 The research instruments.

The TAM2 questionnaire evaluates the intention to adopt an information system (Venkatesh & Davis, 2000). The questionnaire (See Appendix C) was adapted for the use of this study and contains 23 items, where respondents were required to describe how likely they are to agree or disagree with the statement. The responses were measured on a seven-point Likert-scale ranging from 1 (“strongly disagree”) to 7 (“strongly agree”). The use of the Likert scale is important as it is a reliable and standardized method for measuring respondents' perceptions, enabling more precise data analysis and interpretation. This can be tested through the use of Cronbach’s alpha. The Cronbach alphas of the scales used in the adapted model range from 0.81 to 0.98.

The scale for subjective norm (SN) was adapted from items included in Venkatesh & Davis (2000) as well as Shih & Fang (2004). The Perceived Ease of Use (PEOU) scale used was adapted from the items in Davis (1989). The scale for Perceived Usefulness (PU)

was adapted from items listed in the Davis (1989) questionnaire. The scale for Perceived Risk (PR) was adapted from items in the Dash and Saji (2007) study. The scale for Perceived Trust (TRU) was adapted from items included in Dash and Saji (2007) study. The scale for Behavioural Intention (BI) was adapted from items listed in Chin et al. (2003) questionnaire.

3.6 Procedure for data collection

Data for this study was gathered through a survey with questions based on Qualtrics-created metrics. Participants received a pop-up warning about the nature and aim of the study before they could access the survey. The participants were informed that their answers would be kept private and anonymous, and they needed to give their approval before participating in the study. Participants were given information on the aim of the study, an informed consent form, the researcher's contact information, and instructions for filling out the questionnaire.

3.7 Data analysis strategies and interpretation

The proposed model was tested using IBM SPSS AMOS in accordance with the two-step Anderson & Gerbing (1988) approach to achieve a confirmatory factor analysis. First, the measurement model's convergent and discriminant validity were evaluated using the latent constructs and corresponding observed variables with the use of an average variance extracted analysis and correlational analysis (i.e., factor loadings). Second, the structural model was investigated in order to validate the links between the hypotheses with the use of the model specification, identification, parameter estimation, model evaluation, and model modification (Kline 2010; Hoyle 2011; Byrne 2013; Grassi et. al., 2020).

3.8 Possible limitations and challenges of the study

While questionnaires are a good method of collecting important data, there are several restrictions that might have had an impact on a study process. The information provided by the respondents may only be based on their own experiences as a result of the small research sample, which may not correctly reflect the subject matter's current status. Furthermore, a high response rate (80%) might be difficult to achieve as responses cannot be guaranteed as participation in the study is voluntary.

3.9 Quality Assurance

To ensure the replicability of a study, the validity (verification) and reliability (replicability) measures below indicate the data quality.

3.9.1 *External validity*

The extent to which you can generalize the findings of a study to other situations, people, settings and measures will be determined by the population, ecological and temporal validity (Creswell, 2012).

3.9.2 *Internal validity*

The degree to which a piece of evidence supports a claim regarding cause and effect within the context of a specific study is known as internal validity. The following tactics will be used to ensure internal validity:

Peer assessment — The research supervisor acted as a peer assessor.

Participatory research methods — The participant was involved in the majority of this study's phases, from project conception through vetting interpretations and conclusions.

Clarification of researcher bias— Right from the start of this investigation, the researcher's prejudice was described in writing in the thesis proposal under the heading, the researcher's role (Creswell, 2012).

3.9.3 *Reliability*

Internal consistency reliability of the factors was be established through the evaluation of MacDonald Omega as well as Cronbach Alpha’s (Creswell, 2012).

3.10 Ethical considerations

The purpose of this study was explained to participants in an unambiguous manner. An information sheet was provided, and informed consent was requested before completing the questionnaires. Participants were assured that they will remain completely anonymous, and that participation was voluntary at all times. Participants were able to withdraw from

the study at any time without the fear of a penalty or any negative consequences. Participants had access to the researchers' contact details. The results of this study were kept confidential on a single, password-protected computer to which only the research team has access. The researcher sought permission from the Wits Business School ethics Committee, PGC Ethics Committee, and the University committee to complete the research.

The benefit of this study is directly linked to the production of knowledge and contribution toward a better understanding of the TAM2 and interactions within the broader framework of adoption theory. This study has no immediate material benefits or risks.

CHAPTER 4. PRESENTATION OF RESULTS

4.1 Introduction

This chapter presents a sample profile, confirmatory factor analysis (including the factor estimates, model fit, post hoc model performance and the path diagram) as well as a structural equation model.

4.2 Results pertaining Hypothesis 1:

4.2.1 *Sample profile*

The demographic profile of this study's respondents is outlined in this section. The respondents provided information on their age (Table 1), highest educational level (Table 2), the annual income of respondents (Table 3), cost of short-term insurance (Table 4), who respondents consult when purchasing short-term insurance (Table 5), which providers the respondents utilised for short term insurance (Table 6) and which whether the respondents have ever made use of peer-to-peer insurance products (Table 7). Given that response rates to online surveys are typically lower than 10%, the response rate of 11,94% can be viewed as an acceptable rate (Swayne, 2020).

The age distribution of respondents reveals that the majority fall within the age range of 51 to 60, accounting for 28.4% of the total. This is followed by respondents aged 61 to 70, representing 19.6%. The younger age groups (30 and younger, 31 to 40) make up a smaller percentage, while respondents aged 71 and older constitute 6.9%. The higher representation of respondents in the age range of 51 to 60 and 61 to 70 suggests that individuals in these age groups might have a greater need for short-term insurance. As people enter their 50s and 60s, they may have more assets to protect and a higher likelihood of encountering unexpected events or accidents. This could make them more inclined to seek insurance coverage (Browne & Kim, 1993).

Table 1: Age of Respondents

Classification	Count	Percent
Undisclosed	1	1.0%
30 and Younger	16	15.7%
31 to 40	13	12.7%
41 to 50	16	15.7%
51 to 60	29	28.4%
61 to 70	20	19.6%
71 and Older	7	6.9%

The educational level of the respondents indicates that the largest proportion (41.2%) have attained a postgraduate degree, followed by diploma holders (22.5%) and those with a matric qualification (20.6%). A smaller percentage reported having an undergraduate degree or no formal education. The higher percentage of respondents with postgraduate degrees could indicate a greater awareness and understanding of the benefits of insurance. Higher education levels often correlate with higher income levels and a greater appreciation for financial planning. Individuals with advanced degrees may recognize the importance of protecting their assets and be more willing to adopt short-term insurance products (Lusardi & Mitchell, 2014).

