

NEAR EAST UNIVERSITY GRADUATE SCHOOL OF SOCIAL SCIENCES INTERNATIONAL BUSINESS PROGRAM

The Impact of Technological Development on Digitizing the Insurance Sector in Palestine

HEBAH SALAMEH

MASTER'S THESIS

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> NICOSIA 2021

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ABSTRACT

The Impact of Technological Development on Digitizing the Insurance Sector in Palestine

The literature supports that technological development has an impact on digitizing the insurance sector, and reflects on the contribution that insurance makes to the development of a digitalized economy. Technological development and new data sources are changing fundamentally our economy and society, and promise to transform to digitizing the insurance sector as well. This research focuses on the insurance sector in Palestine and aims to empirically examine the relationship between technological development (hardware, software and database and networks) and digitizing the insurance sector (digital marketing, selling online and online security). Data were collected through the use of a questionnaire. The population of the study consisted of all customers of Palestinian insurance companies. A total of 230customers participated in the research. Data analysis involved the computation of descriptive statistics, as well as factor analysis, regression, and correlation analysis. The results of the research indicated that the technological development and digitizing the insurance sector were statistically significant. Moreover, it was found that software and database have the highest impact of all technological development components on digitizing the insurance sector, digital marketing, and online security. Where the networks have the highest impact on selling online. The conceptual model developed in this research provides relationships of technological development (hardware, software and database and networks) that can be used by the management of insurance companies as a guide to positively influence the digitizing the insurance sector of their customers.

Keywords: Technological Development, Digitizing the Insurance Sector, Digital Marketing, Insurance Companies, Palestine.

The Impact of Technological Development on Digitizing the Insurance Sector in Palestine

Literatür, teknolojik gelişmenin sigorta sektörünün dijitalleşmesine katkıda bulunduğunu desteklemekte ve sigortanın dijitalleşen bir ekonominin gelişimine yaptığı katkıyı yansıtmaktadır. Teknolojik gelişme ve yeni veri kaynakları ekonomimizi ve toplumumuzu temelden değiştiriyor ve sigorta sektörünü de dijitalleştirmeye dönüşme sözü veriyor. Bu araştırma, Filistin'deki sigorta sektörüne odaklanıyor ve teknolojik gelişme (donanım, yazılım ve veritabanı ve ağlar) ile sigorta sektörünün dijitalleştirilmesi (dijital pazarlama, çevrimiçi satış ve çevrimiçi güvenlik) arasındaki ilişkiyi deneysel olarak incelemeyi hedefliyor. Veriler bir anket aracılığıyla toplandı. Araştırmanın evrenini Filistinli sigorta şirketlerinin tüm müşterileri oluşturdu. Araştırmaya toplam 230 müşteri katıldı. Veri analizi, tanımlayıcı istatistiklerin hesaplanmasının yanı sıra yapısal eşitlik modellemesi, faktör analizi, regresyon ve korelasyon analizini içeriyordu. Araştırma sonuçları, sigortacılık sektörünün teknolojik gelişiminin ve dijitalleşmesinin istatistiksel olarak önemli olduğunu gösterdi. Ayrıca, yazılım ve veri tabanının, sigorta sektörünün dijitalleştirilmesi, dijital pazarlama ve çevrimiçi güvenlik üzerindeki tüm teknolojik geliştirme bileşenleri arasında en yüksek etkiye sahip olduğu tespit edildi. Ağların çevrimiçi satışta en yüksek etkiye sahip olduğu yerler. araştırmada geliştirilen kavramsal model, müşterilerinin Bu sigorta sektörünün dijitalleşmesini olumlu yönde etkilemek için bir rehber olarak sigorta şirketlerinin yönetimi tarafından kullanılabilecek teknolojik gelişim ilişkilerini (donanım, yazılım ve veri tabanı ve ağlar) sağlamaktadır.

Anahtar Kelimeler: Teknolojik Gelişme, Sigorta Sektörünün Sayısallaştırılması, Dijital Pazarlama, Sigorta Şirketleri, Filistin.

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ABBREVIATIONS

- **TD:** Technological Development.
- HD:Hardware.
- **SD:**Software and Database.
- NT: Networks.
- **DIS:**Digitizing the Insurance Sector.
- **DM**:Digital Marketing.
- SO: Selling Online.
- **OS:** Online Security.
- **IT:** Information Technology.
- **RBV**: Resource-Based View.

CHAPTER 1

INTRODUCTION

1 Introduction

Over the past few decades, global industries not only have faced technological changes that have led to opportunities such as greater flexibility, reactivity and product individualization, but also have presented diverse challenges such as rapid technological change, increased complexity and changing customer preferences and legal requirements. This has led to challenging situations in a corporate context: manifold new technological opportunities are perceived, but people are uncertain how to use and implement them simultaneously in terms of product and service offers (Lerch & Gotsch, 2015).

Nowadays, people have no doubt about the profound impacts of technological development (TD) on their social life and the economic structure of their country(Lell & Kachelrieß, 2020). Whether the impact of TD application is big or small, the final result will depend upon the environment in which TD are applied and the attitudes of the authorities who implement them. The real challenge is how to make use of internet and other TD to ensure that their potentials are used to create better economic opportunities and to reduce poverty. There is no doubt that, when used in a productive sphere, TD are most likely to improve the living standard of people, by affecting different business and service sectors(Abbo et al., 2020).

Most service sectors, especially insurance, employ different forms of TD to facilitate their processes. TD are mainly applied in insurance industry for information purposes, application submission, proposal preparation and online contract conclusion, notification of claims, probable address changes, access to customer and contract data(Xing & Harper Jr, 2020). According to e-business watch report 2003, the insurance sector has the highest TD application rate among other sectors. It also has the highest penetration of Internet access, the second highest level of extranet use, the third highest level of intranet and WAN application use in comparison to other sectors. With this rate of TD application, insurance sector has had the highest rate of information technology (IT) specialist employment.

Just as the Industrial revolution did one and half centuries ago, even now the digital revolution is reshaping the way we live our lives and the way we work at our work places(Lell & Kachelrieß, 2020). It is also forcing a fundamental transformation of businesschanging the relationship with customers, bringing new entrants and their disruptive technologies, driving new channels, products and services, breaking down the walls between industries and, in many cases, forcing a basic rethink of the business model. The speed of change makes it almost impossible to predict the future with any degree of certainty(Beer & Mulder, 2020). In such a climate, insurance company have to act fast It must enter the digital world as quickly as possible and use digital technology, digital technology has the potential to reshape the insurance industry as it has already reshaped many industries, such as mobile banking, e-books, and other innovations related to digital technology, such as financial services, travel, printing and publishing(Beer & Mulder, 2020).

Insurance industry has become an integral part of an individual's life. With the increasing various risk factors importance of purchasing different products of insurance are also on rise. People are opting for insurance products and the question comes how or what channels they will choose to purchase insurance. Now at this age of digitalization it is obvious to find out how digital platforms play important roles in selling and purchasing of insurance. The insurance sector is undergoing large-scale digital transformation that has widespread implications for how companies in the sector run their businesses. New technologies are enabling banks, insurers and other established financial services companies to overhaul their operations and identify different ways of serving their clients. According toBehera et al. (2019) and Sfetcu (2015) there are many factors that have an effect of TD on DIS such as digital marketing (DM), selling online (SO) and online security (OS). Therefore, this research focuses on insurance sector in Palestine and aims to empirically examine the relationship between TD (Hardware (HD), software and database (SD) and networks (NT)) and digitizing the insurance sector (DIS) (DM,SO and OS).

1.1 Problem Statement

Despite expectations that large and lucrative insurance companies may turn to the technology in their day-to-day operations, we do not see any decisive decisions or even indications of this trend, especially in the Arab insurance industry, due to a widespread illiteracy in the field of insurance awareness or a decline in the degree of insurance culture in the Arab countries, or because of the scarcity of insurance expertise or the absence of marketing capacity for insurance products, the almost complete absence in the application of digital technology in insurance transactions is one of the most important obstacles in the way Insurance sector update(Abbo et al., 2020). If Western insurance experts assert that the most important benefits of digital technology meet the needs of customers and reduce public or administrative expenses, which all insurance companies work for at least profitability, we do not see on the horizon indicates the attempt to prepare local competencies technically and professionally to apply this technology. According to Beer & Mulder (2020)all indicators point to the existence of huge opportunities in the field of information technology that has not yet been exploited by the global and Arab insurance companies, although the full mechanization of the insurance companies will take a compulsory path in the next stage, especially with the decline of manual handling of information and data and increasing technological dealings through the existence of a website for each Insurance company, and display its products on it mainly in the future. In

addition, digital marketing is able to issue easy and simple insurance documents, which is indicative of the lack of human intervention in the insurance process in the coming stages.

Unlike the past, most insurance products in developed countries are nowadays delivered via internet. But the insurance companies in Palestine are laggards in making their processes electronically and are still distributing their products via traditional distribution channel(Chang & Lee, 2020). The application of TD by Palestine service sector, especially Insurance is in thievery initial stage. Being largely based on information, the insurance business can be impacted largely by TD application. Increased revenue and transparency, decreased costs, increased productivity and better marketing, are among benefits the insurers and their customers can embrace by applying TD in their interaction(Cappiello, 2020).

The effects of TD and digitizing are the subjects of intense debate in insurance sector and some studies in this regard have been carried out to assess theimpactof e-commerce and IT application on the insurance companies in Palestine and their customer's satisfaction. But, a prospective study to explore the impact of TD on DIS in Palestine its impact on the client's operations is severely needed. In this case, in view of the corona virus pandemic (COVID-19), it has become important to know the extent to which insurance company own devices and equipment with high-specification that capable of coping with the current conditions. As well as having programs and databases of effective performance to handle all the transaction. Also, networks that capable of withstanding the pressure of established transactions when they dealing with the customers.

Based on above discussions, there is a paucity of research on the TD(HD, SD,and NT)and their impact on DIS (DM, OS and SO)in Palestine which not appearing the literature and this represents a significant gap. Therefore, the purpose of this research contributes by empirically examining the impact of TD (HD, SD, and NT)on DIS (DM, OS and SO) amongst customers at Palestinian insurance companies.

1.2 Research Objectives

The aim of this research is to achieve the following objectives:

- 1. To identify the impact of the TD (hardware, software and database and networks) on the success of DISin Palestine.
- To Examine the effect of hardware as part of TD on the success of in DIS Palestine.
- To investigate the influence of software and database as part of TD on the success of DIS in Palestine.
- 4. To recognize the availability of networks as part of TD on the success of DIS in Palestine.
- 5. To give a recommendation that contribute the how to apply and implement the TD amongDIS in Palestine insurance sector.

1.3 Research Questions

As stated previously, this research aims to make an additional contribution to knowledge and practice concerning the relationship between TD (HD, SD and NT) and DIS. The research questions are subsequently examined through the development of the conceptual framework that is the transformation of the research questions into hypotheses and the selection of the appropriate tools and techniques for their empirical examination. Therefore, to achieve the above-mentioned objectives, this research attempts to answer the following research questions:

- 1. Is the impact TD on the success of DIS in Palestine?
- Is there an effect on the employment of computers and accessories on the success of DIS in Palestine?
- 3. Is the application of software and database have theinfluencefor the success of DIS in Palestine?
- 4. Is the employing of the available technologies in the field of networks and communications on the success of DIS in Palestine?

1.4 Research Significance

The study derives its importance from its scientific subject as well as its practical application where the importance of this study is the attempt to enrich the studies and researches conducted in the field of DIS, which are relatively few, especially in the Arab societies, because of their modernity and diversity, the importance of this study also stems from the study and research of an important segment of society, which is the insurance sector in Palestine. Therefore, it can be said that this study is one of the few studies, if not the first, to be conducted on the insurance sector system, the aspects of the importance of the study can be determined by the contribution and the expected addition, as follows:

- 1. This study draws on its importance as it is characterized by modernity and scientific and practical excellence.
- To highlight the importance of DIS to preserve documents from damage and loss in the long term, and to inform the staff of the importance of electronic documents and how to deal with them to provide electronic documents and records, and the consequent saving time and effort.
- Demonstrate the impact of developing networks and communications with the latest devices that provide rapid transfer of electronic documents and information, and work in a small environment regardless of distances within the clear powers of the management.
- Keep abreast of the technological developments in the field of digitizing in the world.
- The insurance sector in Palestine can benefit greatly from the study to develop its document management system, which helps them save time, effort and costs as well as increase productivity and performance.
- 6. To stimulate the insurance sector to develop its technological capabilities as a prelude to linking it to e-government, and this meets with this current research regarding the availability of technological

infrastructure and also that electronic archiving should be one of the main parts of the e-government project.

1.5 Research Model and Hypotheses

The basis of resource-based view (RBV) addresses the fundamental question of why corporations are different and how corporations achieve and sustain competitive advantage by deploying their resources. The RBV has turned focus on the black box of the corporation (Madhani, 2009). Based on a review of literature within TD and DISa research model is developed. The purpose is to provide further insights to the complex relation between TD and DIS. It can also be used as a starting point for empirical investigations within the field, defining the scope of the study or be used as an analytical framework. Furthermore, it proposes a set of areas that are considered to be relevant to take into consideration when exploring the impact of TD on DIS. Figure 1 illustrates the conceptual model of this research. Therefore, the following hypotheses and sub hypotheses are proposed:

H₁:Positive relations exist between technological development and digitizing the insurance sector.

H₁**a:** Positive relations exist between technological development and digital marketing.

 H_1b Positive relations exist between technological development and selling online.

H₁**c**: Positive relations exist between technological development and online security.

H₂: Positive relations exist between hardware and digitizing the insurance sector.

 H_2a : Positive relations exist between hardware and digital marketing. H_2b :Positive relations exist between hardware and selling online.

H₂c: Positive relations exist between hardware and online security.

H₃: Positive relations exist between software and database and digitizing the insurance sector.

H₃**a:** Positive relations exist between software and database and digital marketing.

H₃**b** Positive relations exist between software and database and selling online.

H₃**c**:Positive relations exist between software and database and online security.

H₄: Positive relations exist between networks and digitizing the insurance sector.

H₄a: Positive relations exist between networks and digital marketing.
H₄b Positive relations exist between networks and selling online.
H₄c:Positive relations exist between networks and online security.

