B. KURT

# AN INVESTIGATION OF THE RELATIONSHIP BETWEEN PERSONAL AND SOCIAL INFORMATION AND COMMUNICATION TECHNOLOGY USE AND DIGITAL TRUST

THE GRADUATE SCHOOL OF NATURAL AND APPLIED SCIENCES
OF
ATILIM UNIVERSITY

BUĞRA KURT

A MASTER OF SCIENCE THESIS
IN
THE INFORMATION SYSTEMS ENGINEERING

JULY 2023

ATILIM UNIVERSITY 2023

# AN INVESTIGATION OF THE RELATIONSHIP BETWEEN PERSONAL AND SOCIAL INFORMATION AND COMMUNICATION TECHNOLOGY USE AND DIGITAL TRUST

A THESIS SUBMITTED TO
THE GRADUATE SCHOOL OF NATURAL AND APPLIED SCIENCES
OF
ATILIM UNIVERSITY

BY

BUĞRA KURT

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR
THE DEGREE OF MASTER OF SCIENCE
IN
THE INFORMATION SYSTEMS ENGINEERING

JULY 2023

Approval of the Graduate School of Natural and Applied Sciences, Atilim University.

_____

Prof. Dr. Ender KESKİNKILIÇ
Director

I certify that this thesis satisfies all the requirements as a thesis for the degree of **Master of Science in Information Technologies, Atılım University**.

_____

Prof. Dr. Murat KOYUNCU
Head of Department

This is to certify that we have read the thesis AN INVESTIGATION OF THE RELATIONSHIP BETWEEN PERSONAL AND SOCIAL INFORMATION AND COMMUNICATION TECHNOLOGY USE AND DIGITAL TRUST submitted by BUĞRA KURT and that in our opinion it is fully adequate, in scope and quality, as a thesis for the degree of Master of Science.

_____

Assoc. Prof. Dr. Sacip TOKER
Supervisor

**Examining Committee Members:**

Asst. Prof. Dr. Tuncer AKBAY
Information Sys. and Technologies Department,
Mehmet Akif Ersoy University _____

Assoc. Prof. Dr. Sacip TOKER
Information Sys. Eng. Department, Atılım University _____

Asst. Prof. Dr. Tuna HACALOĞLU
Information Sys. Eng. Department, Atılım University _____

**Date:** *04/07/2023*

I hereby declare that all information in this document has been obtained and presented in accordance with academic rules and ethical conduct. I also declare that, as required by these rules and conduct, I have fully cited and referenced all material and results that are not original to this work.

Name, Last Name : Buğra KURT

Signature :

## ABSTRACT

### AN INVESTIGATION OF THE RELATIONSHIP BETWEEN PERSONAL AND SOCIAL INFORMATION AND COMMUNICATION TECHNOLOGY USE AND DIGITAL TRUST

Kurt, Buğra

M.Sc., Information Technologies

Supervisor: Assoc. Prof. Dr. Sacip Toker

July 2023, 177 pages

Considering the tendency of human behaviour to be affected by the feeling of trust, it can be inferred that trust has an essential role in nearly every aspect of human life. With the proliferation of technological developments, it became one of the key features of the digital world we live in as well. Hence, this study aims to examine the differences between owning specific electronic devices or not, having an account on some social media platforms or not, using some Internet connectivity types or not in terms of the level of digital trust of people. In addition, the relationship between connectivity satisfaction and digital trust is analysed. Finally, the difference between people according to their level of Social Technographic Ladder in terms of digital trust is examined. In short, the main purpose of this study is to analyse the possible impacts of personal and social ICT use on the level of digital trust. The data analysed has been gathered from 5329 participants from 36 different countries around the world by using e-Trust Survey, which is an online questionnaire that measures the level of digital trust with ten components under three levels. Munzel-Bruner analysis, a non-parametric alternative of MANOVA, has been applied on the components of digital trust across each personal and social ICT use information. Results of the study showed that there are significant differences between owning specific electronic devices or not, having an account on some social media platforms or not, using some Internet connectivity types or not in terms of the level of digital trust of people. In addition, it is revealed that connectivity satisfaction is significantly correlated with digital trust. Finally, it is

found that people’s level on Social Technographic Ladder has significant main effects on their level of digital trust.