Table 2: Educational Level of Respondents

Classification	Count	Percent
Undisclosed	1	1.0%
None	3	2.9%
Matric	21	20.6%
Diploma	23	22.5%
Undergraduate	12	11.8%
Postgraduate	42	41.2%

The distribution of respondents based on annual income shows that the highest percentage (22.5%) falls within the income range of R197,001 to R400,000. Other income brackets, such as R19,001 to R68,000 and R400,001 to R688,000, also have significant representation. The distribution of respondents across different income brackets suggests that short-term insurance adoption is not limited to a specific income group. However, the larger representation in the income range of R197,001 to R400,000 might indicate that individuals with a relatively higher income are more likely to afford insurance premiums and prioritize coverage for their assets supporting the assumption that short-term insurance is a necessity to the adopters.

Table 3: Annual Income of Respondents

Classification	Count	Percent
Undisclosed	1	1.0%
R19 000 and Lower	11	10.8%
R19 001 to R68 000	14	13.7%
R68 001 to R197 000	10	9.8%
R197 001 to R400 000	23	22.5%
R400 001 to R688 000	12	11.8%
R688 001 to R 1 480 000	22	21.6%
R1 480 001 to R2 360 000	5	4.9%
R2 360 000 and higher	4	3.9%

Regarding the cost of short-term insurance, the majority of respondents (37.3%) reported paying between R2,001 and R4,000. This is followed by those who pay between R0 and R2,000 (31.4%). A smaller percentage reported higher insurance costs, ranging from R4,001 to R10,000. The higher percentage of respondents paying between R2,001 and R4,000 for short-term insurance suggests that individuals who are willing to allocate a moderate portion of their income for insurance coverage are more likely to adopt short-term insurance products. It implies that they see value in protecting their assets and are willing to pay a reasonable premium for comprehensive coverage (Malambo, 2022).

Table 4: Cost of Short-Term Insurance of Respondents

Classification	Count	Percent
Undisclosed	1	1.0%
R0 to R2 000	32	31.4%
R2 001 to R4 000	38	37.3%
R4 001 to R6 000	15	14.7%
R6 0001 to R8 000	7	6.9%
R8 001 to R10 000	6	5.9%
More than R10 000	3	2.9%

When making decisions about short-term insurance, the majority of respondents (65.7%) consult financial advisers. Friends and family members were also consulted by 15.7% of respondents, while a smaller percentage relied on nobody or sought advice from other sources. The majority of respondents consulting financial advisers when purchasing short-term insurance indicates the importance of professional advice in making insurance decisions. Individuals who seek guidance from financial advisers may be more proactive

in managing their financial well-being and recognizing the benefits of expert recommendations. They are likely to prioritize securing appropriate insurance coverage.

Table 5*:* Individuals consulted when purchasing Short-Term Insurance

Classification	Count	Percent
Undisclosed	2	2.0%
Nobody	9	8.8%
Friends and Family	16	15.7%
Financial Adviser	67	65.7%
Other	8	7.8%

The primary provider chosen by respondents for short-term insurance is Santam, accounting for 54.9% of the responses. Discovery is the second most commonly used provider (18.6%), followed by other providers. It is worth noting that some respondents did not disclose their provider of choice. The popularity of Santam as the primary provider chosen by respondents suggests that its reputation, market presence, and range of offerings might have influenced their decision to adopt short-term insurance. The preference for well-established providers like Santam and Discovery could be attributed to their strong brand recognition and the trust associated with their long-standing presence in the insurance industry (Stokes, 2022).

Table 6: Providers used when purchasing Short-Term Insurance

Classification	Count	Percent
Undisclosed	3	2.9%
Discovery	19	18.6%
Santam	56	54.9%
Old Mutual	3	2.9%
Naked	1	1.0%
Pineapple	0	0.0%
Other	20	19.6%

Table 7 presents the usage of peer-to-peer insurance among the respondents. The data shows that the majority of participants (97.1%) have not utilized peer-to-peer insurance products, while a small percentage (2.9%) have used such products. This information suggests that peer-to-peer insurance is still relatively uncommon among the study participants, highlighting the potential for further exploration of its adoption and potential benefits.

Table 7: Usage of Peer-to-Peer Insurance

Classification	Count	Percent
Yes	3	2.9%
No	99	97.1%

Overall, the demographic characteristics provide valuable insights into the profile of the study participants, including their age distribution, educational background, income levels, consulting preferences, preferred insurance providers, and usage of peer-to-peer insurance. These insights contribute to understanding the characteristics and perspectives of individuals interested in short-term insurance, enabling a comprehensive analysis of the factors influencing their adoption of peer-to-peer insurance policies.

4.2.2 *Construct Validity*

Average variance extracted (AVE) is a metric for comparing the variation captured by a construct to the variance resulting from measurement error. By establishing if each indicator's predicted pattern coefficient on its proposed underlying construct component is significant, convergent validity can be evaluated from the measurement model (greater than twice its standard error) (Anderson & Gerbing, 1988). This is accomplished by calculating the average extracted variance (AVE). This is thus how much variation in items can be explained by the construct or latent variable when determining the average variance extracted for a construct. An acceptable AVE is 0.5 (Hair et al., 2009). The constructs used in this study (in Table 8), fulfils this criterion (AVE ≥ 0.5; Hair et al., 2009) and hence the constructs are said to have convergent validity.

Table 8: Convergent Validity Inspection through inspection of Average Variance Extracted

CONSTRUCT	AVERAGE VARIANCE EXTRACTED
PU	0.80
PEOU	0.79
SN	0.78
PR	0.60
TRU	0.73

When developing an instrument using a latent construct, discriminant validity is necessary (Hair et al., 2019). Discriminant validity is divergent validity, which implies that there should be a conceptually substantial difference between two concepts (Field, Miles, & Field, 2012). It seeks to establish that one concept is fundamentally distinct from the other (Hamid et al., 2017). If the correlation value between the two (or more) constructs is less than the square root of the AVE value, discriminant validity exists (Fornell & Larcker, 1981). The correlation values (diagonal in Table 9) are less than the square root of the AVE values and hence discriminant validity exists through the Fornell-Larcker Criterion (1981).