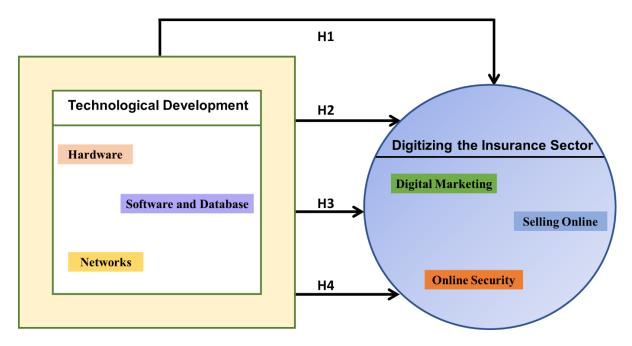


Figure 1 Research Model

CHAPTER 2

LITERATURE REVIEW

2.1 Technological Development

With the spread of the IT revolution, TD has become the focus of great interest on the part of the actors in the insurance and social protection sector. Also, it helps insurance institutions to achieve strategic advantages and improve the relationship with the customer through advanced DIS programs and interactive applications that bring insurance services closer and simplify their meanings to the recipient in different ways (Toderascu & Stofor, 2019). Likewise, TD contributes to expanding the customer base, through an integrated system for the relationship with the customer that accompanies it in all stages of the contract between him and the insurance institution (Becker et al., 2009). In addition to the availability of data banks that define specifications for current and potential customers, according to the degree of investment and the susceptibility to risk. This explains the behavior of consumers of insurance services between those who have a sense of my adventures and the ability to take risks, the customer who has a phobia of the future and seeks comprehensive insurance about risks, and a customer who sees insurance as a high investment opportunity through which he can reap financial and social profits (Hsu, 2012).

In this regard, TD improves the quality of services through constant communication with customers, tracking their insurance preferences and their desires for social protection (Agyabeng-Mensah et al., 2019). The Internet, smart and mobile devices have become an important place in facilitating services, as customers can now write insurance contracts remotely, send them via the Internet to insurance institutions, follow up services and offers without the need to move, in addition to sending documents and photos from the smart mobile phone to the relevant insurance institution in the event of accidents. In addition to all of the above, technology dissipates time differences and time is used by customers and insurance to remote areas and rural areas and break barriers to accessing insurance services for all geographical areas (Becker et al., 2009).

Substantially, TD holds broad prospects for advancing the insurance sector, especially with the emergence of valuation activities that provide estimates of insurance as a result of an evaluation process and experience with financial systems and risk levels (Sriram & Stump, 2004). They found that the estimation depends on anticipating the risks by establishing the probabilities of occurring events and measuring their results, while suggesting specific ways to reduce losses. Evaluators use TD programs and analytical systems to measure risks and make forecasts, and they use communication means to conduct questionnaires and surveys with the aim of determining the damage from three dimensions, first the type of damage, its size and its impact on the institutional structure and the budget of individuals, as well as on the economic return as a whole in addition to the costs of repairing the damage (Tarute & Gatautis, 2014). Therefore, insurance and social protection have become a vital sector on the economic level, with its contributions to the gross national product and the increase in the rate of growth, as well as on the social side by supporting individuals and families in crises. However, TD is a powerful lever to enhance this sector and improve its services (Toderascu & Stofor, 2019).

Another way of looking at TD is by looking at how technologically competitive countries are. This would give insight into what different countries do that makes them competitive. In this field there are at least two interesting publications that compare the competitiveness of nations: the IMDsWorld Competitiveness Yearbook and the World Economic Forum's Global Competitiveness Report. For example, the Global Competitiveness Report (GCR) has focus on economic performance and looks at factors that contribute to this performance(Schwab, 2009). In particular, the GCR distinguishes 12 pillars of competitiveness: institutions, infrastructure, macroeconomic stability, health and primary education, higher education and training, goods market efficiency, labor market efficiency, financial market sophistication, technological readiness, market size, business sophistication, and innovation. TD has an influence in several of these areas such as through technological readiness and innovation but also through institutions (property protection which relates to technology diffusion and commercialization), infrastructure (for example number of telephone lines, which cane viewed as availability of a specific technology), higher education and training(internet access in schools), and business sophistication (production process sophistication). The GCR further established that different pillars have a different influence on economic performance based on the stage the country is in. The GCR distinguishes three different stages, that is, factor driven economy, efficiency driven economy, and innovation driven economy. The emphasis in the factor driven stage ison institutions, infrastructure, macroeconomic stability, and health and primary education while in the innovation driven stage the emphasis is on business sophistication and innovation(Schwab, 2009). Thus, it can be deduced that the type of TD which is beneficial for countries depends on its stage.

More specifically focused on TD is the technology competitiveness ranking, determined by the Technology Policy and Assessment Center at Georgia Institute of Technology(Chang & Lee, 2020). This ranking is based on four input variables (national orientation, socioeconomic infrastructure, technological infrastructure, and productive capacity) and three output variables (technological standing, technological emphasis, and rate of

technical change(George et al., 2020). More recently only TD standing is used as the sole output indicator (Elghdban et al., 2020). The input indicators reflect national propensity for future technology-based competitiveness, output indicators gauge current competitiveness. For studies in this literature stream, a first issue of concern is whether countries are actually competing with each other and therefore whether a ranking of competitiveness is even appropriate(Aiginger, 2006). Regardless of this, the TD provides valuable insight as it explains how different technological aspects of countries can be assessed. Unfortunately, there are similar issues with the TD measurements as were described for the techno-economic policy analysis framework in the previous section. That is, concepts are defined and measured but whether they relate to something real or whether they are abstract theoretical notions has yet to be determined. For example, the premise of the TD indicators is that there are input indicators which say something about future performance. But, despite this claim, and despite a clear theoretical model which links the input indicators with the output, i.e., technological standing(George et al., 2020), such relationship has not been validated. This means that it is also not clear whether the input indicators actually provide a strong relationship with for example a technological standing output indicator 15 years into the future. This may explain some of the controversy around the most recent ranking, i.e., 2007, in which China was ranked number one on technological standing. Aside from apparent controversy about this ranking compared to other rankings such as the GCR(Porter, 2015), it stands to reason that if this output ranking of China inaccurate, then it should have ranked at or near the top on the input indicators impervious years, since this is supposed to be a predictor, but this was clearly not thecae(Toderascu & Stofor, 2019). Thus, the validity of the TD approach is not established. Furthermore, it illustrates the difficulty of determining how technology affects development. Another insight from the GCR is that different nations, due to their different stage of development, may be differently affected by technology(Dávila-Fernández, 2020).

2.1.1 Hardware

Bevilacqua et al. (2015) stressed the significance of TD to discover the route how to manage and organize the result TD based on computer data. Bhatt & Grover (2005) suggested that TD process can be divided into programs and procedures, computer programs implemented by the HD and the procedures implemented by users. Santhanam & Hartono (2003) proposed that the users are the most important component of the HD. These components are executed and controlled by the HD and users (Ma & Turban, 2013).

According to Jun & Kang (2009), investment on HD is significantly related to the utilization of TD. (Forman & Gron, 2011) states that a higher level of TD utilization is complex and may require changes in business processes. As the corporation needs to use HD to integrate to their business operations and transform their business model, it would require significantly more investment in HD(Frey, 2020). Corporation need to invest in HD to keep up with and better differentiate from their competitors (Wang & Cheung, 2014). Several studies also reported that the investment in HD improved the productivity of the sample corporations even through the benefits from increased productivity were harvested by consumers(Olsson, 2020; Śliwiński & Marano, 2020). The research conducted by Ham et al. (2014) shows that hardware as an important resource has potential to create competitive advantage. The SD investment in general is important and contributes to improve and maximize the utilization of HD investment. Moreover, in the case of high-income countries, there is a need to manage the equipped HD more effectively by securing more expertise in terms of internal spending (Lee et al., 2018). The greater the HD investment, the better corporation provide the infrastructure and HD to support the TD in corporations and achieve their objectives (Huang et al., 2014).

2.1.2 Software and Database

Many researchers have positioned themselves to integrate TD components to their SD packages so that they may offer fully integrated enterprise application architecture to business community(Yao et al., 2020). SD is often viewed as a series of individual software applications by organization. Most of the major TD functions have their own specific software integrated into the organization package (Prajogo & Sohal, 2013). Some large organization have attempted to assemble many of these different SD applications together under a single roof, or at least connect them together with some interfaces, but no one has yet a complete package of their own. Integrating the different pieces of the applications together could be an ongoing process (Swafford et al., 2008). Currently, perhaps the best way to think about TD is to separate it into SD that helps to plan and SD that helps to execute the process inside the organization (Lu et al., 2018).

SD uses mathematical algorithms to help improve the flow and efficiency of the TD (Bayraktar et al., 2009). This type of software is entirely dependent upon information for its accuracy. Planning applications are available for all five of the major TD steps, while the most valuable one is demand planning, which determines how much product will satisfy different customers' demands. TD execution SD is intended to automate the different steps of the organization (Dehning et al., 2013).

Given the complexity of maintenance, enhancement, and upgrade of TDsolutions, their integration and upgrades become challenging for managers (Kaliani Sundram et al., 2016). In order for business to streamline operations as well as better coordinate with customers, it is necessary for them to integrate their TD solution or upgrade periodically to improve business SD(Losev et al., 2020). In addition, as TD try to streamline their solutions to connect SD together under a single solution suite, the managers face the question of whether to keep up with the TD with upgrading the SD to obtain additional services (Zhang & Dhaliwal, 2009).

The use of SD involve structure that hyperlink a corporation to providers, distribution channels, or clients. These structures use SD in corporation to enhance the overall performance or to enhance the relationships amongst corporations. The main objective of SD is to create value-added by using the internet to connect different corporations with others through TD applications. Also, SD creates higher relationships between clients, setting the

establishment of globalization and growth the corporation's business. SD is designed to meet the needs of corporation and added a specific improvement process (Ball, 2013). These improvements will lead corporations to have a new modification and versions of their SD(Jamshi & Ganeshkumar, 2017).

SD follow the market requirements where corporations consider the important standards for solving the identified problems that may occur. Furthermore, SD process in the corporation must be monitored and evaluated their SD to determine its stability continuously (Nozari & Maryam Mjjdehi, 2016). Lucas & Smith (1981) recommends that to have a better TD the corporations need to improve the performance of their SD. Evolutionary SD maintenance has flourished because of the ease of adding new functionality to the system but at the same time it puts an additional risk (Stadtler & Kilger, 2008)

2.1.3 Networks

Shadiev & Huang (2020)suggested that NT as a set of inter-organizational relationships between the focal actor and interdependent external actors closely linked and working cooperatively together to create value for the customer. Also, they recognized that the existence of a central node and the need for the governance and coordination of activities and actors in the NT. Coordination begins with the creation of the NT and has to be perpetual throughout all value creation activities. The effective operation of a NT is premised on three requirements: (1) the effective management and implementation of key business processes, (2) the effective communication and coordination between firms in the NT, and (3) the creation of an effective interface between the NT and its environment(Gebhart & Funk, 2020). Accordingly, these actions are realized through an infrastructure of business processes and TD.

Although the discourse concerning NT is nascent, authors have identified salient characteristics of successful NT, such as: (1) each participant increases its own value, (2) self-renewal behavior or sustainable over time as a NT, (3) they generate more profitable outcomes other than other forms of

competitive, or cooperative, strategy, (4) interacting in novel ways, and (5) establishing a common understanding of ethics, meanings and symbols(Boyer, 2020). According to Shadiev & Huang (2020) NT are expected to enhance the capacity to change and innovate organizations. All these characteristics of SBN implicitly recognize the need for adaptability. However, agents have to invest resources in developing adaptability. Therefore, another critical factor of NT adaptability is the number of resources required. It is sub-optimal to approach well defined problems that require assimilation with excessive resources that would normally be used in process of accommodation. Likewise, approaching problems of а accommodation with insufficient effort will be insufficient and probably lead to failure. Therefore, the challenge is to recognize the difference between assimilation and accommodation, and respond with the appropriate and the right number of resources (Lee, 2020).

Notwithstanding the financial implications of TD investment; such investment is worthwhile as NT can improve information sharing, decision-making, coordination, product quality, responsiveness and distribution(Yao et al., 2020). Similarly, investments in NT can also reduce operational costs and facilitate better communication (Shadiev & Huang, 2020). The benefits of investing in TD include; improvement of information flows, enhancement of arbitrage abilities, facilitating price discovery, and substitution of costly physical transport by widening markets NT (Andrianaivo & Kpodar, 2011). This implies that there is a bi-directional (direct and indirect impacts) causal relationship between TD and economic growth (Adewoye & Akanbi, 2012). Meanwhile, Rikhardsson & Kræmmergaard (2006) identify five areas of TD applications in support of firm development: economic development of product, community development, research and education, small and medium enterprises development, and media networks. The role of TD in national development cannot be over emphasized. Likewise, Datta & Agarwal (2004) show that economic benefits of TD can be direct (through increases of employment and demand) and indirect (notably through social returns). Moreover, effective NT provides necessary information need of a nation economy - industry, commerce, agriculture, services sector - to foster

necessary structural linkages for sustainable growth (Onakoya & Tella, 2012).

Thus, TDs enable insurance companies to explore the benefits of NT to take timely decision to improve the insurance industry competitive advantage (Pankajakshi & Shailaja, 2012). Likewise, NT adoption can impact the insurance industry significantly by improving the mode of operation and development of range of services to customers; by creating multi-channel communication between the company and customers; and by actualizing effective and efficient organization and management of customers' information (Coviello, 2008). Consequently, TD, if adequately engaged by insurance firms, can facilitate creation and maintenance of a flexible NT of inter-organizational arrangements within the insurance industry (Adewoye & Akanbi, 2012).

2.2 Digitizing the Insurance Sector

As per the report of ("World Insurance Report 2020 Infographic," 2020) Capgemini, with the rise in penetration of the internet, there has been a gradual change in customer preferences around buying insurance products. This change has been both behavioral and attitudinal in nature, and is more prominent among younger customers. (Odoyo & Nyangosi, 2011), stated that, the TD place in the hands of DIS and agents, the tools to bring new savings and better services to the consumers. Digitization has made it possible to process and communicate information faster, cheaper and more easily and reliably than ever before. According to the Finnie et al. (2017) the Life and Health Insurance Foundation for Education (LIFE) Foundation and LIMRA eighty-three per cent of consumers would use the Internet to research life insurance before purchasing a policy if they had the option and face-toface contact with an agent is the most preferred method for buying life insurance. Also, they specified that there's no doubt that tomorrow's top performing insurance companies will have stronger digital capabilities as well as new skills, refined metrics, upgraded tools and re-oriented cultures. To get there tomorrow, insurers must move fast today. Because in the digital world, standing still or just keeping up means falling further behind.