Keywords: Digital trust, online trust, personal ICT use, social ICT use

# ÖZ

## KİŞİSEL VE SOSYAL BİLGİ VE İLETİŞİM TEKNOLOJİLERİ KULLANIMI İLE DİJİTAL GÜVEN ARASINDAKİ İLİŞKİNİN İNCELENMESİ

Kurt, Buğra
Yüksek Lisans, Bilişim Teknolojileri
Tez Yöneticisi : Doç. Dr. Sacip Toker

Temmuz 2023, 177 sayfa

İnsan davranışlarının güven duygusundan etkilenme eğilimi göz önünde bulundurulduğunda, güven duygusunun insan hayatının neredeyse her alanında çok önemli bir rol oynadığı söylenebilir. Teknolojik gelişmelerin yaygınlaşmasıyla birlikte güven, içinde yaşadığımız dijital dünyanın da temel parçalarından biri haline gelmiştir. Bu çalışma, belirli elektronik cihazlara sahip olup olmamanın, bazı sosyal medya platformlarında hesap sahibi olup olmamanın ve bazı internet bağlantı türlerini kullanıp kullanmamanın; kişilerin dijital güven düzeyi üzerindeki etkilerini analiz etmeyi hedeflemektedir. Ayrıca, internet bağlantısına yönelik memnuniyet düzeyinin dijital güvenle olan ilişkisi incelenmiştir. Son olarak, insanların Sosyal Teknolojik Merdiven üzerindeki rollerinden kaynaklanan dijital güven düzeyi farklılıkları analiz edilmiştir. Kısaca, bu çalışmanın ana amacı, kişisel ve sosyal bilgi ve iletişim teknolojileri (BİT) kullanımının, dijital güven düzeyi üzerindeki olası etkilerini incelemektir. Çalışmada analiz edilen veriler, 36 farklı ülkedeki 5329 katılımcıdan, üç seviye altındaki on bileşeniyle dijital güven düzeyini ölçmekte kullanılan e-Güven Anketi aracılığıyla toplanmıştır. MANOVA'nın parametrik olmayan bir alternatifi olan Munzel-Bruner analizi, kişisel ve sosyal BİT kullanımı ile ilgili olan her bir özellik ve dijital güven bileşenleri üzerinde uygulanmıştır. Çalışmanın sonuçları, belirli elektronik cihazlara sahip olup olmamanın, bazı sosyal medya platformlarında hesap sahibi olup olmamanın ve bazı internet bağlantı türlerini kullanıp kullanmamanın; kişilerin dijital güven düzeyi üzerinde önemli etkilere sahip olduğunu

göstermiştir. Ayrıca, internet bağlantısına yönelik memnuniyet düzeyinin dijital güven düzeyiyle önemli derecede ilişkili olduğu ve kişilerin Sosyal Teknolojik Merdiven üzerindeki rollerinin dijital güven düzeylerini etkilediği görülmüştür.

Anahtar Kelimeler: Dijital güven, Çevrimiçi güven, kişisel BİT kullanımı, sosyal BİT kullanımı

*To my wonderful family: mom, dad, brother, and a cat.*

## ACKNOWLEDGMENTS

I would like to express my deepest appreciation to my supervisor, Assoc. Prof. Dr. Sacip TOKER. He provided me an amazing guidance with his endless support and extensive knowledge. It would have been impossible for me to complete this journey without his guidance.

I also thank to members of examining committee members, Assist. Prof. Dr. Tuncer AKBAY and Assist. Prof. Dr. Tuna HACALOĞLU, who have been supportive and motivating.

I also would like to emphasize my sincerest appreciation to Mehtap TUFAN, who helped me tirelessly throughout the process. It is impossible for me to express her valuable contributions to my thesis with the limited number of lines here. Thank you for sharing all the knowledge you have with me and making me able to complete this thesis.

Furthermore, I thank to Prof. Dr. Markus LAUNER, Ostfalia University of Applied Sciences, Campus Suderburg, Germany for sharing the data used in this study which was collected through EFRE Research Project "Digital Trust & Teamwork", financed by EU and the State of Lower Saxony.