Table 9: Discriminant Validity Testing

CONSTRUCT	PU	PEOU	SN	PR	TRU
PU	0.895				
PEOU	0.802*	0.892			
SN	0.307*	0.403*	0.884		
PR	0.571*	0.632*	0.516*	0.775	
TRU	0.726*	0.752*	0.497*	0.766*	0.857

Note p<0.001*

AVE Indicated on Diagonal

4.2.3 *Reliability*

Cronbach's alpha is a metric used to evaluate the internal consistency or reliability of a group of scale or test items. Cronbach's alpha is one approach to gauge the strength of such consistency. In other words, the reliability of any measurement relates to the degree to which it is a consistent measure of a notion. By comparing the amount of shared variation, or covariance, among the items that make up an instrument to the amount of overall variance, Cronbach's alpha evaluates reliability. According to the theory, if an instrument is dependable, there should be a significant amount of covariance between its items and variance (Cronbach, 1951). A Cronbach alpha of above 0.7 Indicates a high internal consistency, as seen in Table 10, the Cronbach’s alpha for all constructs meets this criterion.

In traditional test theory, the McDonald's omega coefficient of reliability is employed. Specifically concentrating on the consistency of the test's factor structure, it is a sort of

measurement used to examine the validity of a test or assessment tool. McDonald's omega calculates the reliability of many aspects or dimensions inside a test.

The range of omega values is 0 to 1, with values closer to 1 suggesting a high level of reliability (McDonald, 1999). Like Cronbach's alpha, the McDonald's Omega threshold is not a rigid or standardized figure. It depends on the test's objectives and the subject matter. According to a widely accepted rule of thumb, numbers above 0.7 denote acceptable reliability, values between 0.6 and 0.7 denote doubtful reliability, and values below 0.6 denote poor reliability. The McDonald's Omega for each construct (PU, PEOU, SN, PR, TRU), as shown in Table 10, achieves values that the rule of thumb considers that indicates an appropriate reliability.

Table 10: Reliability of Constructs Evaluated by McDonald's Omega, Cronbach's Alpha and Composite Reliability

CONSTRUCT	CRONBACH ALPHA (A)	MCDONALD'S OMEGA (Ω)	COMPOSITE RELIABILITY (CR)
PU	0.941	0.940	0.942
PEOU	0.937	0.936	0.940
SN	0.867	.[a]	0.877
PR	0.850	0.856	0.856
TRU	0.936	0.935	0.932

[a] McDonald's Omega cannot be calculated for constructs with less than two items

Similar to Cronbach's alpha, composite reliability (sometimes referred to as construct reliability) is a metric for scale components' internal consistency (Netemeyer, 2003). According to Brunner and Süß (2005), it is equivalent to the entire amount of actual score variance in relation to the total scale score variance. It can also be referred to as an "indicator of the shared variance among the observable variables utilized as an indication of a latent construct" (Fornell & Larcker, 1981, pg. 78). There is disagreement on the thresholds for composite dependability (a suitable threshold can range from 0.6 and higher), with various writers proposing various threshold values. How many items you have in your scale has a significant impact. Lower reliability levels typically result from smaller scale item quantities. The Fornell & Larcker (1981) requirement has been met for all constructs, as can be shown in Table 10.

4.2.4 *Confirmatory Factor Analysis (CFA)*

In Table 11, below, the results of the Confirmatory Factor Analysis and determination of the factor loadings are presented.

Table 11: Confirmatory Factor Analysis and Determination of Factor Loadings

FACTOR	*INDICATOR*	*ESTIMATE*	*SE*	*Z*	*P*	*STAND.EST*
PU	PU_1	1.43	0.149	9.62	<0.001	0.799
	PU_2	1.56	0.132	11.82	<0.001	0.908
	PU_3	1.53	0.120	12.79	<0.001	0.948
	PU_4	1.51	0.126	12.06	<0.001	0.917
PEOU	$PEOU_1$	1.47	0.127	11.55	<0.001	0.895
	$PEOU_2$	1.55	0.157	9.89	<0.001	0.813
	$PEOU_3$	1.62	0.127	12.75	<0.001	0.948
	$PEOU_4$	1.60	0.135	11.82	<0.001	0.908
SN	SN_1	1.50	0.189	7.97	<0.001	0.786
	SN_2	1.66	0.168	9.87	<0.001	0.973
PR	PR_1	1.37	0.154	8.91	<0.001	0.772
	PR_2	1.61	0.151	10.63	<0.001	0.871
	PR_3	1.04	0.149	7.00	<0.001	0.646
	PR_4	1.34	0.144	9.25	<0.001	0.794
TRU	TRU_1	1.49	0.125	11.97	<0.001	0.916
	TRU_2	1.37	0.140	9.80	<0.001	0.810
	TRU_3	1.50	0.141	10.62	<0.001	0.854
	TRU_4	1.54	0.151	10.21	<0.001	0.831
	TRU_5	1.56	0.142	10.97	<0.001	0.870

Comparative Fit Index (CFI):

The CFI is a normed fit index as it has a range of 0 to 1, with higher values signifying a better fit. CFI is the parameter that is most frequently used to define a good fit if CFI ≥ 0.90 with a conservative estimate of CFI ≥ 0.95 (Hu and Bentler, 1999; West et al., 2012). The model meets the Hu and Bentler (1999) criterion, as shown in Table 12, and fits well with the less conservative CFI cut off choice.

Table 12: Fit Measures for the Confirmatory Factor Analysis

CFI	TLI	SRMR	RMSEA
0.927	0.913	0.046	0.0975

Tucker–Lewis Index (TLI):

A relative decrease in misfit is measured by the TLI (Tucker & Lewis, 1973) per degree of freedom. Bentler and Bonett (1980) recommended that TLI > 0.90 indicates an accepTable fit and subsequently a more conservative estimate of TLI ≥ 0.95 which is typically used as a cut-off value for the goodness of fit was suggested (Hu & Bentler, 1999; West et al., 2012). The TLI is within the required range on a less conservative proposal, as shown in Table 12 column (Hu & Bentler, 1999; West et al., 2012).

Standardized Root Mean Square Residual (SRMR)

The difference between the observed correlation and the model-implied correlation matrix is known as the SRMR. As a result, it enables evaluation of the (model) fit criterion using the average magnitude of the differences between observed and expected correlations. In a more conservative form, a value of less than 0.08 (see Hu and Bentler, 1999) is regarded as a good fit. The model satisfies the criteria for discrepancies between observed and expected correlations, as can be seen in Table 12.