Odoyo & Nyangosi, (2011) in his blog in www.finextra.com had an opinion that, main components of a successful digital strategy include enhancing customer experience and focused management of customer relationship. Owing to increasing market competitiveness in the insurance industry, a cost involved in acquiring customer share is rising. Therefore, it becomes imperative for companies to retain customers. This can happen with continuous improvement in delivering a better customer experience that is digitally inclined. Pahuja & Chitkara (2016), analyzed the data related to the study on perception towards E-insurance and awareness, collected through structured questionnaire returned by sample selected through convenience sampling technique. Hypothesis was tested through one-way ANOVA. Author concluded that age and gender do not have any relationship with use of Einsurance. Kumar (2016) quoting industry research and analyses of BCG, said that in the 2-3 years, three out of every four insurance purchase decisions will be influenced by digital channels of sales and marketing. That's an astounding number. It simply demonstrates the power of digital media and its growing role in the insurance sector.

The process of digitalization is closely related to using of TD in the insurance sector. There are widely used the expression DIS (Cappiello, 2018; Nicoletti, 2016; Schmidt et al., 2017; Stöckli et al., 2016) that means the implementation of TD into insurance. DIS was described through the approach of digital transformation framework in the cases of selected insurers (Wiesböck et al., 2017). Some of the more comprehensive and involve both these items. DIS is characterized by some features: volatility, uncertainty, complexity, ambiguity (Bennett & Lemoine, 2014). Schmidt et al. (2017) also links the actual raising DIS process in the insurance sector with TD, profit-reducing and needs of cost-cutting. Cappiello (2018) shows the impact of DIS through the use of Big Data, artificial intelligence/cognitive computing, predictive modeling, wearable devices, telematics, and the creation of value chain. The nature of TD in insurance was also showed through Green TD (Essvale Corporation Limited, 2009). A smaller unit of the DIS is SD. The SD is a kind of TD. TD include HD, SD, NT, and telecommunication equipment (Pankajakshi & Shailaja, 2012).

The main aim of TD in the insurance market is to create and use the knowledge and exchange the information (Kedra et al., 2019). The role of TD has been changing: previously TD was the instrument for data processing, but after the implementation of Big Data in the economy, it has become the instrument for creating new types of data. The DIS is totally dependent on the ability to convert raw data into intelligence - intelligence about customers, markets, competitors, and business environment (Schmidt et al., 2017). Modern insurance business looks for opportunities to reduce the asymmetry of information under the condition of the rising cost of risks. So, insurers are looking for new knowledge about the probability of the risks. Heeks (2017) explains the relationship between knowledge, information, and data as data is processed into information is assimilated into knowledge; knowledge explains information and processes data. Forman & Gron (2011) showed a connection between vertical integration in distribution construction of DIS and the adoption of new technologies. Some aspects of TD integration into financial institution were discussed in the context of the connection between banking and TD Marinč (2013). Study of the link between life insurer TD expenditure and the efficiency of its activity was based on financial data in the research made by (Bennett & Lemoine, 2014). A few studies show the linkage between the TD budget (as a part of intangible assets) and the financial condition of companies from different points of view: between investment in computers and company's market value (Kumar, 2016).

2.2.1 DigitalMarketing

Given the importance of early and rapid TD, DM as a concept highlights a set of profile processes that embrace all the digital channels available to promote a product or service, or to build a digital brand(Kotler & Armstrong, 2012). From the economic practice, DM originally developed around web sites to later show robustness by redirecting traffic to the advertising industry and bidding sites. DM is feasible through the Internet as a working and display environment (Melović et al., 2020). If consider the usefulness of DM in ebusiness, then it is necessary to consider the concept of a group of CISCO specialists, according to which the term includes all the activities that are

designed and developed in a business via the Internet, in order to identify, attract, win and make loyal the customers by the marketers and sales team staff (Banerjee, 2016). The uniqueness of DM is given by some specific and relational features included in seven operational functions, namely: personality; confidentiality; customer service; the community; security; sales promotion (Kotler & Keller, 2009). DM has created and will lead to key changes not only in business, but also in customer behavior. In order to be operational, this type of marketing provides a unique platform for companies to identify and understand customer requirements and create opportunities for them based on time and place. It also reduces costs by eliminating unnecessary transactions(Low et al., 2020). Over the last decade, DM has evolved continuously and rapidly. This is evidenced by the intensive use of the internet by many companies in the world, mainly for advertising or corporate promotion. Other companies have fully utilized and fully accessed in their functional system all the possible facilities of the Internet, considered a modern means absolutely necessary in the design and development of business specific to the digital age(Banerjee, 2016).

The existence of internet technology has changed the lifestyle in various aspects, including in way of communication. For a marketer, the internet could be a weapon for creating bound between the consumer and the brand. Furthermore, finally, the marketer also assumes that traditional marketing strategy is getting unable to create sustainability in a business (Kaur, 2017). Then, it makes many marketers transform traditional marketing and structure to be more dynamic. Including the way of communication. Then, marketing communication is developed to be a device for creating long term relation between marketer and potential consumer. Interaction is the main key that should be highlighted via marketing communication through the internet connection (Batinić, 2015). Tourists are often affected by available information on the internet, especially through the comment section or review written by other consumers (Filieri et al., 2015). That comment and review then form the level of trust for potential consumers to choose a tourist destination by reasoning that potential consumer candidate is a more trusting review that written by an experienced tourist who already chose a destination

and its tourism product (Abubakar & Ilkan, 2016). Then this is called as the electronic world of mouth (e-WOM). Furthermore, social media is also useful in the tourism sector since it can be a source for tourism products which is possible as a preference for tourists in choosing and following up the products. Social media also functioned as media for pictures, video and consumer's opinion about their experience during consuming product and service. The usage of social networking by tourist would change the way to browse the information about tourist destination since social media provides information production collaborated service of tourist destination and organization that manage the tourism industry (Gerritsen et al., 2014). Concept of eWOM and social media are developing to be two things that can be combined and well known as social media word of mouth or s-WOM(Redmiles et al., 2020). Moreover, generally, a company which moves to this industry uses electronic mail (email) also it is also a popular digital marketing communication channel and most used to build communication with consumers. Email makes easier to adjust communication for sending message to potential consumers (Demangeot & Broderick, 2010). Considering, it needs to be aware that currently, internet browsers are not only interacting among them, but also with the brand as their preference. This phenomenon becomes a chance for the brand in the market to make dialogue directly with the consumers and know them even better (Kaur, 2017).

2.2.2 Selling Online

To a very large extent, SO can be studied using frameworks from 'offline' or traditional consumer behavior. A number of general frameworks in consumer behavior are available that capture the decision-making processes of consumers (Griffis et al., 2012). These frameworks distinguish a number of stages, typically including at least the following: need recognition, prepurchase search, evaluation of alternatives, the actual purchase, and post purchase evaluation. These stages are relatively abstract and do not consider the medium through which the consumer buys. Hence, the stages can be applied to SO to the customer (Anaza, 2016). Looking more closely at

the difference between SO and 'off-line' consumer behavior, van der Heijden et al. (2003) identified at least two types of issues that differentiate SO to the customer from off-line consumers. First, SO have to interact with technology to purchase the goods and services they need. The physical shop environment is replaced by an electronic shopping environment or, in other words, by TD. This gives rise to technical issues that have traditionally been the domain of TD (Monsuwe et al., 2004). Second, a greater degree of trust is required in an SO environment than in a physical shop. It is by now a folk theorem that trust is an important issue for those who engage in electronic commerce (Demangeot & Broderick, 2010). Trust mitigates the feelings of uncertainty that arise when the shop is unknown, the shop owners are unknown, the quality of the product is unknown, and the settlement performance is unknown (Griffis et al., 2012). These conditions are likely to arise in an electronic commerce environment.

Recent TD has caused a wave of "Technology- based self-service" offerings in the market (Singh, 2015). Such TD have changed the way service firms and consumers interact. SO is becoming increasingly important not only in determining the success or failure of electronic commerce but also in providing consumers with a superior experience with the interactive flow of information (Santos, 2003). SO is distinct from service delivery through other modes like, bricks and mortars stores, as in the case for retailing. SO can be usefully conceived as an interactive information service (Singh, 2015). The internet has made existing organizations to manage increasingly complicated actions involving many business partners (Schmidt et al., 2017). By adopting universal standards, the finance industry has made more customization within the open marketplace possible. The internet and internet start-ups have had dramatic effects on equity markets world over; like other areas of finance have benefited from TD. The response to online insurance products has amazed everyone. What started as a novelty product is being lapped up by the consumers (Kotler & Armstrong, 2012). The annual online sale projections of companies have been met in less than two months. The Insurance regulator recently came up with an application to compare ULIP products (Unit Linked Insurance Product). So much so that the public sector

life insurance giant has plans for coming up with a game changing online term insurance product shortly. People are not just going online to check and compare insurance quotes because it is convenient, it has now become a necessity (Singh, 2015). As with many sectors such as travel and retail, internet is now looking to transform the insurance sector. The regulators, and the insurers, have been trying very hard to increase the insurance penetration (Kędra et al., 2019).

2.2.3 Online Security

Bobba (2020)in his Technology Acceptance Model states that the individuals' acceptance of technology depends on their attitude toward using the OS. The ease of use and usefulness play a pivotal role in adoption of the TD. Further research added a new attribute to the above-mentioned attributes.Redmiles et al. (2020) state that use of OS is amplified if the customers feel a sense of enjoyment in using it. The OS service experience is enhanced with the interactivity and enjoyment features of the Web site.Lin & Wu (2012) postulate that customer satisfaction and adoption of technology is related to attributes such as information content, customization and reliability. The customers' responses have a significant effect on their perceived ease of use and usefulness of OS in the Web sites. The implications of any innovation can be measured by the volume of use and how far it fits into the customers' requirement (Hoffman et al., 2006; Lederer et al., 2000; Lin & Wu, 2012; Parasuraman et al., 1994).

Technology use in services has made it possible for service providers to offer personalized services to customers (Hoffman et al., 2006). The acceptability of technology in insurance sector is of interest to the insurance industry. It is inevitable that receptivity of the customers has to be grasped for making the necessary customizations the OS in the Web sites. Santos (2003) posit that trust plays a significant role in driving customer satisfaction in financial services, especially in OS of insurance services. Technology can tackle trust related expectation of customers as it is closely linked with security and system integrity.

Technical SD issues may create technical glitches and affect customer satisfaction. The broken links on the Web sites demotivate the customer from visiting the Web site (Lederer et al., 2000). The service companies can reduce these technical problems by eliminating links that do not open or work (Hoffman et al., 2006). Luna et al. (2002) postulates that content and structure of information of OS on Web sites are prerequisites for making customer comfortable in using it. If the technical features are simple and instructions easy to follow, the customer would feel comfortable in navigating the Web site. The customers' inhibitions are attributed to their lack of experience about OS in insurance services. Researchers have voiced concern about selling insurance online, as they feel that internet will remain secondary to traditional direct interactive channels (Brown et al., 2002). Groth (2005) recommend understanding customers' behavior toward SO of Web site design and technical features for online services. The ease-of-navigation and user-friendly attributes are important determinants of online retailing (Demangeot & Broderick, 2010).

Customers prefer direct channels for seeking information about the insurance products. Griffis et al. (2012) states that many customers prefer to speak to an insurance agent for purchasing a policy and are not comfortable shopping for insurance online. Customers place high priority to OS attributes, and technical safety of the network against fraud or hackers is a high concern (Chen et al., 2015). Customers' concerns can be categorized as financial and non-financial, which affect their evaluations (Odoyo & Nyangosi, 2011). The customer satisfaction in online financial service depends on easy navigation, availability of information, graphics and OS in transaction (Vickery et al., 2003).

2.3 The Palestinian Insurance Sector

In 1993, the Palestinian National Authority (PNA) started its supervision of the insurance industry and expanded the geographical scope of its responsibility for this sector in 1994. The agreement held with the Israeli side granted to the Palestinian National Authority as the body authorized by law and supervisor in the field of insurance to support the faithful and the agents and supervise their activity. This sector has suffered from the absence of legislation and mechanisms of government supervision and control, labor chaos and long-term insurance trust. The Palestinian Capital Market Authority (PCMA) was established and became the body authorized to supervise, regulate and control the work of this sector in late 2004. The issuance of the Insurance law No. (20) of 2005 has helped to reorganize the insurance sector. The same law is still organizing the insurance sector till now with additional special instructions that are issued by PCMA every period of time covering some special cases and following the periodically results achieved by insurance companies. The Palestinian Capital Market Authority, as the authorized body, has developed detailed policies aimed at developing the insurance sector, preparing the necessary 6 regulations, and providing a suitable environment for the growth and progress of the insurance industry to benefit the overall economic activity. As of May 2018, there are ten insurance companies working in the Palestinian insurance market; eight of them are specialized for usual insurance products such as motors, Fire, workmen, engineering insurances, and two companies are specialized in life or mortgage only (Abdeljawad et al., 2020).

Continuous development and improvement of the internal work system in line with market developments. The year 2019 witnessed a number of developments in the insurance sector, as the professional certification program linked to the competency framework for the insurance sector was launched in cooperation with the Bahrain Institute of Banking and Finance BIBF, Chartered Insurance Institute CII and Life Office Management Association LOMA, based on the directions and the decisions of the PCMA's Board of Directors based on the importance and necessity of strengthening and developing the technical capabilities of the Palestinian insurance sector in accordance with international best practices. On the other hand, PCMA has launched an awareness campaign targeting the insurance sector in Palestine titled "Insurance; Protection and Safety"; it's a comprehensive awareness campaign for the Palestinian insurance sector, and in accordance with directions of the direct board of directors on the need to

enhance confidence between citizens and providers Insurance services in Palestine, which spanned over seven months and covered all governorates in the West Bank and Gaza Strip(Abdeljawad et al., 2020; Kassab et al., 2017; Shaheen et al., 2020).

Likewise, during the year 2019, all insurance companies were linked to the unified credit inquiry system with the Palestine Monetary Authority, and this comes as a culmination of the efforts made in encouraging companies to join the unified credit inquiry system issued by the PMA and benefit from the facilities and services that provided by this system to insurance companies, which contributes to enhancing its financial stability and safety, and enhancing its liquidity ratios(Shaheen et al., 2020).

CHAPTER 3

RESEARCH METHODOLOGY

3.1 Research Design

The author elaborates the methodology of this research that has been utilized in revealing the impact of TD on DIS in Palestine. This research describes the procedures that have been used to analyze the data and check the hypotheses by collecting data, measuring the variables in the research model, and the types of analysis methods that have been used (SPSS v25). Before conducting research, there must be several important issues, such as the type of research, the reasons for investigation, and the methods that used to collect data by taking an idea, construct, or thought, at that point, building up a measure or scale to monitor it empirically (Creswell, 2009).

In conclusion, based on a deductive approach the quantitative research relates to layout, measurement, and sampling issues that focusing on detailed planning to data collection and data analysis. The author applied quantitative research methods and the procedures are created systematically before unifying data collection. Besides, data analysis relies on the use of statistical methods, Tables, or figures and discusses how to link the result to hypotheses. Therefore, the nature of this research is completely quantitative.

3.2 Sampling & Sample

The main objective of designing the study sample was to generate a comprehensive and ideal sample of Palestinian insurance companies. The target population of this study contains all customers of Palestinian insurance companies. After approval was obtained from the ethics committee at Near East University the questionnaire was applied between October2020 and November 2020. A questionnaire was distributed by hand within the insurance companies. Once all responses had been received, they were recorded in the database using SPSS v 25 for further analysis. The study population consisted of customers of Palestinian insurance companies. The target sampling was the Palestinian insurance companies which it is 10 companies and selected based on the Palestine Capital Market Authority.

3.3 Data Collection Procedures

This research aims to check the impact of TD on DIS in Palestine by using a questionnaire from literature reviews to test the hypotheses for this research, where the customers of Palestinian insurance companies formed as an analysis unit of this research see Appendix 1. To collect credible and useful data and avoid coercive participation, the author informed the respondents

that their participation was voluntary and he explained the purpose of the research and obtained verbal consent from them before distributing the questionnaire. This research was conducted using a questionnaire which is considered as a suitable means for effective and accurate information. Therefore, the questionnaire method was adopted as the preferred tool to answer current research objectives.

The questionnaire will be reviewed by university professors who are having an experience and knowledge in the field of information technology and digitalization to detect mistakes or a possible source of misunderstandings and to test the accuracy and validity of the professional terms and perspicuity. Validity also checked through distributed 20 questionnaires as pilot research to adjust proportion to the responders' abilities to answer the questions and based on their feedback the questionnaire questions was edited to be more comprehensive and accurate. The questionnaire was designed with a 5-point Likert scale ranging from Strongly Agree = 5 to Strongly Disagree = 1.

3.4 Study Variables and Instrument

The model of the research is quantitative and cross-sectional. The questionnaire consists of three parts and 39 items in total: demographic information, the Technological Development Scale (TDS) and the Digitizing the Insurance Sector Scale (DISS). Table 1 summaries the Cronbach's alpha for these scales.

1.5.1 Demographic Information

The research also assesses some demographic variables that are presented in Part 1 of the questionnaire (see Appendix). The respondents were asked about gender, age, educational level, monthly income and occupation. The demographic questions consist of 5 items.

3.4.1 Technological Development Scale

The TDS used in this study was developed by (Kassab et al., 2017). This scale consists of 19 items with the format of a typical Five-Point Likert Scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree) which divided into

three sub-dimensions: hardware, software and database and networks with a Cronbach's alpha score of 0.857. According to (Hair et al., 2014) the level of Cronbach's alpha that needs to achieve the reliability and to be an acceptable study is 0.7. Therefore, the Cronbach's alpha scores for the TD variables for this study are reliable.

3.4.2.1 Hardware

HD scale has (8) items developed by (Kassab et al., 2017). The data were collected from customers and measured based on five-point Likert scale ranging from 5 = Strongly Agree to 1= Strongly Disagree. This scale was measured through 8 items with Cronbach's alpha score of 0.935.

3.4.2.1 Software and Database

SD scale has (6) items developed by (Kassab et al., 2017). The data were collected from customers and measured based on five-point Likert scale ranging from 5 = Strongly Agree to 1= Strongly Disagree. This scale was measured through 6 items with a Cronbach's alpha score of 0.927.

3.4.2.1 Networks

NT scale has (5) items developed by (Kassab et al., 2017). The data were collected from customers and measured by the subject's responses based on five-point Likert scale ranging from 5 = Strongly Agree to 1= Strongly Disagree. This scale was measured through 5 items with a Cronbach's alpha score of 0.911.

3.4.2 Digitizing the Insurance Sector

The DISS used in this study was developed by (Sultan, 2011). This scale consists of 15 items with the format of a typical Five-Point Likert Scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). The Cronbach's alpha value for the DISS was calculated as 0.755. As with the TDS, this value is also considered to be reliable.

3.4.2.1 Digital Marketing

DM scale has (7) items developed by (Sultan, 2011). The data were collected from customers and measured based on five-point Likert scale ranging from 5 = Strongly Agree to 1= Strongly Disagree. This scale was measured through 7 items with a Cronbach's alpha score of 0.834.

3.4.2.2 Selling Online

SO scale has (5) items developed by (Sultan, 2011). The data were collected from customers and measured based on five-point Likert scale ranging from 5 = Strongly Agree to 1 = Strongly Disagree. This scale was measured through 5 items with a Cronbach's alpha score of 0.889.

3.4.2.3 Online Security

OS scale has (3) items developed by (Sultan, 2011). The data were collected from customers and measured based on five-point Likert scale ranging from 5 = Strongly Agree to 1= Strongly Disagree. This scale was measured through 3 items with a Cronbach's alpha score of 0.823. The Cronbach's alpha value for the present study of 34 items was calculated as 0.780 which this value considered to be reliable.

Variable Name	Number of Items	Cronbach's alpha
Technological Development	19	0.857
Hardware	8	0.935
Software and Database	6	0.927
Networks	6	0.911
Digitizing the Insurance Sector	15	0.755
Digital Marketing	7	0.834
Selling Online	5	0.889
Online Security	3	0.823
Total	34	0.780

Table 1 The Cronbach's Alpha for Research Variables

3.5 Data Analysis Procedures

After collecting data, SPSS v.25 software was used to analyze the data with the following steps: First, test the reliability of the scale and validity of the questionnaire through Cronbach's alpha coefficient. According to (Sekaran & Bougie, 2016), Cronbach's alpha indicates that values which greater than 0.70 has high internal consistency in measured the variables and increases reliability. Second, correlation analysis shows how variables are positively related to each other. Table 2 summarizes the correlation coefficient scale. Third, factor analysis was used to find out the principal components to identify whether the factors used in the research can measure the variables and whether the factors used in the questionnaire are related to the variables or not. (Hair et al., 2014) reported that exploratory factor analysis (EFA) is used to explore data and provides information on the number of factors needed to represent data better. Also, all measured or observed variables are related to each factor according to the value of the load estimation factor. The main feature of EFA is that all factors are obtained only from statistical results, not from any theory, and after the factor analysis is performed the factors can be named. In other words, EFA can be analyzed without knowing the number of factors that already present in the research or which variables that belong to which constructs. Finally, regression analysis was applied to test the hypotheses that developed to determine the effect of TD on DIS.

Correlation Scale	Description
±0.90 - ± 1.00	Very high positive or negative correlation
$\pm 0.70 - \pm 0.89$	High positive or negative correlation
±0.69 - ±0.50	Moderate positive or negative correlation
±0.49 - ±0.30	Low positive or negative correlation
±0.29 - ±0.00	Negligible correlation

The hypotheses and sub-hypotheses that used in this research will be tested at 95% confidence level (or 5% margin of error). The rule of decision is that if the PV less than 0.05, the null hypothesis will be rejected and if it is greater than 0.05 it will be accepted.

1.6 Ethical Considerations

This research was conducted taking into account the ethical implication at each stage of the research process. Approval was obtained from the Ethics Committee at Near East University for the research questionnaire before collecting data. This research was designed to meet the ethical principles of voluntary participation, ensuring that participants were not harmed, respecting their right to privacy, anonymity, and self-determination. During this research, participants were introduced to the importance of the research and its purpose, and the participation in this research is voluntary and the data collected during this research will be used for academic research purposes only and may be presented at national/international academic meetings and/or publications and will be treated with strict confidentiality. Also, the information of participants in this research will be guaranteed to be confidential and anonymous.

CHAPTER 4

RESEARCH RESULT

4.1 Descriptive Statistics

The purpose of this research is to examine the impact of technological development on DISin Palestine. To achieve this goal, the researcher distributes (250) questionnaire were subjected to (230) valid questionnaire for statistical analysis. Table 3 summarizes the distribution of the questionnaire on the research sample.

	Number	Ratio
Distributed questionnaires	250	100%
Questionnaires recovered	242	97%
Non-refunded questionnaires	8	3%
Non-analytical questionnaires	12	5%
Questionnaires under analysis	230	92%

 Table 3
 The Distribution of The Questionnaire on The Research Sample

After collecting the questionnaire from the sample, the questionnaire response scale which contains 34 items was translated to a quantitative scale by giving the answer category 5 = Strongly Agree, 4 = Agree, 3 = Neither Agree nor Disagree, 2 = Disagree, 1 = Strongly Disagree. The total scores of the sample respondents for each paragraph were classified as shown in Table 4.

Likert-Scale	Classification	Description
1	1 – 1.79	Strongly Disagree
2	1.8 – 2.59	Disagree
3	2.6 – 3.39	Neither Agree nor Disagree
4	3.4 – 4.19	Agree
5	4.2 – 5	Strongly Agree

Table 4The Degree of Approval of the Questionnaire Paragraphs

The researcher relied on the degree of approval of the questionnaire paragraphs according to (Idek et al., 2014)the rule specified in Table 4 that the approval for the paragraph is strongly disagreed if the average mean of the paragraph between 1 - 1.79, disagree if the average mean of the paragraph falls between 1.8 - 2.59, neither agree nor disagree if the average mean of the paragraph between 3.4 - 4.19, and strongly agree if the average mean of the paragraph between 4.2 - 5.

4.1.1 Technological Development

Table 5 shows the mean scores for the TD and its sub-dimensions items. The respondents' mean scores for the sub-dimensions of TD items range from 3.33 to 4.12. At the same time, their standard deviation demonstrated that the items do not present a high deviation from the average mean among items. Where The respondents' mean scores for HD was 3.80, SD was 3.77 and NT was 4.04. Therefore, the respondents' mean scores for TD (overall), as well as each of its dimensions, were all above the 3.00 mid-point score. These scores indicate that the customers perceptions of the TD are satisfactory.

Items	Mean	Std. Deviation	Degree of Approval
HD1	3.33	1.03	Natural
HD2	4.08	1.10	Agree
HD3	3.73	1.04	Agree

Table 5 The Mean Scores for the TDand It Sub-Dimensions Items

HD4	4.03	1.05	Agree
HD5	3.34	1.04	Natural
HD6	4.10	1.09	Agree
HD7	3.74	1.04	Agree
HD8	4.05	1.11	Agree
HD Means Score	3.80	1.06	Agree
SD1	3.67	0.86	Agree
SD2	3.78	0.84	Agree
SD3	3.79	0.88	Agree
SD4	3.81	0.85	Agree
SD5	3.86	0.90	Agree
SD6	3.72	0.85	Agree
SD Means Score	3.77	0.86	Agree
NT1	4.05	1.01	Agree
NT2	4.02	0.98	Agree
NT3	4.04	0.99	Agree
NT4	4.12	0.99	Agree
NT5	3.97	0.99	Agree
NT Means Score	4.04	0.99	Agree
TD Means Score	3.85	0.90	Agree

4.1.2 Digitizing the Insurance Sector

Table 6 shows the mean scores for the DISand its sub-dimensions items. The respondents' mean scores for DIS items range from 2.16 to 3.99. At the same time, their standard deviation demonstrated that the items do not present a high deviation from the average mean among items. Where The respondents' mean scores for DM was 2.50, SO was 3.69 and OS was 2.52. Therefore, the respondents' mean scores for DIS (overall) was 2.9this indicate that the customers perceptions of the DIS are natural.

Table 6 The Mea	an Scores for the I	DISand It Sub-D	imensions Items

Items	Mean	Std. Deviation	Degree of Approval
DM1	2.33	1.13	Disagree
DM2	2.36	1.03	Disagree
DM3	2.53	0.96	Disagree

DM4	2.16	0.96	Disagree
DM5	2.44	0.93	Disagree
DM6	3.12	1.22	Natural
DM7	2.56	1.16	Disagree
DM Means Score	2.50	1.06	Disagree
SO1	3.35	1.00	Natural
SO2	3.99	1.13	Agree
SO3	3.76	1.07	Agree
SO4	3.94	1.05	Agree
SO5	3.39	1.01	Natural
SO Means Score	3.69	1.05	Agree
OS1	2.37	1.13	Disagree
OS2	2.53	1.05	Disagree
OS3	2.67	1.25	Natural
OS Means Score	2.52	1.14	Disagree
DIS Means Score	2.9	1.07	Natural

4.2 Demographic Characteristics of Respondents

Demographic characteristics of respondents that have been captured in this research include 5 different aspects; gender, age, educational level, monthly income and occupation. First, gender was measured into two categories of male and female. Second, the age which was measured in seven categories having options of less than 25 years, from 25 - 29 years, from 30 - 34 years, from 40 - 44 years, from 45 - 49 years, and more than 50s years. Third, educational level was measured in three categories diploma or below, undergraduate, postgraduate or above. Fourth, the monthly income was measured in four categories having options of below than 250, From 250 - 450, From 451 - 650 and More than 650. Fifth, occupation was measured in three categories of unemployed, professional/ employed and business/self-employed.

4.2.1 Gender

Gender respondents were selected in two categories: male and female. In data from customers, the majority of male and female respondents were 69%

and 31% respectively. This is consistent with the fact that females are in Palestine usually took the role of the family only and the males were responsible to do business and make money for the family. But this has begun to change in the recent past, and now more female workers continue to work even after marriage because of the constantly rising cost of living and low wages for their partners. Table 7 summarize the sample distribution by gender.

Variables	Frequency	Percent
Gender		
Male	159	69%
Female	71	31%
Total	230	100%

 Table 7
 Sample Distribution by Gender

4.2.2 Age

In customers data, respondents were of different age groups in a relative distribution as shown in Table 8. The highest representation is respondents who belong to the 30 - 34 years by 36%. The rate of ageing between 35 - 39 years was 26%, respondents from 25 - 29 years were 13%, from 40 - 44 years 11%, from 45 - 49 years 7%, and 7% were more than 50s years.

Variables	Frequency	Percent
Age		
25-29	30	13%
30-34	82	36%
35-39	60	26%
40-44	25	11%
45-49	17	7%
50 years and more	16	7%
Total	230	100%

Table 8Sample Distribution by Age

The educational level of respondents was measured in three categories as shown below in Table 9. The highest percentage of respondents who obtained an undergraduate degree is 90%, and postgraduate or above is 10%.