Root Mean Square Error of Approximation (RMSEA):

Table 13: Correlation matrix

Construct	PU	PEOU	SN	PR	TRU
PU	*1.000*				
PEOU	*0.802**	*1.000*			
SN	*0.307**	*0.403**	*1.000*		
PR	*0.571**	*0.632**	*0.516**	*1.000*	
TRU	*0.726**	*0.752**	*0.497**	*0.766**	*1.000*

Note p<0.001*

The degree of freedom at which an approximation causes a discrepancy is measured by the RMSEA (Steiger, 1989, 1990; Steiger & Lind, 1980). The RMSEA is a measure of the badness of fit; it produces lower values for a better match. A model with an RMSEA ≥ .10 is undeserving of serious consideration, whereas one with an RMSEA ≤ .06 may be deemed accepTable (Browne & Cudeck, 1993; Hu & Bentler, 1999). According to the Hu & Bentler (1999) Criteria, the model's RMSEA value can be viewed as having a marginally accepTable fit, as seen in Table 12.

4.2.5 *Structural Equation Modelling*

Descriptive statistics of observed variables:

In SEM, the inference of causality within the model is made as a result of the variation and association of observed variables gained from the provided data. The correlation coefficient is typically used to measure association and variance. Therefore, before conducting a thorough analysis, it should be carefully examined (Kang & Ahn, 2021). Tabachnick (2007) advised examining the correlation coefficient's size according to the 0.3 criterion, Hair (1995) categorized the size as "minimum level," "important," and "practically significant," respectively, when the correlation coefficient was ±0.3, ±0.4, and ±0.5. The correlation matrix in Table 13 shows that, when the recommended levels suggested by Hair (1995) are taken into account, all of the correlation values of the constructs can be regarded as significant.

Goodness of Fit:

Standardized Root Mean Square Residual (SRMR)

As previously mentioned, the SRMR is the difference between the actual correlation and the correlation matrix implied by the model. The average magnitude of the discrepancies between actual and expected correlations can then be used to evaluate the (model) fit criterion. In a more cautious form, a value of less than 0.08 is regarded as a satisfactory fit (Hu & Bentler, 1999). The SRMR value is in accordance with Hu & Bentler's (1999) threshold for an acceptable fit, as can be seen in Table 14.

Table 14: Fit Indices

SRMR	RMSEA	CFI
0.042	0.160	0.937

Root Mean Square Error of Approximation (RMSEA):

As stated above, the RMSEA calculates the degree of freedom in which an approximation results in a discrepancy (Steiger, 1989, 1990; Steiger & Lind, 1980). The RMSEA is a measurement of how poorly a model fits, a better fit results in lower values. Table 14 shows that, when Hu & Bentler's (1999) cut-off is taken into account, the RMSEA appears to indicate a poor model fit.

Sadly, it has been established that the RMSEA has significant issues with simpler models that have few degrees of freedom. This is particularly true for simple CFAs and route models, which more frequently have a limited degree of freedom. Even though the model correctly fits the data in this case, the RMSEA may falsely imply a poor match (Kenny et al., 2015). Given that the model only has 9 degrees of freedom, this appears to be the case. Instead of seeking the RMSEA, one might demonstrate the model's fit primarily using CFI (and/or TLI) and SRMR which is the basis on which this study determines the model fit. To affirm this view, several other fit indices have been employed. The CFI as seen in Table 14, indicates an acceptable fit with a CFI > 0.9. and in conjunction with the SRMR indicated in Table 14, one can conclude that the model has an acceptable fit.

Evaluation of the measurement model and its estimates:

Since the measurement model serves as the conceptual foundation for defining latent variables, its evaluation is essential. For the measurement model, factor loadings, standardized estimates, p-values, and squared multiple correlations (SMC) are presented. SMC (R^2) in the measurement model denotes the amount of variance for a given observed variable that is explained by latent variables, as well as the relationship "measurement error = 1-SMC" (Kang & Ahn, 2021, p158).

Standardised Regression/Path Coefficients (β)

The standardized regression coefficients, or betas, in a structural equation modelling (SEM) analysis show the degree and direction of the association between variables in the model. A standardized beta coefficient measures how strongly each independent variable has an impact on the dependent variable. The effect is stronger the higher the beta coefficient's absolute value (Bollen, 1989; Hair et al., 2009, Kline, 2010). Table 15 shows that the exogenous variable with the strongest impact on the Behavioural Intention was Trust, followed by Perceived Ease of Use, Perceived Usefulness, Perceived Risk and Finally Subjective Norm. Values larger than 0.7 are typically viewed as very good, whereas values greater than 0.3 are typically interpreted as good. As seen in Table 15 all beta values can be interpreted as having a strong effect on the endogenous variable BI.

Table 15: Measurement Model

				95% CI					
Latent	**Observed**	**Estimate**	**SE**	**Lower**	**Upper**	**B**	**Z**	**p**	**R^2**
Exogenous	PU	1.000	0.000	1.000	1.000	0.845			0.715
	PEOU	1.027	0.093	0.845	1.210	0.868	11.03	<0.001	0.754
	SN	0.600	0.112	0.739	0.821	0.507	5.32	<0.001	0.257
	PR	0.919	0.099	0.725	1.114	0.777	9.28	<0.001	0.604
	TRU	1.049	0.092	0.869	1.229	0.887	11.40	<0.001	0.787
Endogenous	BI	1.000	0.000	1.000	1.000	1.000			1.000

P-Values and Hypothesis Testing

The p-values associated with the estimations of the structural model parameters in structural equation modelling (SEM) represent the likelihood of witnessing the estimated

parameter values if the null hypothesis is correct. Typically, the null hypothesis for a parameter in a structural model is that the parameter's real value is zero, which denotes that there is no relationship between the variables it represents. Understanding p-values If a parameter's p-value is less than 0.05, the null hypothesis can be rejected since there is a statistically significant association between the variables it represents (Bollen, 1989; Hair et al., 2009, Kline, 2010). In other words, it is improbable that the observed relationship between the variables happened by accident. Since the p-values for each exogenous variable in Table 15 are all less than 0.05, it may be concluded that they all significantly influence behavioural intention and diverge from the null hypothesis that no relationship between the variables exist.