Variables	Frequency	Percent		
Educational Level				
Undergraduate	207	90%		
Postgraduate	23	10%		
Total	230	100%		

Table 9Sample Distribution by Educational Level

4.2.4 Monthly Income

Monthly income of respondents was measured in four categories as shown below in Table 10. The highest percentage of respondents who has monthly income from 451 – 650 by 38%. The monthly income from 250 – 450 was 33%, more than 650was 22% and less below 250 was 7%. Table 15 summarize the sample distribution by monthly income.

Variables	Frequency	Percent
Monthly Income		
Below 250	15	7%
250 – 450	77	33%
451 – 650	87	38%
More than 650	51	22%
Total	230	100%

Table 10Sample Distribution by Monthly Income

4.2.5 Occupation

Occupation of respondents was selected in three categories. The highest representation is respondents who belong to professional/ employed by 55%. Business/self-employed was38% and unemployed 7%. Table 11 summarize the sample distribution by occupation.

Variables	Frequency	Percent
Occupation		
Unemployed	15	7%
Professional/ Employed	128	55%
Unemployed	87	38%
Total	400	100%

Table 11Sample Distribution by Occupation

4.3 Correlation Analysis

The results of the correlation analysis which indicates that all the six constructs were positively correlated with each other with 0.01 significance value are shown in Table 12. The relationship between TD and DIS (R= 0.761, p = 0.01) is considered as a significant and high positive correlation. The relationship between TD and DM (R = 0.690, p = 0.01) is considered as a significant and moderate positive correlation. The correlation coefficient between TD and SO (R = 0.994, p = 0.01) is considered as very high positive correlation. The relation between TD and OS (R = 0.802, p = 0.01) is considered as high positive correlation. The relationship between HD and OS (R = 0.377, p = 0.01) is considered as low positive correlation. The relationship between HD and DM (R = 0.053, p = 0.428) is considered as a not significant and very low positive correlation. The correlation coefficient between HD and SO (R = 0.446, p = 0.01) is considered as low positive correlation. The relation between HD and OS (R = 0.377, p = 0.01) is considered as low positive correlation coefficient between HD and SO (R = 0.446, p = 0.01) is considered as low positive correlation. The relation between HD and OS (R = 0.377, p = 0.01) is considered as low positive correlation.

The relationship between SD and DIS (R= 0.831, p = 0.01) is considered as a significant and high positive correlation. The relationship between SD and DM (R = 0.651, p = 0.01) is considered as a significant and moderate positive correlation. The correlation coefficient between SD and SO (R = 0.743, p = 0.01) is considered as high positive correlation. The relation between SD and OS (R = 0.824, p = 0.01) is considered as high positive correlation. The relationship between NT and DIS (R= 0.776, p = 0.01) is considered as a significant and high positive correlation. The relationship between NT and DM (R = 0.620, p = 0.01) is considered as a significant and moderate positive correlation. The correlation coefficient between NT and SO (R = 0.844, p = 0.01) is considered as high positive correlation. The relation between NT and OS (R = 0.812, p = 0.01) is considered as high positive correlation.

	HD	SD	NT	DM	SO	OS	TD	DIS
HD	1							
SD	.600**	1						
NT	.540**	.789**	1					
DM	.053	.651**	.620**	1				
SO	.446**	.743**	.844**	.704**	1			
OS	.377**	.824**	.812**	.704**	.808**	1		
TD	.446**	.748 ^{**}	.845**	.690**	.994**	.802**	1	
DIS	.377**	.831**	.776 ^{**}	.695**	.756**	.960**	.761**	1

 Table 12Correlation between Research Variables

N=230

**Correlation is significant at the 0.01 level (2-tailed).

HD: Hardware, SD: Software and Database, NT: Networks, DM: Digital Marketing, SO: Selling Online, OS: Online Security, TD: Technological Development, DIS: Digitizing the Insurance Sector.

4.4 Exploratory Factor Analysis

Exploratory factor analysis (EFA) enables the author to reduce the observed variables to smaller numbers and identify the relationship between them (Hinkin, 1998). Principal components analysis (PCA) technique following by the Promax with Kaiser Normalization rotation method was used to extract the factors. As proposed by (Hair et al., 2014) the author kept only those items which loaded 0.4 or above on single item. Table 13 showed KMO and Bartlett's Test and the resulting value for Palestinian insurance companies was 0.789 which effectively comply with (Kaiser & Rice, 1974) of the required sample value.

Table 13KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure	of Sampling Adequacy	0.789
Bartlett's Test of Sphericity	Approx. Chi-Square	19160.351

Df	1485
Sig.	0.000

The author examined the correlation between the variables and the visual examination showed a significant correlation at p = 0.01. The EFA analysis extracted six distinct factors explaining 73.42% of the total variance. The constructHD possessed eight items which loaded between 0.764 to 0.877, and the construct explained 18.93% of the total variance. The construct SD possessed six items and one of them was deleted, the remaining five items loaded between 0.808 to 0.953 and explained 14.83% of the total variance. The original construct of the NT had five items which loaded between 0.823 to 0.878 and explained 12.20% of the total variance. The SO had five items and loaded from 0.805 to 0.885 and explained 10.50% of the total variance. The DM construct had seven and three items was deleted, the remaining four items loaded between 0.730 to 0.908, and the construct explained 9.64% of the total variance. The construct of OS had three items and loaded between 0.770 to 0.915 and explained 7.32% of the total variance. Table 14 summarizes exploratory factor analysis result.

Factor	Factor loading	% of Variance Explained	Cronbach's alpha	Initial Eigenvalues	
Factor 1: Hardware					
HD1	.830				
HD2	.818		0.935	5.679	
HD3	.875				
HD4	.764	18.93%			
HD5	.807				
HD6	.830				
HD7	.877				
HD8	.827				
Factor 2: Software and Database					
SD1	.808				
SD2	.904	14.83%	0.941	4.450	
SD3	.892				

Table 14 Exploratory Factor Analysis Results

SD4	.934		
SD5	.953		

Factor	Factor loading	% of Variance Explained	Cronbach's alpha	Initial Eigenvalues
Factor 3: Networks				
NT1	.831			
NT2	.878			
NT3	.865	12.20%	0.911	3.659
NT4	.852			
NT5	.823			
Factor 4: Selling Online				
SO1	.885			
SO2	.805			
SO3	.813	10.50%	0.889	3.150
SO4	.810			
SO5	.851			
Factor 5: Digital Marketing				
DM1	.858			
DM2	.906	9.64%	0.868	2.891
DM4	.908	3.0470	0.000	2.091
DM7	.730			
Factor 6: Online Security				
OS1	.896			
OS2	.915	7.32%	0.823	2.196
O\$3	.770			

4.5 Hypotheses Testing

The researchers used linear regression for SPSS v25 to test the research hypotheses. This research consists of four main hypotheses and twelve sub-hypotheses. The relationship for these hypotheses and sub-hypotheses divided into four sections.

4.5.1 The relationship between technological development and digitizing the insurance sector

Hypothesis H₁ posits that TD positively influence DIS. As shown in Table 15the linear regression demonstrated that the path estimates between TD and DIS was significant ($F_{(1,228)} = 314.644$, p < 0.05, $R^2 = 0.580$). Also, the model coefficient shows that TD were positive and statistically significant to DIS ($T_{(228)} = 17.738$, $\beta = 1.515$, p < 0.05). According to the lower and upper bound of the 95% confidence interval if zero falls between them, then the hypothesis will be rejected. If zero falls outside of the interval, then the hypothesis will be accepted. In Table 15 shows that zero does not fall between the lower and upper bound of the 95% confidence interval of the 95% confidence interval (LLCl= 1.347, ULCl= 1.683), so the author infers that the effect of TD on DIS is significantly different from zero. Therefore, hypothesis H₁ was accepted.

Table 15 Regression analysis of TD on DIM

								Model S	ummar	y					
_		_	_							Chai	nge St	atistics			
N	lodel	R	R Squ	lare	Adjusted	d R Sq	uare	R Square	Change	F Change	df1	df2	Sig	. F Change	
	1	.761 ^a	.58	0	.578			.58	0	314.644	1	228		.000	
a. Predictors: (Constant), TD															
								ANO	VA ^a						
	Ν	lodel		Sun	n of Squar	es	df	Mean Se	quare	F			Sig.		
	_	Regre	ssion	1	4806.786		1	14806.	306.786 314.644			.000 ^b			
	1	Resi	Residual 10729.406 228 47.0		59										
		To	tal	2	5536.191		229								
a. I	Depend	lent Var	iable: D	IS											
b. I	Predicto	ors: (Co	nstant),	TD											
								Coeffic	cients ^a						
			Unsta	ndaro	dized	St	andar	dized		t	Sig.	Sig. 95.0% Confidence Interval for B		nco Intorval for R	
	Mode		Coe	fficie	nts	С	Coeffic	ients		l	Sig.	95.0			
			В	Std	I. Error		Bet	a				Lowe	er Bound	Upper Bound	
4	(Cons	tant)	25.199	2	.639			g		.548	.000	1	9.998	30.399	
1	TC)	1.515		085		.76	1	17	7.738	.000	1	.347	1.683	
a. I	Depend	lent Var	iable: D	IS											

4.5.1.1 The relationship between technological development and digital marketing

Hypothesis H1a posits that TD positively influence DM. As shown in Table 16 the linear regression demonstrated that the path estimates between TD and DM was significant (F $_{(1,228)}$ = 207.395, p< 0.05, R2= 0.474). Also, the model coefficient shows that TD were positive and statistically significant to DM (T $_{(228)}$ = 14.401, β = 1.027, p < 0.05). According to the lower and upper bound of the 95% confidence interval if zero falls between them, then the hypothesis will be rejected. If zero falls outside of the interval, then the hypothesis will be accepted. In Table 16 shows that zero does not fall between the lower and upper bound of the 95% confidence interval (LLCI= 0.886, ULCI= 1.167), so the author infers that the effect of TD on DM is significantly different from zero. Therefore, hypothesis H1a was accepted.

Table 16 Regression analysis of TD on DM

						Model S	Summa	ry				
								С	hange	Statis	tics	
Model	I R	RSC	quare	Adjusted F	Squa	R Square C	hange	F Change	df1	df2	Sig. F (Change
1	.690 ^a	.4	76	.47	4	.476	.476 207.395 1 228 .000					00
a. Predi	ictors: (Co	nstant)), TD									
						AN	OVA ^a					
	Model		Sum c	of Squares	df	Mean Square	F				Sig.	
	Regre	ssion	68	01.458	1	6801.458	207.39	5			.000 ^b	
1 Resi		lual	7477.189		228	32.795						
Total 14278.648				229								
a. Depe	endent Va	iable: I	DM									
b. Predi	ictors: (Co	nstant)), TD									
						Coeff	icients	a				
Мс	odel	Unsta	Indardiz	zed Coeffici	ents	Standardized C	andardized Coefficients		5	Sig.	95.0% Confidence Interval for I	
		В		Std. Error		Beta					Lower Bound	Upper Bound
	onstant)	.301		2.203				.137		392	-4.041	4.642
1	TD	1.027	.071 .690				14.401	.(000	.886	1.167	

4.5.1.2 The relationship between technological development and selling online

Hypothesis H1b posits that TD positively influence SO. As shown in Table 17 the linear regression demonstrated that the path estimates between TD and SO was significant (F $_{(1,228)}$ = 18697.318, p< 0.05, R2= 0.988). Also, the model coefficient shows that TD were positive and statistically significant to SO (T $_{(228)}$ = 136.738, β = 1.009, p < 0.05). According to the lower and upper bound of the 95% confidence interval if zero falls between them, then the hypothesis will be rejected. If zero falls outside of the interval, then the hypothesis will be accepted. In Table 17 shows that zero does not fall between the lower and upper bound of the 95% confidence interval of the 95% confidence interval (LLCI= 0.995, ULCI= 1.024), so the author infers that the effect of TD on SO is significantly different from zero. Therefore, hypothesis H1b was accepted.

Table 17 Regression analysis of TD on SO

					Model	Summa	ary					
		_	5.0			Change Statistics						
Mod	lei	el R R Square		Adjusted R Square	R Square	Change	F Ch	ange	df1	df2	2 Sig.	F Change
1		994 ^a	.988	.988	.98	8	1869	7.318	1	228	8	.000
a. Pr	a. Predictors: (Constant), TD											
					AN							
Model Sum of Squares					df	Mean	Squar	e	F	=		Sig.
	Regression		ression	6569.322	1	656		18697	7.318	.000 ^b		
1	1 Residual		sidual	80.108	228	.351						
		٦	Fotal	6649.430	229	229						
a. De	epend	dent Va	ariable: SO									
b. Pr	redicto	ors: (C	onstant), TI	0								
					Coef	ficients	a					
			Unstanda	ardized Coefficients	Standardized	d Coefficie	ents	t	s	ig.	95.0% Confide	nce Interval for B
	Mode	el	В	Std. Error	Be	eta					Lower Bound	Upper Bound
	(Con	stant)	239	.228				-1.050	.2	95	689	.210
1	1		1.009	.007	.9	94		136.738		00	.995	1.024
a. De	epend	dent Va	ariable: SO									

4.5.1.3 The relationship between technological development and online security

Hypothesis H1c posits that TD positively influence OS. As shown in Table 18 the linear regression demonstrated that the path estimates between TD and OS was significant (F $_{(1,228)}$ = 410.429, p< 0.05, R2= 0.643). Also, the model coefficient shows that TD were positive and statistically significant to OS (T $_{(228)}$ = 20.259, β = 0.828, p < 0.05). According to the lower and upper bound of the 95% confidence interval if zero falls between them, then the hypothesis will be rejected. If zero falls outside of the interval, then the hypothesis will be accepted. In Table 18 shows that zero does not fall between the lower and upper bound of the 95% confidence interval (LLCI= 0.747, ULCI= 0.908), so the author infers that the effect of TD on OS is significantly different from zero. Therefore, hypothesis H1c was accepted.