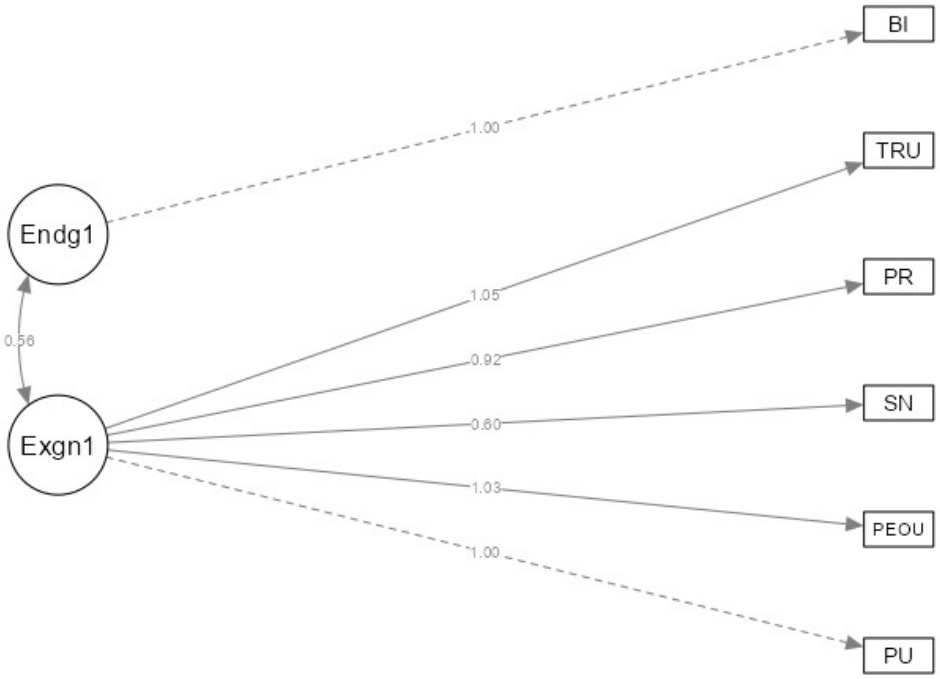
Coefficient of determination (R^2)

The amount of variance in the dependent variable that is explained by the independent variables in a regression model is expressed statistically as R-squared. Higher numbers suggest a better fit of the model to the data, and R-squared values range from 0 to 1.

A value of 0 for R-squared means that the independent variables in the model do not explain any of the variance in the dependent variable, whereas a value of 1 for R-squared means that the independent factors completely explain the variance in the dependent variable. If the dependent variable's variation is partially explained by the independent variables, the R-squared value is between 0 and 1 (Bowerman & O'Connell, 2000; Field, 2009; Kutner et al., 2004). As seen in Table 15 all the values beside Social Norm indicate a high explanation of variance in Behavioural Intention. Social Norm indicates a moderate but not substantial variance in Behavioural Intention.

4.2.6 *Path Model*

Figure 2: *Path model*



4.3 Chapter Summary

This chapter presents the results of this study. There are clear connections between the constructs and behavioural intention, proving that the research's goal was met. This is demonstrated by the metrics listed in Table 4 to Table 15, which through the two-step procedure proposed by Anderson and Gerbing (1988) shows, a model with adequate reliability, validity, and model fit using both a CFA and SEM approach with the proper convergence and discriminance.

CHAPTER 5. DISCUSSION OF THE FINDINGS

5.1 Introduction

This study used the Technology Acceptance Model 2 (TAM2) to assess the replacement of conventional short-term insurance products with peer-to-peer insurance models. This chapter provides information for both researchers and practitioners by integrating the literature and the findings to highlight the main factors influencing and impeding the substitution of insurance products.

5.2 Perceived Usefulness and Intention to Use.

The expectation that perceived usefulness plays a significant role in technology acceptance and use has been well-established in prior research, as mentioned in studies by Davis et al. (1989) and Venkatesh and Davis (2000). These studies demonstrate a positive correlation between perceived usefulness and intention to use a technology system.

In line with these findings, our study's results indicate a strong positive correlation ($p \leq 0.001$; $R^2 = 0.751$) between perceived usefulness and intention to use short-term insurance products. This suggests that perceived usefulness is a reliable predictor of technology usage behavior and holds a significant association with intention to use short-term insurance products. When perceived usefulness decreases, the intention to use short-term insurance products also decreases, and vice versa. This finding emphasizes the importance of ensuring that short-term insurance products are perceived as useful by users in order to promote their adoption and usage.

Furthermore, considering that 97.1% of the respondents had never used peer-to-peer insurance, our study also sheds light on the factors influencing the continued usage of traditional short-term insurance products. This information is valuable in understanding why traditional products remain more widely utilized. As indicated by the positive association between perceived usefulness and usage intention, the high level of perceived usefulness attributed to traditional products suggests that a decline in perceived usefulness could potentially lead to a shift towards the adoption of peer-to-peer insurance.

These findings support the hypothesis that perceived usefulness is a crucial factor in influencing individuals' intention to use short-term insurance products and their decision to continue or discontinue using traditional insurance systems. The results align with previous research and reinforce the understanding that users are more likely to adopt and utilize short-term insurance products when they perceive them as useful. By highlighting the role of perceived usefulness and its implications for the adoption of peer-to-peer insurance, this study provides valuable insights into the factors that influence individuals' choices in the insurance domain.

5.3 Perceived ease of use and behavioural intention.

In the realm of insurance technology, previous studies have established that an individual's intention to adopt a new technology is influenced by its ease of use (Adams et al., 1992; Davis, 1989; Hendrickson et al., 1993; Segars & Grover, 1993; Subramanian, 1994; Szajna, 1994). Building upon this body of literature, the present study aimed to investigate the impact of perceived ease of use on the behavioural intention to use traditional short-term insurance systems.

The findings of this study reveal a strong positive correlation ($p<0.001$; $R^2 = 0.754$) between perceived ease of use and the behavioural intention to use traditional short-term insurance systems. Specifically, when individuals perceive the traditional insurance systems as easier to use, their intention to use those systems increases. Conversely, a lower perceived ease of use leads to a decreased intention to use short-term insurance systems. These results align with prior research and support the hypothesis that the ease of use of traditional insurance systems is a crucial factor influencing individuals' preference for them over peer-to-peer insurance alternatives.

The implications of these findings suggest that the ease of use of traditional insurance systems plays a significant role in why they are favoured over peer-to-peer insurance alternatives. Users tend to opt for systems that are perceived as more user-friendly and convenient. This finding is consistent with prior research and meets the expectations set forth by the current study. It indicates that when the inverse conditions exist, where peer-to-peer insurance systems are perceived as easier to use, users are more likely to have a greater affinity to substitute traditional insurance products with peer-to-peer alternatives.

Overall, these findings contribute to the existing knowledge by highlighting the importance of ease of use in shaping users' intention to adopt and utilize traditional short-term insurance systems. By recognizing the role of perceived ease of use, insurance providers can design systems that are more user-friendly and attractive to potential customers, potentially facilitating the adoption of peer-to-peer insurance models in the future.

5.4 Subjective Norm and Behavioural Intention.

Prior research has demonstrated the significance of subjective norm in influencing the adoption of new systems, including the adoption of short-term insurance products (Bananuka et al., 2019; Mamun et al., 2021; Mathieson, 1991; Venkatesh & Davis, 2000). Previous studies have found a positive correlation between an individual's perception of what is important to those in their lives and their intention to engage in a specific activity, suggesting that subjective norm may play a role in the decision to adopt alternative short-term insurance products.

Building upon this previous research, our study aimed to further explore the role of subjective norm in individuals' decision-making processes regarding the adoption of short-term insurance products. The current findings reveal a weak positive correlation between subjective norm and behavioral intention ($p<0.001$; $R^2 = 0.257$). Although the correlation is weak, these results provide valuable insights into the potential impact of subjective norm on the adoption of short-term insurance products. It suggests that a decrease in subjective norm could potentially lead to a decrease in individuals' intention to adopt traditional insurance systems and an increased propensity to adopt alternative short-term insurance products, such as peer-to-peer insurance.

These findings align with a priori expectations and support the notion that subjective norm is an influential factor to consider when examining individuals' adoption of short-term insurance products. Although the correlation is weak, it highlights the relevance of subjective norm in individuals' decision-making processes and offers insights into its potential impact on the adoption of alternative short-term insurance options. Hence underscoring and supporting the hypothesis that subjective norm influence the (dis)continuation of use of traditional insurance systems.

5.5 Perceived Risk and Behavioural Intention.

Prior research has highlighted low perceived risk as a key driver in online financial transactions, including the adoption of digital insurance products. Bauer (1960) defined perceived risk as the unpredictability and undesirable outcomes linked to consumers' expectations and demonstrated how it influences purchasing decisions. According to Blankertz and Cox (1969), perceived risk is linked to the subjective ambiguity of outcomes, which affects the propensity to use digital insurance products.

Aligned with previous research, this study aimed to examine the relationship between perceived risk and the intention to use short-term insurance systems. The findings revealed a strong negative association between perceived risk and intention to use (p-value < 0.001; R^2 = 0.604). As anticipated, a higher perceived risk is likely to deter individuals from using short-term insurance systems, while a lower perceived risk is associated with a higher intention to use.

Consequently, this study contributes to the existing literature by demonstrating the significant impact of perceived risk as a deterrent in the adoption of short-term insurance systems. The results support the hypothesis that the presence of perceived risk hinders individuals' willingness to embrace short-term insurance systems and suggests that reducing perceived risk is essential to encourage their usage. Hence it can be proposed that traditional insurance systems have a low perceived risk and thus enhances the inclination to make use of traditional short-term insurance systems as opposed to peer-to-peer insurance systems.

Overall, these findings underscore the importance of addressing perceived risk concerns in the design and implementation of short-term insurance systems. By minimizing perceived risk and enhancing trust and security, insurers can increase the likelihood of individuals adopting and utilizing short-term insurance systems effectively.

5.6 Perceived Trust and Behavioural Intention.

Prior research has demonstrated the importance of trust in determining usage intention in online settings, particularly for short-term insurance products. Due to the increased potential for opportunistic behaviour in online environments, trust plays a critical role in

shaping consumer interactions with insurance businesses (Gefen et al., 2003; Koch et al., 2011; Reichheld and Schefter, 2000).

This study supports these prior findings, revealing a statistically significant result with a strong positive relationship ($p< 0,001$; $R^2 = 0.787$) between perceived trust and the intention to use short-term insurance products. The inverse relationship, predicting a decline in usage intention with a decrease in perceived trust, is also supported by this study's findings indicating that the reduction of perceived trust would lead to a reduction in the intention to continue the use of traditional insurance systems and substitute them for peer-to-peer insurance systems.

Overall, these results meet the expectations set forth by previous research (Gefen et al., 2003; Koch et al., 2011; Reichheld and Schefter, 2000), emphasizing the important role of trust in shaping consumer behaviour in the context of short-term insurance products in online settings and providing a possible rationale for why 97.1% of respondents preferred traditional systems as opposed to peer-to-peer insurance.

5.7 Chapter Summary

This chapter highlights the important role played by perceived ease of use, perceived usefulness, perceived risk, subjective norm, and perceived trust in determining a person's intention to use short-term insurance products. The results of this study showed a statistically significant relationship between each of these constructs and behavioural intention, confirming that they are significant predictors with regards to the usage of short-term insurance products. Furthermore, the positive correlation between these constructs and behavioural intention supports the idea that a decrease in these factors is likely to result in a decrease in the intention to use traditional insurance products. Given that short-term insurance is considered a necessity, as indicated by its high penetration rate, it can be concluded that these factors play a crucial role in the substitution of traditional insurance products with peer-to-peer insurance products.

CHAPTER 6. CONCLUSIONS & RECOMMENDATIONS

6.1 Introduction

The research aimed to investigate the factors that influence the substitution of traditional short-term insurance providers for peer-to-peer short-term insurance providers. The findings showed that subjective norm, perceived ease of use, perceived usefulness, perceived risk, and perceived trust all had a significant impact on the intention to continue the use of traditional insurance systems. The hypotheses provide valuable insights into why peer-to-peer insurance has not yet been widely adopted. The study contributes to a deeper understanding of the substitution process and highlights the crucial role of these factors in promoting the adoption of peer-to-peer insurance systems. The chapter concludes with recommendations based on the findings and suggestions for future research to further advance the field.

6.2 Conclusions

The research objective to contextually review the factors that influence the substitution of traditional short-term insurance providers for peer-to-peer short-term insurance providers was successfully met through the analysis of hypotheses (H1-H5) related to the factors that influence the intention to use short-term insurance systems. The findings showed that lower perceived usefulness, ease of use, trust, and high perceived risk, as well as an unfavourable subjective norm, would likely result in the discontinuation of traditional short-term insurance systems, leading to their substitution with technologically advanced peer-to-peer insurance systems in a South African context. This is important given the high penetration rate of short-term insurance in the region, making substitution to modern systems inevitable when unfavourable scores are recorded against the factors studied.