Table 18 Regression analysis of TD on OS

					N	lodel Su	umma	ry						
									Change	Statis	stics			
Мо	del R	R Square	Adjuste	ed R So	quare	R Squar	e Char	nge F (Change	df1	df2	Sig. F Change		
-	1.802 ^a	.643		.641		.6	643	4	0.429	1	228	.000		
a. F	Predictors: (C	onstant), T	D											
Model Sum of Squares df Mean Square F Sig. Regression 4420,700 1 4420,700 410,429 .000 ^b														
	Regression 4420.700 1 4420.700 410.429 .000 ^b													
Regiession 4420.700 1 4420.700 410.429 .000 1 Residual 2455.774 228 10.771														
	Total	6876	6.474	229										
a. D	Dependent Va	ariable: OS												
b. F	Predictors: (C	onstant), T	D											
		T				Coeffic	ients	a		1				
		Uns	tandardiz	ed		Standardi	zed	t	Sig.	05.0	0% Confid	ence Interval for B		
	Model	С	oefficient	S		Coefficie	nts	ι ι	Sig.	95.0				
		В	Std. I	Error		Beta				Low	er Bound	Upper Bound		
1	(Constant)	10.846	1.2	63				8.590	.000	1	8.358	13.334		
1	TD	.828	.04	11		.802		20.259	.000		.747	.908		
ъГ)enendent V:	ariable: OS												

a. Dependent Variable: OS

4.5.2 The relationship between hardware and digitizing the insurance sector

Hypothesis H2 posits that HD positively influence DIS. As shown in Table 19 the linear regression demonstrated that the path estimates between HD and DIS was significant (F $_{(1,228)}$ = 37.854, p< 0.05, R²= 0.142). Also, the model coefficient shows that HD were positive and statistically significant to DIS (T $_{(228)}$ = 6.153, β = 0.227, p < 0.05). According to the lower and upper bound of the 95% confidence interval if zero falls between them, then the hypothesis will be rejected. If zero falls outside of the interval, then the hypothesis will be accepted. In Table 19 shows that zero does not fall between the lower and upper bound of the 95% confidence interval (LLCI= 0.154, ULCI= 0.299), so the author infers that the effect of HD on DIS is significantly different from zero. Therefore, hypothesis H2 was accepted.

						Mode	el Summ	ary					
		5.0	A 11		0				Chai	nge Sta	atistics	3	
Мо	del R	R Squai	re Adju	isted R	Square	R Sq	uare Chan	ge	F Change	df1	df2	Sig	. F Change
1	1.377 ^a	.142		.139	9		.142		37.854	1	228		.000
a. F	Predictors: (C	Constant), H	łD										
						A	NOVA ^a						
	Model	Sum of	Squares	df	Mean S	Square	F				Si	g.	
	Regressio	n 363	6.046	1	3636.	.046	37.854				.00)0 ^b	
1	Residual	2190	0.146	228	96.0)53							
	Total	2553	6.191	229									
a. C	Dependent V	ariable: DIS	6										
b. F	Predictors: (C	Constant), H	ID										
						Coe	efficient	s ^a					
		Unstand	ardized C	oefficie	ents Sta	andardiz	zed Coeffic	cients			95.0)% Confide	nce Interval for B
	Model	В	Std.	Error			Beta		t	Sig.	Low	er Bound	Upper Bound
	(Constant)	60.316	1.	902					31.713	.000	Ę	56.568	64.064
1	HD	.227	.0)37			.377		6.153	.000		.154	.299
a. D	Dependent V	ariable: DIS	3										

Table 19Regression analysis of HD Functions on DIS

4.5.2.1 The relationship between hardware and digital marketing

Hypothesis H2a posits that HD positively influence DM. As shown in Table 20 the linear regression demonstrated that the path estimates between HD and DM was significant (F $_{(1,228)} = 0.631$, p< 0.05, R²= 0.003). Also, the model coefficient shows that HD were positive and statistically significant to DM (T $_{(228)} = 0.794$, $\beta = 0.024$, p > 0.05). According to the lower and upper bound of the 95% confidence interval if zero falls between them, then the hypothesis will be rejected. If zero falls outside of the interval, then the hypothesis will be accepted. In Table 20 shows that zero does fall between the lower and upper bound of the 95% confidence interval (LLCI= -0.035, ULCI= 0.882), so the author infers that the effect of HD on DM is not significantly different from zero. Therefore, hypothesis H2a was rejected.

Table 20 Regression analysis of HD on DM

		-				Mode	el Sum	mar	ry				
N4-		DO	A							Chan	ge Sta	istics	
IVIO	del R	R Square	Adjuste	ea R S	quare	R Squar	e Chan	ge	F Chan	nge c	lf1 d	f2 Sig.	F Change
	1.053 ^a	.003		002		.(003		.631		1 2	28	.428
a. F	Predictors: (0	Constant), H	D										
					-	A	NOVA	A a					
	Model	Sum of	Squares	df	Mear	n Square	F					Sig.	
	Regressio	n 39.4	420	1	39	9.420	.631					.428 ^b	
1	Residual	1423	9.228	228	62	2.453							
	Total	1427	8.648	229									
a. C	Dependent V	ariable: DM											
b. F	Predictors: (0	Constant), H	D										
						Coe	efficie	nts ^a			-		
		Unstanda	ardized C	oefficie	ents 3	Standardiz	zed Coe	fficie	nts	t	Sig.	95.0% Confide	ence Interval for B
	Model	В			Beta					Lower Bound	Upper Bound		
	(Constant)	30.415	1.	534					19	9.832	.000	27.393	33.437
1	HD	.024	.(030			.053			.794	.428	035	.082
a. C	Dependent V	ariable: DM											

4.5.2.2 The relationship between hardware and selling online

Hypothesis H2b posits that HD positively influence SO. As shown in Table 21 the linear regression demonstrated that the path estimates between HD and SO was significant (F $_{(1,228)}$ = 56.567, p< 0.05, R² = 0.195). Also, the model coefficient shows that HD were positive and statistically significant to SO (T $_{(228)}$ = 7.521, β = 0.137, p < 0.05). According to the lower and upper bound of the 95% confidence interval if zero falls between them, then the hypothesis will be rejected. If zero falls outside of the interval, then the hypothesis will be accepted. In Table 21 shows that zero does not fall between the lower and upper bound of the 95% confidence interval (LLCI= 0.101, ULCI= 0.173), so the author infers that the effect of HD on SO is significantly different from zero. Therefore, hypothesis H2b was accepted.

Table 21 Regression analysis of HD on SO

						Mode	el Summa	ary					
			A 15 - 6						Cha	nge S	Statis	stics	
MC	del R	R Square	Adjuste	ed R S	quare	R Squar	re Change	F Cha	ange	df1	df2	Sig.	F Change
	1.446 ^ء	.199		.195			199	56.5	567	1	228	3	.000
a. F	Predictors: (Constant), H	D										
						A							
	Model	Sum of	Squares	df	Mear	n Square	F					Sig.	
	Regressi	on 1321	.796	1	13	21.796	56.567					.000 ^b	
1	Residua	I 5327	7.635	228	23	3.367							
	Total	6649	9.430	229									
a. C	Dependent	Variable: SO											
b. F	Predictors: (Constant), H	D										
						Coe	efficients	a					
		Unstanda	ardized C	oefficie	ents	Standardiz	zed Coeffic	ients				95.0% Confide	nce Interval for E
	Model	В	Std.	Error			Beta		t	Si	ig.	Lower Bound	Upper Bound
	(Constan	:) 23.847	.9	938					25.421	.0	00	21.999	25.695
1	HD	.137).)18			.446		7.521	0	00	.101	.173

a. Dependent Variable:

4.5.2.3 The relationship between hardware and online security

Hypothesis H2c posits that HD positively influence OS. As shown in Table 22 the linear regression demonstrated that the path estimates between HD and OS was significant (F $_{(1,228)}$ = 37.808, p< 0.05, R²= 0.142). Also, the model coefficient shows that HD were positive and statistically significant to OS (T $_{(228)}$ = 6.149, β = 0.118, p < 0.05). According to the lower and upper bound of the 95% confidence interval if zero falls between them, then the hypothesis will be rejected. If zero falls outside of the interval, then the hypothesis will be accepted. In Table 22 shows that zero does not fall between the lower and upper bound of the 95% confidence interval (LLCI= 0.080, ULCI= 0.155), so the author infers that the effect of HD on OS is significantly different from zero. Therefore, hypothesis H2c was accepted.

Table 22 Regression analysis of HD on OS

	1	-				Mode	l Summa	ary					
									Cha	nge S	Statis	tics	
Мо	del R	R Square	Adjuste	d R So	quare	R Squar	e Change	F Cł	nange	df1	df2	Sig. F	⁻ Change
1	.377 ^a	.142			.138		.142	3	37.808	1	22	8	.000
a. F	Predictors: (Constant), H	D										
						Α	NOVA ^a						
Мо	del	Sum of S	Squares	df	Mear	n Square	F					Sig.	
1	Regressio	n	978.094	1		978.094	37.808						.000
	Residual	5	898.379	228		25.870							
	Total	6	876.474	229									
a. E	Dependent \	/ariable: OS											
b. F	Predictors: (Constant), H	D										
						Coe	efficients	a					
		Unstanda	ardized Co	oefficie	nts	Standardiz	ed Coeffici	ents				95.0% Confider	nce Interval for B
Мо	del	В	Std.	Error			Beta		t	S	g.	Lower Bound	Upper Bound
1	(Constant)	30.340			987				30.73	8 .0	000	28.395	32.285
	HD	.118			019			.377	6.14	9 .0	000	.080	.15

a. Dependent Variable: OS

4.5.3 The relationship between software and database and digitizing the insurance sector

Hypothesis H3 posits that SD positively influence DIS. As shown in Table 23 the linear regression demonstrated that the path estimates between SD and DIS was significant (F $_{(1,228)}$ = 510.039, p< 0.05, R²= 0.691). Also, the model coefficient shows that SD were positive and statistically significant to DIS (T $_{(228)}$ = 22.584, β = 0.982, p < 0.05). According to the lower and upper bound of the 95% confidence interval if zero falls between them, then the hypothesis will be rejected. If zero falls outside of the interval, then the hypothesis will be accepted. In Table 23 shows that zero does not fall between the lower and upper bound of the 95% confidence interval (LLCI= 0.896, ULCI= 1.068), so the author infers that the effect of SD on DIS is significantly different from zero. Therefore, hypothesis H3 was accepted.

Table 23 Regression	analysis of	SD Functions	on DIS
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				1			Mode	el Summa	ary					
		5								Cha	nge S	Statis	stics	
IVIC	del	R	R Square	Adjuste	ed R S	quare	R Squar	re Change	F Cha	ange	df1	df2	Sig. I	F Change
	1.	831 ^a	.691		.690		.6	691	510.	039	1	228	3	.000
a. F	Predicto	ors: (Co	onstant), SI)										
							A	NOVA ^a						
	Mode	el	Sum of S	Squares	df	Mear	n Square	F					Sig.	
	Regr	ession	17647	7.382	1	176	47.382	510.039					.000 ^b	
1	Regression Residual		7888	.810	228	34	4.600							
	Тс	otal	25536	6.191	229									
a. C	Depend	lent Va	riable: DIS											
b. F	Predicto	ors: (Co	onstant), SI)										
							Coe	efficients	a					
			Unstanda	rdized C	oefficie	ents S	Standardiz	zed Coeffici	ents				95.0% Confide	nce Interval for E
	Mode	9l	В	Std.	Error			Beta		t	Si	g.	Lower Bound	Upper Bound
	(Con	stant)	35.553	1.0	631					21.804	.0	00	32.341	38.766
1	s	D	.982	.0	43			.831		22.584	.0	00	.896	1.068

a. Dependent Variable: DIS

4.5.3.1 The relationship between software and database and digital marketing.

Hypothesis H3a posits that SD positively influence DM. As shown in Table 24 the linear regression demonstrated that the path estimates between SD and DM was significant (F $_{(1,228)}$ = 167.414, p< 0.05, R²= 0.423). Also, the model coefficient shows that SD were positive and statistically significant to DM (T $_{(228)}$ = 12.939, β = 0.575, p < 0.05). According to the lower and upper bound of the 95% confidence interval if zero falls between them, then the hypothesis will be rejected. If zero falls outside of the interval, then the hypothesis will be accepted. In Table 24 shows that zero does not fall between the lower and upper bound of the 95% confidence interval (LLCI= 0.487, ULCI= 0.662), so the author infers that the effect of SD on DM is significantly different from zero. Therefore, hypothesis H3a was accepted.

Table 24 Regression analysis of SD on DM

						Mode	el Summa	ary					
									Cha	inge S	Statis	tics	
Мо	del R	R Square	Adjuste	ed R S	quare	R Squar	re Change	F Cł	nange	df1	df2	Sig.	F Change
1	.651 ^ª	.423		.421		.4	423	167	'.414	1	228	3	.000
a. P	redictors: (C	Constant), S	D										
						A							
	Model	Sum of	Squares	df	Mear	n Square	F					Sig.	
	Regressio	n 6045	5.429	1	604	45.429	167.414					.000 ^b	
1	Residual	8233	3.218	228	36	5.111							
	Total	1427	8.648	229									
a. C	ependent V	ariable: DM											
b. P	Predictors: (0	Constant), S	D										
						Coe	efficients	a					
		Unstanda	ardized C	oefficie	ents S	Standardiz	zed Coeffici	ents				95.0% Confide	nce Interval for B
	Model	В	Std.	Error			Beta		t	S	ig.	Lower Bound	Upper Bound
	(Constant)	10.626	1.	666					6.379	.0	00	7.344	13.908
1	SD	.575	.0)44			.651		12.93	9.0	00	.487	.662
a. D	ependent V	ariable: DM											

4.5.3.2 the relationship between software and database and selling online

Hypothesis H3b posits that SD positively influence SO. As shown in Table 25 the linear regression demonstrated that the path estimates between SD and SO was significant (F $_{(1,228)}$ = 281.525, p< 0.05, R²= 0.551). Also, the model coefficient shows that SD were positive and statistically significant to SO (T $_{(228)}$ = 16.779, β = 0.448, p < 0.05). According to the lower and upper bound of the 95% confidence interval if zero falls between them, then the hypothesis will be rejected. If zero falls outside of the interval, then the hypothesis will be accepted. In Table 25 shows that zero does not fall between the lower and upper bound of the 95% confidence interval (LLCI= 0.395, ULCI= 0.501), so the author infers that the effect of SD on SO is significantly different from zero. Therefore, hypothesis H3bwas accepted.

Table 25 Regression analysis of SD on SO

				1			Mode	el Summa	ary					
			D 0							Cha	nge S	Statis	stics	
IVIO	odel	R	R Square	Adjuste	ed R S	quare	R Squar	e Change	F Cł	nange	df1	df2	2 Sig.	F Change
-	1	.743 ^a	.553		.551		.5	553	281	.525	1	228	3	.000
a. F	Predict	tors: (Co	onstant), S	D										
							A	NOVA ^a						
	Мос	del	Sum of S	Squares	df	Mear	n Square	F					Sig.	
	Reg	ression	3673	.972	1	36	73.972	281.525					.000 ^b	
1	Regression 3673.972 1 Residual 2975.459 228						3.050							
	т	otal	6649	.430	229									
a. C	Depen	dent Va	riable: SO											
b. F	Predict	tors: (Co	onstant), S	D										
							Coe	efficients	a					
			Unstanda	ardized Co	cefficie	ents	Standardiz	zed Coeffici	ents				95.0% Confide	nce Interval for B
	Mod	lel	В	Std.	Error			Beta		t	S	ig.	Lower Bound	Upper Bound
	(Cor	nstant)	14.162	1.0	001					14.142	2 .0	00	12.189	16.136
1	5	SD	.448	.0	27			.743		16.779	.0	00	.395	.501
a. D	Depen	dent Va	riable: SO											

4.5.3.3 the relationship between software and database and online security

Hypothesis H3c posits that SD positively influence OS. As shown in Table 26 the linear regression demonstrated that the path estimates between SD and OS was significant (F $_{(1,228)}$ = 481.046, p< 0.05, R²= 0.678). Also, the model coefficient shows that SD were positive and statistically significant to OS (T $_{(228)}$ = 21.933, β = 0.505, p < 0.05). According to the lower and upper bound of the 95% confidence interval if zero falls between them, then the hypothesis will be rejected. If zero falls outside of the interval, then the hypothesis will be accepted. In Table 26 shows that zero does not fall between the lower and upper bound of the 95% confidence interval (LLCI= 0.460, ULCI= 0.550), so the author infers that the effect of SD on OS is significantly different from zero. Therefore, hypothesis H3c was accepted.

Table 26 Regression analysis of SD on OS

				•			Mode	el Summa	ary					
		_	D O							Cha	nge S	Statis	stics	
Мо	del F	×	R Square	Adjuste	ed R S	quare	R Squar	e Change	F Cł	nange	df1	df2	2 Sig.	F Change
1	1.82	24 ^a	.678		.677		.6	678	481	.046	1	228	3	.000
a. F	redictors	s: (Co	onstant), S	D										
							A							
	Model		Sum of	Squares	df	Mear	n Square	F					Sig.	
	Regres	ssion	4665	.284	1	46	65.284	481.046					.000 ^b	
Regression 4665.284 1 4665.284 481.046 1 Residual 2211.190 228 9.698														
	Tota	al	6876	.474	229									
a. C	Depender	nt Vai	riable: OS											
b. F	redictors	s: (Co	onstant), S	D										
							Coe	efficients	a					
			Unstanda	ardized Co	oefficie	nts	Standardiz	zed Coeffici	ents				95.0% Confide	nce Interval for B
	Model		В	Std.	Error			Beta		t	S	ig.	Lower Bound	Upper Bound
	(Consta	ant)	17.657	.8	63					20.454	.0	00	15.956	19.358
1	SD		.505	.0	23			.824		21.933	3.0	00	.460	.550
a. D	Depender	nt Vai	riable: OS											

4.5.4 The relationship between networks and digitizing the insurance sector

Hypothesis H4 posits that NT positively influence DIS. As shown in Table 27 the linear regression demonstrated that the path estimates between NT and DIS was significant (F $_{(1,228)}$ = 345.457, p< 0.05, R²= 0.602). Also, the model coefficient shows that NT were positive and statistically significant to DIS (T $_{(228)}$ = 18.586, β = 1.123, p < 0.05). According to the lower and upper bound of the 95% confidence interval if zero falls between them, then the hypothesis will be rejected. If zero falls outside of the interval, then the hypothesis will be accepted. In Table 27 shows that zero does not fall between the lower and upper bound of the 95% confidence interval (LLCI= 1.004, ULCI= 1.243), so the author infers that the effect of NT on DIS is significantly different from zero. Therefore, hypothesis H4 was accepted.

							Mode	el Summa	ary					
			D 0	A 19 6						Cha	nge S	Statis	tics	
Мо	del R	۲	R Square	Adjuste	ed R Se	quare	R Squar	e Change	F Ch	ange	df1	df2	Sig. F	- Change
	1.77	76 ^a	.602		.601		.6	602	345	.457	1	228	3	.000
a. F	redictors	s: (Co	onstant), N	Г										
							Α	NOVA ^a						
	Model		Sum of S	Squares	df	Mear	n Square	F					Sig.	
	Regres	ssion	15383	8.290	1	153	83.290	345.457					.000 ^b	
1	Resid	lual	10152	2.901	228	44	4.530							
	Tota	al	25536	6.191	229									
a. C	Depender	nt Var	riable: DIS											
b. F	redictors	s: (Co	onstant), N	Г										
							Coe	efficients	a					
			Unstanda	rdized Co	oefficie	nts S	Standardiz	zed Coeffici	ents				95.0% Confide	nce Interval for B
	Model		В	Std.	Error			Beta		t	Si	g.	Lower Bound	Upper Bound
	(Consta	ant)	33.387	2.(88					15.991	.0	00	29.273	37.501
1	NT		1.123	.0	60			.776		18.586	0.	00	1.004	1.243
a. C	Depender	nt Var	riable: DIS											

Table 27 Regression analysis of NT Functions on DIS

4.5.4.1 The relationship between networks and digital marketing

Hypothesis H4a posits that NT positively influence DM. As shown in Table 28 the linear regression demonstrated that the path estimates between NT and DM was significant (F $_{(1,228)}$ = 142.342, p< 0.05, R²= 0.382). Also, the model coefficient shows that NT were positive and statistically significant to DM (T $_{(228)}$ = 11.931, β = 0.671, p < 0.05). According to the lower and upper bound of the 95% confidence interval if zero falls between them, then the hypothesis will be rejected. If zero falls outside of the interval, then the hypothesis will be accepted. In Table 28 shows that zero does not fall between the lower and upper bound of the 95% confidence interval (LLCI= 0.560, ULCI= 0.782), so the author infers that the effect of NT on DM is significantly different from zero. Therefore, hypothesis H4a was accepted.

Table 28 Regression analysis of NT on DM

							Mode	el Summa	ary					
				A 12 <i>A</i>						Cha	nge S	tatis	tics	
Мо	del R		R Square	Adjuste	a R S	quare	R Squar	e Change	F Cha	ange	df1	df2	Sig. I	- Change
1	.620	0 ^a	.384		.382		.3	384	142.	342	1	228	3	.000
a. F	redictors:	: (Co	nstant), N ⁻	Г										
							Α	NOVA ^a						
	Model		Sum of S	Squares	df	Mean	n Square	F					Sig.	
	Regress	sion	5488	.029	1	548	38.029	142.342					.000 ^b	
Regression 5488.029 1 5488.029 142.342 .000 ^o 1 Residual 8790.619 228 38.555														
	Total	I	14278	3.648	229									
a. C	ependen	t Var	iable: DM											
b. F	redictors:	: (Co	nstant), N	Г										
							Coe	efficients	а					
			Unstanda	rdized Co	oefficie	ents S	Standardiz	zed Coeffici	ents				95.0% Confide	nce Interval for B
	Model		в	Std.	Error			Beta		t	Si	g.	Lower Bound	Upper Bound
	(Consta	nt)	8.903	1.9	43					4.582	.00	00	5.075	12.731
1	NT		.671	.0	56			.620		11.931	.00	00	.560	.782
a. C	ependen	t Var	iable: DM								•			

4.5.4.2 The relationship between networks and selling online

Hypothesis H4b posits that NT positively influence SO. As shown in Table 29 the linear regression demonstrated that the path estimates between NT and SO was significant (F $_{(1,228)}$ = 564.718, p< 0.05, R²= 0.712). Also, the model coefficient shows that NT were positive and statistically significant to SO (T $_{(228)}$ = 23.764, β = 0.623, p < 0.05). According to the lower and upper bound of the 95% confidence interval if zero falls between them, then the hypothesis will be rejected. If zero falls outside of the interval, then the hypothesis will be accepted. In Table 29 shows that zero does not fall between the lower and upper bound of the 95% confidence interval (LLCI= 0.572, ULCI= 0.675), so the author infers that the effect of NT on SO is significantly different from zero. Therefore, hypothesis H4b was accepted.

Table 29 Regression analysis of NT on SO

		•				Mode	el Summa	ary							
		D.O.		Adjusted R Square			Change Statistics								
Мо	del R	R Squar	e Adjuste				R Square Change			df1	df2	Sig. I	F Change		
1	.844 ^a	.712		.711			564.	.718	1	228		.000			
a. F	redictors: (Constant),	NT												
ANOVAª															
	Model	Sum o	um of Squares		Mean Square		F		Sig.						
1	Regressio	n 473	4736.933		4736.933		564.718	.000 ^b							
	Residua	191	2.497	.497 228		.388									
	Total	664	6649.430												
a. C	ependent \	/ariable: S	C												
b. F	redictors: (Constant),	NT												
Coefficients ^a															
		Unstan	Instandardized Coefficie			Standardized Coeffic		ents	t		9	95.0% Confidence Interval for B			
Model		В	Std.	Std. Error			Beta			Sig) .	Lower Bound	Upper Bound		
1	(Constant	9.432	.906						10.409	.00	0	7.646	11.218		
	NT	.623	.623 .020			.844			23.764	.00	0	.572	.675		
a. C	ependent \	/ariable: S	C					•		•					

4.5.4.3 The relationship between networks and online security

Hypothesis H4c posits that NT positively influence OS. As shown in Table 30 the linear regression demonstrated that the path estimates between NT and OS was significant (F $_{(1,228)}$ = 441.327, p< 0.05, R²= 0.659). Also, the model coefficient shows that NT were positive and statistically significant to OS (T $_{(228)}$ = 21.008, β = 0.610, p < 0.05). According to the lower and upper bound of the 95% confidence interval if zero falls between them, then the hypothesis will be rejected. If zero falls outside of the interval, then the hypothesis will be accepted. In Table 30 shows that zero does not fall between the lower and upper bound of the 95% confidence interval (LLCI= 0.553, ULCI= 0.667), so the author infers that the effect of NT on OS is significantly different from zero. Therefore, hypothesis H4b was accepted.

Table 30 Regression analysis of NT on OS

	Model Summary												
Model R R Square Adjusted R Sq				Change Statistics									
Mo	del R	R Square	Adjuste	Adjusted R Square		R Square Change		F Ch	ange	ge df1 df		Sig.	F Change
1	.812 ^a	.659				.659 441.327 1 228 .000		.000					
a. P	a. Predictors: (Constant), NT												
ANOVAª													
	Model Sum of Squares df Mean Square F Sig.												
	Regressior	4534	4534.068		453	34.068	441.327		.000 ^b				
1	Residual	2342	.406	228 1).274							
	Total	6876.474		229									
a. D	ependent Va	ariable: OS											
b. P	Predictors: (C	onstant), N	Т										
						Coe	efficients	a					
		Unstanda	Unstandardized Coefficients		ents S	Standardized Coefficients		ents				95.0% Confidence Interval for E	
	Model	В	Std.	Error			Beta		t		g.	Lower Bound	Upper Bound
	(Constant)	15.453	1.0	003					15.409	0. 6	00	13.477	17.429
1	NT	.610	.0)29			.812		21.008	3.0	00	.553	.667
a. D	ependent Va	ariable: OS											

CHAPTER 5

DISCUSSION AND CONCLUSION

5.1 Discussion

The amount of research about the TD and its impact on DIS on Palestine insurance sector is limited. Accordingly, the current study aimed at classifying this issue in the literature by empirically examining the relationship between TD and DIS among the customers of Palestine insurance sector.

The research results show that the relationship between TD and DIS is at 58%. This indicated that TD have a moderate relationship with DIS. This indicated that this relationship may be due to the existence of a set of obstacles that prevent insurance companies from using technology in the best way, including digital literacy, or the lack of clarity of the plans and policies followed, the inability of insurance companies to change the old systems used in customer service. Therefore, this research recommends insurance companies to focus more on finding optimal solutions to such obstacles that prevent them from keeping pace with on the ground. Also, most insurance company will not completely get rid of their legacy systems, but will modernize them, adding that they might do this with application programming interface(APIs) or service-based options(Becker et al., 2009; Kassab et al., 2017; Toderascu & Stofor, 2019).

The research results show that the relationship between TD and DM is at 47.6%. This indicated that TD have a low relationship with DM. This implies

that within a simple look on the Palestinian insurance sector, this research can conclude that a weak usage of TD as a DM and sale tool in the Palestinian insurance companies comparing to other sectors such as banking. Comparing to other neighboring countries such as the Gulf region, Palestine is not using the benefits of TD in selling insurance services without the need of traditional way with full using of papers and through authorized offices, agents and brokers. Therefore, this research recommends the Palestinian insurance companies that to keep parallel with the TD worldwide especially in the DM, Palestinian Capital market authority (as a legislature of insurance sector) have to create the sufficient regulations for the purpose of arranging the DM of insurance services. Also, the Palestinian insurance companies have to be interested in the DM field and create sufficient tools to develop the suitability of it with the insurance products or services. Moreover, the Palestinian insurance companies have to increase the awareness of the DM in insurance services among its employees and customers(Abubakar & Ilkan, 2016; Achrol & Kotler, 1999; Banerjee, 2016).

The results showed that the relationship between TD and SO is at 98.8% which is known to have the highest impact of TD on DIS components. This indicated that TD have a very strong relationship with SO. This is due to the fact that Palestinian insurance companies follow the correct policies or have the ability to keep pace with developments in this field in terms of programs and networks used in insurance companies to work on finding solutions for customers on how to access their services through the Internet. The global crisis that affected all parts of the world, which is the emerging Corona virus (COVID-19) crisis, has revealed that this crisis had negative effects on almost all sectors, the medical sector, the food sector, the industrial sector, the commercial sector and the insurance sector, which is of particular interest to this research. Then, the Palestinian insurance companies are affected quickly and noticeably as a result of the spread of this virus. However, despite the change in consumer behavior with its various characteristics in Palestine, even the consumer who did not follow the behavior of SO before became compelled to it now, and this was the reason for the TD and the concept of electronic commerce among Internet users of

various characteristics. Therefore, this research recommends Palestinian insurance companies to choose an appropriate platform to offer their services to the largest possible number of clients in an appropriate manner and work to improve what they provide continuously, by reviewing the results and extracting aspects that can be improved in order to reflect on the service in a positive way, and this undoubtedly helps in achieving more profits(Agnihotri et al., 2012; Singh, 2015).