This study extends from previous research as it evaluated financial systems within the context of a South African short-term insurance customer base based in Alberton and provided a baseline for the adoption of digital insurance concepts in the field of short-term insurance using the Technology Acceptance Model 2 (Gomber et al., 2017). Additionally, the study assessed the market demand for cost-effective financial products and identified the business case for alternative short-term insurance models for prospective policyholders

(Ellingrud et al., 2022; KPMG, 2021; Manchester, 2021). This was achieved through the investigation of clients' and business entities' willingness to adopt peer-to-peer short-term policies compared to traditional, centralized insurance policies and stickiness in the market has resulted in a reluctance to substitute traditional short-term insurance products. This study thus addressed the shortcomings of previous research as identified in the research problem and extended the understanding of the adoption of short-term insurance products within the context of TAM2 and South Africa.

6.3 Recommendations

6.3.1 *Significance for the Marketing/E-Commerce Practitioner:*

The study's findings are of significance to marketers and e-commerce practitioners in the field of short-term insurance. The results indicate that factors such as perceived usefulness, perceived ease of use, perceived trust, and perceived risk play a crucial role in the adoption and discontinuation of traditional short-term insurance systems. Additionally, a negative subjective norm also has a significant impact on the intention to use these systems.

Marketers and e-commerce practitioners can leverage these insights to improve the design and marketing of their peer-to-peer insurance systems, ensuring that they are perceived as useful, easy to use, trustworthy, and low-risk by their potential customers. This can help increase the adoption and usage of these systems and ultimately increase the market share for these innovative insurance products.

6.3.2 *Theoretical Significance for the Technology Acceptance Model*

The findings of this study hold theoretical significance for the Technology Acceptance Model 2 (TAM2). The results suggest that the factors of perceived usefulness, perceived ease of use, perceived trust, perceived risk, and subjective norm are important determinants of the intention to substitute traditional short-term insurance providers for peer-to-peer insurance providers. These findings contribute to the literature on TAM2 by demonstrating the model's ability to explain the adoption of new technologies in the context of short-term insurance.

This study provides further evidence of the usefulness of TAM2 as a theoretical framework for understanding the factors that influence technology adoption. It highlights the importance of considering perceived usefulness, ease of use, trust, and subjective norm in the adoption of peer-to-peer short-term insurance services and suggests that future research in this area should focus on these factors. Additionally, the study provides insight into the role of perceived risk in the adoption of new technology, which is a unique contribution to the literature on TAM2.

6.3.3 *Significance for the FSCA and other policymakers*

The research findings have significant policy implications for the Financial Sector Conduct Authority (FSCA) in South Africa. The study highlights the factors that influence the substitution of traditional short-term insurance providers with peer-to-peer insurance systems, such as perceived usefulness, ease of use, trust, perceived risk, and subjective norm. Considering the high penetration rate of short-term insurance in the region and the inevitability of substitution when unfavourable scores are recorded for these factors, the FSCA should take proactive measures to adapt its policies and regulations to accommodate the growing presence of technologically advanced insurance models. This includes ensuring regulatory compliance, consumer protection, and solvency requirements for peer-to-peer insurance platforms.

Moreover, the FSCA should consider promoting transparency, reliability, and user-friendliness in digital insurance systems. The study's contextual evaluation of the South African short-term insurance customer base and its use of the Technology Acceptance Model 2 provide a valuable baseline for the FSCA to understand the adoption of digital insurance concepts and make informed policy decisions. By addressing the shortcomings of previous research and extending the understanding of short-term insurance adoption, the study can guide the FSCA in formulating policies that support innovation, competition, and consumer interests in the evolving landscape of short-term insurance in South Africa.

6.4 Suggestions for further research

Future research can contribute to a deeper understanding of the substitution of traditional short-term insurance providers with peer-to-peer short-term insurance providers and provide valuable insights for practitioners in the insurance industry, addressing both future avenues as well as current short comings. Additionally, it can further develop the Technology Acceptance Model (TAM2) by exploring the following areas:

Comparative study: Conduct a comparative analysis between traditional short-term insurance providers and peer-to-peer short-term insurance providers to identify the specific factors that contribute to the substitution and understand how these factors differ between the two models.

Demographic variables: Investigate the role of demographic variables, such as age, income, education, and others, in influencing the adoption of peer-to-peer short-term insurance providers. Additionally, explore how these demographic variables impact the substitution of traditional short-term insurance providers.

Long-term implications: Investigate the long-term implications of the substitution process, including its impact on customer satisfaction, loyalty, and overall market dynamics. Examine how the adoption of peer-to-peer short-term insurance providers affects customer behavior and the competitive landscape in the insurance industry.

Regulatory considerations: Explore the regulatory considerations and challenges associated with the emergence of peer-to-peer short-term insurance providers. Investigate the regulatory frameworks and policies needed to ensure consumer protection, fair competition, and financial stability in this evolving market.

Long-term insurance sector: Investigate the adoption of peer-to-peer insurance models within the long-term insurance sector. Explore the factors that influence the substitution of traditional long-term insurance providers with peer-to-peer alternatives, and compare them to the findings from the short-term insurance sector. This research can provide insights into the potential expansion of peer-to-peer insurance across different insurance domains.

By exploring these areas, future research can provide valuable insights into the dynamics of the substitution process and help inform insurance industry practitioners, while also advancing the theoretical foundations of the TAM2.

Table 1. Consistency Table: research questions, hypotheses, data collection and data analysis

RQ #	State Research Question or Objective	Hypothesis #	Hypotheses	Data collection detail	Data analysis method
1.	To determine potential precursors for the substitution of traditional short-term insurance providers with peer-to-peer short-term insurance providers using TAM2	1.	An unfavourable subjective norm is a precursor that increases the clients' intention to substitute traditional insurance systems.	Questionnaire: Section B SN1, SN2	Latent constructs and corresponding observed variables and structural model analysis.
		2.	Low perceived ease of use is a precursor that increases the clients' intention to substitute traditional insurance systems.	Questionnaire: Section B: PEOU1, PEOU2, PEOU3, PEOU4	Latent constructs and corresponding observed variables and structural model analysis.

RQ #	State Research Question or Objective	Hypothesis #	Hypotheses	Data collection detail	Data analysis method
1.	To determine potential precursors for the substitution of traditional short-term insurance providers with peer-to-peer short-term insurance providers using TAM2	3.	Low perceived usefulness is a precursor that increases the clients' intention to substitute traditional insurance systems.	Questionnaire: Section B PU1, PU2, PU3, PU4	Latent constructs and corresponding observed variables and structural model analysis.
		4.	Perceived risk is a factor that influences the intention to discontinue use of traditional insurance systems.	Questionnaire: Section C $PR1_b$, $PR2_b$, $PR3_b$, $PR4_b$	Latent constructs and corresponding observed variables and structural model analysis.