The relationship between TD and OS is at 64.3%, thus rendering it moderate. This means that Palestinian insurance companies need to work hard on their operating system by using a new program that increases awareness and makes customers more confident with the online payment process. This research recommends Palestinian insurance companies to use two-factor authorization, mobile payment application and use a unique password for every login or transactions such as receiving a message on customer mobile. The emergence of TD in front of Palestinian insurance companies in the shadow of the global crisis of the Coronavirus has posed new challenges and serious issues such as the increase in the amount of personal information that is uploaded, which has prompted data retention and network logon technologies to redefine users' expectations regarding their privacy on the Internet. As well as the increasing circulation in virtual currencies, new dimensions are emerging for issues related to electronic payment methodologies. The widespread use of mobile banking services, especially in developing countries, highlights the need to deal with these issues by increasing the OS of information and keeping pace with TD to protect customers from cyber-attacks. This research recommends Palestinian insurance companies to develop standards and policies that limit the effects of cyber-attacks and reduce their risks on the future environment, because it defines the parameters of the future of technology and the world. They must also contain current and future cyber-attacks at the global level by enhancing levels of cooperation and exchange of information between consumers, government and private agencies, to ensure that OS acts as a key factor in the future in light of TD(Abbas et al., 2015; Alan et al., 2003; Gupta et al., 2004).

The relationship between HD and DIS, SO and OSis at 14.2%, 19.9% and 14% respectively. The results of the research revealed that HD had a statistically significant influence on DIS, SO and OS of customers in Palestinian insurance companiesbut with a very low relationship. This means that Palestinian insurance companies need to be more attention to TD that are driving the need for HD innovations such as better VR gear, new chip architecture, and on-the-job wearables. This research recommends Palestinian insurance companies to have a security continues because it is a major challenge with mobile devices. One option is Intel's Software Guard Extension (SGX) technology, which will support the use of secure encrypted memory spaces on commodity CPUs. The goal is to provide applications with an area of secure and protected memory and execution. This could be a boon for mobile devices, a leading source of security breaches that corporate TD must contend with(Bevilacqua et al., 2015; Forman & Gron, 2011; Jun & Kang, 2009).

The relationship between SD and DIS, SO and OSis at 69.1%, 55.1% and 67.8% respectively. The results revealed that SD had a significant and moderate influence with DIS, SO and OS. This implies that Palestinian insurance companies have the ability to build and develop a new software that go beyond the TD which help them to make their system more digitalized. This research recommends the Palestinian insurance companies that the development of complex SD is a challenging design activity not because of the complexity of technical problems, but because of social interaction when users and system developers learn to create, develop and express their ideas and visions. However, they need to take in their consideration that the design of complex SD is an intrinsic collaborative process in which the main source of complexity arises from the need to pool different perspectives on the problems to be solved. These perspectives arise from the many stakeholders involved in developing the system. The primary challenge for SD of the future is to provide support for mutual understanding between groups of people who see the world in radically different ways(Ahmed et al., 2006; Prajogo & Sohal, 2013; Yen et al., 2002).

The relationship between SD and DM is at 42.3%, thus rendering it weak. This result indicated that SD has a weak relationship but positively significant to DM. This implies that Palestinian insurance companies need to place considerable attention on the SD that make their e-marketing process more effective and sufficient to promote DM of their customers. This research recommends the Palestinian insurance companies that need to understand the reason why they need SD for DM which is to simplify most of their work and focus more on what they like the most. A SD that helps them to target audience, generate reports and analytics, create landing pages, and perform all other types of promotion techniques can be considered as an online marketing, campaign management, etc. which proving to be the factors responsible for such dramatic change and to expand their market and get better results(Al-Mudimigh et al., 2001; Galbraith, 2014).

The results showed that the relationship between NT and DIS and OS is at 60.2% and 65.9% respectively. The results revealed that NT had a significant and moderate influence with DIS and OS.This implies that Palestinian insurance companies must continuously monitoring of NT for safeguard against attacks test OS infrastructure and will affect the process of DIS. The log files of the users accessing the host containing information about their IPaddresses, duration and time stamp must be recorded. The weak areas must be identified through intrusion detection systems and the network security holes must be fixed before hackers find them. Also, they need considered at the OS services that have been used by NT because some of these services must be implemented such as password authentication, authorization and accounting. In the days of localized, centrally managed systems, passwords were considered sufficient to validate and authenticate users and this enhance the process of DIS(Achrol & Kotler, 1999; Bhagwat & Goutam, 2013; Campbell & Wilson, 1996).

The results showed that the relationship between NT and DM is at 38.2%, thus rendering it weak. This indicated that Palestinian insurance companies need to This research recommends the Palestinian insurance companies to

concentrate on social media because it has had a huge influence on business, marketing and on how they engage with their target market. The use of social media to share and engage with others continues to grow, so it would be wise for any business to develop and implement a sustainable social media strategy in order to successfully take advantage of this rapidly changing environment. Also, Palestinian insurance companies need to take in their consideration the social media marketing which is recently become a phenomenon that began with social media dominating online communication. It is considered as a form of internet marketing that implements various social media networks in order to achieve DM and branding goals. Moreover, social media marketing primarily covers activities involving social sharing of content, videos, and images for DM purposes. Palestinian insurance companies need to understand the social media marketing programs which is usually considered as a center on efforts to create content that attracts attention and encourages customers to share it with their social networks(Boyd & Ellison, 2008; Campbell & Wilson, 1996; Gupta et al., 2004; Sriram & Stump, 2004).

5.2 Conclusion

The existence of insurance companies depends on the contribution of significant elements of TD. DIS in these companies has more importance than any other sectors because the customers have direct and constant contact with the companies' staff that they serve. The digital revolution has transformed the way companies interact with customers, creating an environment where marketing, information and technology must work together. Retailers and industry giants have made significant strides in adopting digital platforms to deliver a satisfying customer experience. As mobile and social networks increase in popularity, consumers are relying on smart phones and tablets to research, compare prices and buy products online – anytime, anywhere. Yet, customers expect the same intuitive and streamlined experience from their insurance carriers as they do from their favorite app, search engine or online retailer. Insurance companies must adjust their business models and strategies to remain competitive and take

advantage of potential wallet share. Perhaps the most significant changes will be in the way that insurance products are sold, serviced and the usage of customer data. These changes will lead to much greater levels of personalization and so change the customer experience and value proposition.

There are signs that, through the COVID-19 situation, this will begin to change. Insurers are recognizing that they need to bring more value to their customers, with more personalized offerings and communications on a more segmented basis. One of the notable features of the situation has been the great boom in online communication between people, including via video. It's anticipated that some insurance products will likely start to be sold through a 'digital first' advice approach – where customers engage with an advisor via a video call in the first instance, before the sale moves to other channels to complete. This could lead to much better value for money through reduced distribution costs for the insurer and increased access to personalized advice for the customer. As we have noted, there is likely to be much higher demand than in the past for certain types of insurance. Insurers need to review their channel strategy approaches in order to serve this demand. This means greater investment in integrating their channels and creating digital pathways on an end-to-end basis.

5.3 Research Implication

5.3.1 Managerial and Practical Implications

Managers need to modify their approach to innovation. Such modification should be focused on the value-in-use concept and its underlying rationale on innovating the role of the customer regarding the buying, using and paying for insurance services. This represents a huge modification in the approach currently employed. Thus, a subsequent step toward innovating the role of the customer could be to create a more extensive customer service. Concentrating on customer service creates service-related skills and abilities in insurance companies that, at a later date, can be applied to the role of the customer. It could be considered as fundamental step in creating internal

service knowledge. Also, managerial implication is related to the marketing approach which, for insurance providers, means that the customer perceives the presence of value-added services differently. Without knowing a priori to which group a new customer belongs, insurance providers require a strategy of new processes in order to target the segment of customers interested in value-added services.

For many insurers, core transformation programs are still underway, even as they recognize a clear need to do more. Linking digital transformation programs to core transformation can help insurers use resources more effectively and strengthen the business case. Waiting for core transformation programs to be completed and then taking up the digital transformation would likely result in many missed performance improvement and innovation opportunities, as well as higher implementation costs. Within the digital transformation Program Framework, goals and objectives need to be clearly articulated through a transformation roadmap with a communications plan. Project managers must be aligned to the roadmap and have clear lines of responsibility to coordinate people, processes, and tools for program accountability, resource management, quality assurance, financial forecasting, and program efficiency.

5.3.2 Theoretical Implications

Many insurers have already begun piloting new customer journeys, which is an ideal place to start on the overall digital transformation process. Customer journey pilots must be the first step because they have immediate customer impact. Insurers should begin with the most important customer journeys based on the number of transactions, expected efficiency gains, and qualitative criteria such as impact and organizational buying. The integration of digital technologies pointed the way to increasing table sizes, which had a direct and measurable impact on employee's ability to produce. Start by reviewing your organization's overall communication or strategic plan to see how digital can reinforce that work. Insurers can in this stage develop objectives that are specific, measurable, achievable, realistic and timebound. Insurers must be focused and bold within their progressive approach to digital transformation, as it is the way to generate quick wins and create nearterm value that can be invested in the next steps. Each step along the digital maturity curve enables future gains. Rather than waiting to be passively disrupted, truly digital insurers move boldly and proactively, testing and learning in pursuit of innovation, and redesigning operations, engaging customers in new ways and seeking out new partners.

5.4 Research Limitation and Future Study

There are some limitations and opportunities for future studies. Firstly, the data for the present research was collected from only Palestinian insurance companies, so it is not clear whether the relationship between TD and DIS the same in other countries. Secondly, there is a possibility of bias in the conventional method of answering all questions. Although we did not statistically find the problems of the method prevalent in this research, they cannot be excluded entirely. Thirdly, this research is conducted using crosssectional data. This data can only at a specific time, reveal the total impact that predictor variable has towards a particular criterion variable. Thus, a longitudinal study should be carried out instead, to provide more data which are useful from respondents. Finally, this research focuses only on Palestinian insurance companies, which raises whether the relationships we examined in this study will be different for other sectors. Besides, for a future study, the author suggests a comparative study to be performed between customers working in Palestinian insurance companies. Moreover, a longitudinal study is encouraged to be carried out in future research. This may bring significant findings and results, capturing perception change on a period of time that affect the determinants of customers toward DIS.

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APPENDIX

QUESTIONNAIRE



Near East University

Faculty of Economics and Administrative Science

Department of International Business

Dear Responder,

This questionnaire aims to complete a study conducted by the researcher under the title, **The Impact of Technological Development on digitalizing the insurance sector in Palestine.** Please fill this questionnaire that designed to conduct the study. All data will be used for scientific research purposes and will be treated with strict confidentiality.

Thank you for your cooperation

Researcher

Please answer the questions by placing a (X) next to the answer that suits you.

1.	Gender							
	Male			Female				
2.	Age							
		Less Than 25		From 25 - 29Fr	30 - 34		F_m 35 - 39	
		From 40 - 44		From 45 - 49	1	More than 50s		
3.	Educationa	l level						
		Diploma and belo	owUn rg1	raduate	P_gradu	uate or above		
4.	Monthly In	come						
		Below than 250	Fron 50	- 450 From	451 - 65	More that	un 650	

5. Occupation

Unemployed

Professional/ Employed Business

<u>Please answer the questions by placing an (X) next to the answer you think is appropriate for you.</u>

#	Items	Strongly disagree 1	Disagree 2	Neither agree/ nor disagree 3	Agree 4	Strongly agree 5
	Technological Development					
	Hardware					
6.	I have all the ability to handle computers.					
7.	I believe that employeesare diverse professionals and develop their computer skills and abilities.					
8.	Existing employees have the ability to adapt to the requirements of the computers.					
9.	Increase the ability of employees to deal with the computers due to increased awareness and level of education in the Authority.					
10.	Increase confidence in the success of changing the manual to computers to increased awareness and level of education in the body.					
11.	The computers require special technical skills.					
12.	There is resistance from some employees who do not want to deal with the computer.					
13.	It is difficult for employees to understand the mechanisms of the computers.					
	Software and Database					
14.	A centralized database management system is available within the company.					
15.	Easy to provide original versions of database management software, software and antivirus.					
16.	It is easy to develop software related to document management.					
17.	Software to be used has the ability to allow more than one employee to communicate simultaneously at a time.					
18.	The company has the ability to provide the best databases that provide confidentiality and security of information.					
19.	Technological development has software with the ability to adapt to the work of the corporation's performance					

#	Items	Strongly disagree 1	Disagree 2	Neither agree/ nor disagree 3	Agree 4	Strongly agree 5
	Networks					
20.	The electronic document management system relies on the presence of a private computer network in the Intranet and the Internet					
21.	The latest specifications are available from computers and networks.					
22.	Employees have the ability to share data through a computer network.					
23.	The data is exchanged between all the branches of the Authority through the Authority's website.					
24.	The corporation has the ability to deliver orders to customers sooner than competitors					
	Digitalizing Insurance Sector					
	Digital Marketing					
25.	The website design helps me in searching the products easily					
26.	I prefer to purchase from a website that provides safety and ease of navigation and order					
27.	The website layout helps me in searching and selecting the right product while shopping online					
28.	I believe that familiarity with the website before making actual purchase reduce the risk of shopping online					
	I prefer to buy from website that provides me with quality of information					
29.	Online shopping takes less time to purchase					
30.	Online shopping doesn't waste time					
	Selling Online					-
31.	I feel that it takes less time in evaluating and selecting a product while shopping online					
32.	It is easy to choose and make comparison with other products while shopping online					
33.	I can buy the products anytime 24 hours a day while shopping online					
34.	Detail information is available while shopping online					
35.	I get on time delivery by shopping online					

#	Items	Strongly disagree 1	Disagree 2	Neither agree/ nor disagree 3	Agree 4	Strongly agree 5
	Online Security					
36.	I feel safe and secure while shopping online					
37.	Online Shopping protects my security					
38.	I like to shop online from a trustworthy website					

PLAGIARISM REPORT

The Impact of Technological Development on Digitizing the **Insurance Sector in Palestine**

by Hebah Salameh

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The Impact of Technological Development on Digitizing the Insurance Sector in Palestine

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ETHICS COMMITTEE



BİLİMSEL ARAŞTIRMALAR ETİK KURULU

11.11.2020

Dear Hebah Salameh

Your application titled **"The Impact of Technological Development on Digitizing the Insurance Sector in Palestine"** with the application number YDÜ/SB/2020/832 has been evaluated by the Scientific Research Ethics Committee and granted approval. You can start your research on the condition that you will abide by the information provided in your application form.

Assoc. Prof. Dr. Direnç Kanol

Rapporteur of the Scientific Research Ethics Committee

Direnc Kanol

Note: If you need to provide an official letter to an institution with the signature of the Head of NEU Scientific Research Ethics Committee, please apply to the secretariat of the ethics committee by showing this document.