RQ #	State Research Question or Objective	Hypothesis #	Hypotheses	Data collection detail	Data analysis method
1.	To determine potential precursors for the substitution of traditional short-term insurance providers with peer-to-peer short-term insurance providers using TAM2	5.	Perceived trust is a factor that influences the intention to discontinue use of traditional insurance systems.	Questionnaire: Section C $TRU1_b$, $TRU2_b$, $TRU3_b$, $TRU4_b$, $TRU5_b$	Latent constructs and corresponding observed variables and structural model analysis
		6.	Intention to discontinue usage is a precursor for the discontinuation of traditional insurance systems.	Questionnaire: Section C $BI1_b$	Latent constructs and corresponding observed variables and structural model analysis

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APPENDIX A: Information Sheet

INVITATION LETTER

PROJECT TITLE: Peer-to-Peer Insurance: Investigating the willingness to adopt peer-to-peer short-term insurers in South Africa

RESEARCHER NAME: Mr. DF Dörfling

This invitation letter and informed consent form may contain some words that are unfamiliar to you. Please ask questions about anything you do not understand or anything you want to learn more about.

You may keep an unsigned copy of this consent form to think about or discuss with family or friends before making a decision whether or not to participate.

Once you understand, and if you agree to take part, you will be asked to sign your name or make your mark on this form. You will be offered a copy to keep.

INTRODUCTION

Hello, my name is Danie Dörfling. I am a student at the Wits Business School (WBS). I would like to invite you to take part in this study. I am conducting research for my master's degree. I have selected you to participate in this study as you are an individual who is part of the G&S Insurance database.

YOUR PARTICIPATION IS VOLUNTARY

Before you decide whether or not to participate in this study, I would like to explain the purpose, risks, benefits, what is expected of you and what you can expect from me.

- It is up to you whether or not you participate in the study
- You may choose to leave this study at any time

AIM OF THE STUDY
The aim of this study is to gain a better understanding of the factors that influence the usage of peer-to-peer insurance products.

RESEARCH

WHAT THIS SURVEY IS ABOUT

The questions in this survey ask your opinion your usage of short-term insurance product adoption specifically with regards to the comparison between brick-and-mortar insurers and peer-to-peer insurance platforms. We would like to reassure you that we do not collect any identifying information and all your answers will be kept anonymous and confidential. Your participation is voluntary. You are free to decide if you want to take part in the research. You can refuse to participate or stop at any time without giving any reason. You have the right to confidentiality and privacy.

THE RESEARCHERS

If you have any questions or concerns about this study, please contact the researcher or the research supervisor listed below.

Investigators:

Mr. Danie Dörfling (Researcher)
1707526@student.wits.ac.za
084 352 7265

Dr Euphemia Godspower-Akpomiemie (Supervisor)
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APPENDIX B: Informed Consent Form

INFORMED CONSENT FORM

- I hereby confirm that I have been informed about my involvement in this research.

- I have also received, read (or had it read to me) and understood the above written information regarding the study.

- I also agree that the data collected during this study can be processed in a protected computerized system.

- I may at any stage, without prejudice, withdraw my consent and participation. I am not required to give a reason for withdrawal.

- I have had sufficient opportunity to ask questions and (of my own free will) declare myself prepared to participate.

SIGNATURES:

I have read this consent form (or had it read and explained to me), and all of my questions have been answered to my satisfaction. My signature below confirms that:

□ I agree to participate in the study

Signature of participant:

Signature: _____ Date:_____

Researcher Signature: _____

APPENDIX C: Instrument

Questionnaire

SECTION A

Please indicate your answer by ticking (✓) on the appropriate box

1. **Please indicate your age:**

30 and under	31 - 40	41 – 50	51 – 60	61 – 70	71 and older

2. **Please indicate your level of education**

None	Matric	Diploma	Undergraduate Qualification	Post-Grad Qualification

3. **Please indicate your income per annum**

R0.00 – R19,000	**R19,001 – R86,000**	**R86,001 – R197,000**	**R197,001 – R400,000**	**R400,001 – R688,000**	**R688,001 – R1,481,000**	**R1,481,001 – R2,360,000**	**R2,360,001+**

4. **How much do you spend on Short-Term insurance per month on average?**

R0.00 – R2 000	**R2 001 - R4 000**	**R4 001 - R6 000**	**R6 001 - R8 000**	**R8 001 - R10 000**	**R10 001+**

5. **How many times have you searched for a different short-term insurance provider in the last one month?**

None	**Once**	**Twice**	**Thrice**	**Four times or more**

6. **Who do you consult when purchasing a short-term insurance policy?**

Nobody	Friends and Family	Financial Adviser	Other (please specify)

7. **Which provider do you have a short-term insurance policy with?**

Discovery	Santam	Old Mutual	Pineapple	Other (please specify)

SECTION B

Please take note that; 1=Strongly disagree, 2=Disagree, 3 = Somewhat Disagree, 4=Neutral. 5= Somewhat Agree, 6= Agree, 7= Strongly Agree.

		1	2	3	4	5	6	7
PU1	I think that using traditional insurance systems would enable me to accomplish insurance tasks more quickly.							
PU2	I think that using traditional insurance systems would make it easier for me to carry out tasks associated with insurance.							
PU3	I think that traditional insurance systems are useful.							
PU4	Overall, I think that using traditional insurance systems is advantageous.							
PEOU1	My interaction with traditional insurance systems is clear and understandable.							
PEOU2	Interacting with traditional insurance systems does not require a lot of my mental effort.							
PEOU3	I find traditional insurance systems to be easy to use.							

PEOU4	I find it easy to get the traditional insurance systems to do what I want it to do.							
SN1	People who influence my behaviour think that I should use traditional insurance systems.							
SN2	People who are important to me think that I should use traditional insurance systems.							
PR1	I don't perceive any risk by sharing my personal information on traditional insurance systems.							
PR2	I am confident that others cannot tamper with information concerning my policy application on traditional insurance systems.							
PR3	! believe that advanced technology can certainly provide the desired security for my transaction with traditional insurance systems.							
PR4	I don't think that my money will get stolen whenever I transact through traditional insurance systems.							
TRU1	I believe that the transaction through traditional insurance systems is always reliable							
TRU2	I don't think that things may go wrong in using traditional insurance systems.							

TRU3	I am confident that using traditional insurance systems will always be transparent.							
TRU4	I believe that traditional insurance systems always keep my best interest in mind.							
TRU5	Based on my past experience, I can say that traditional insurance systems are trustworthy.							
BI1	I presently intend to use traditional insurance systems.							