I am also thankful to my friends and colleagues who have been motivating me throughout this journey, especially Gizem ALTINAY, Özge TEKİN and Zeynep Yaren OĞUZ for their endless support, encouragement, and for all their help throughout the process.

Finally, I am forever grateful to my wonderful parents and to my brother who is also my best friend. Without your love and continuous support, I could not have achieved what I have done so far.

## TABLE OF CONTENTS

## LIST OF TABLES

TABLES

## LIST OF FIGURES

FIGURES

## LIST OF SYMBOLS/ABBREVIATIONS

| | |
|---|---|
| ICT | Information and communication technology |
| MANOVA | Multivariate analysis of variance |
| LGBT-Q | Lesbian, gay, bisexual, transgender and queer |

# CHAPTER 1

# INTRODUCTION

Considering human behaviours tend to be affected by trust in a positive or negative manner, it can be inferred that trust has an essential role in nearly every aspect of human life. The concept of trust, however, is not something significant in only our traditional world, it is also a crucial element of every interaction held in digital world that may be vast from sharing something on social media to shopping from an e-commerce website. By taking this significance into account, the main purpose of this study is to reveal the possible effects of personal and social information and communication technology (ICT) use on the level of digital trust of people. In this section of the study, the background and statement of the problem, purpose of the study and research questions are given as an introduction.

## 1.1. Background of the Problem

With the rapid and continuous developments in technology, it can be deduced that number of people who are making transactions in an online environment is increasing every year, even day by day. Yet, technological developments are not enough themselves in order to encourage people to make online transactions such as using an e-commerce website for shopping. Businesses must build a consumer trust in order to increase the tendency of their consumers to shop online. Therefore, the term digital trust is getting more popular in recent years and especially businesses are getting more willing to answer the question how they can grasp the trust behaviours in the digital era [1], [2]. As Miyazaki and Fernandez [3] explained, consumers are expected to create more online transactions such as shopping online when they feel there are fewer concerns and risks. In addition, Corbitt et al. [4] found that if people have high level of trust for an online merchant, then their likelihood of shopping increases. Besides, Irshad et al. [5] emphasize that trust is crucial because it may have a role on encouraging people to consider buying products online. With all these explanations,

the importance of building customer trust for a business making operations in an online environment can be considered as crucial. It can be even said that building consumer trust in an online environment is much more significant than building it in a traditional physical environment because there is a higher level of uncertainty for a person who makes economic transactions in an online environment rather than a physical store [6].

Technological developments are not only changing the way we live, but they are also forcing the businesses to change the way they conduct their operations. Considering that businesses must create an online presence in order to be feasible and sustainable in the digital era, being aware of the term digital trust and the possible factors that are affecting it in a positive or negative manner is essential for the businesses.

## 1.2. Statement of the Problem

The main goals of a business are always to sell products or services in order to earn money and continue to conduct its operations in a successful manner. To be able to achieve these purposes, they need to build consumer trust because it is found that people are more likely to shop when they have higher level of trust [4], [5]. Therefore, businesses need to have a know-how about building consumer trust, especially if they are operating in an online environment because the likelihood of uncertainty to be dramatically increased is much higher in an online environment when it is compared to a physical one [6]. In addition, according to Kumar and Pradhan [7], managing the level of trust of its existing and potential consumers is one of the most prominent problems for a business that is conducting online operations. Similar to its importance to e-commerce businesses, trust is also a key element in being successful for an s-commerce business that uses social media platforms to sell products [8]. Hence, both digital trust and the factors affecting it are important research areas for the academicians and for the businesspeople. When the related literature is analysed, it is found that although there are some studies that are trying to define digital trust, there is a lack of studies in revealing the possible factors that influence the digital trust. By considering this requirement, the main purpose of this study is to reveal the possible effects of personal and social ICT use on the level of digital trust of people.

## 1.3. Purpose of the Study

The main purpose of this study is to analyse the possible effects of personal and social ICT use on digital trust. In a more detailed manner, the goal of this study is to examine the differences between owning specific electronic devices or not, having an account on a social media platform or not, having different type of Internet connectivity on the level of digital trust of people and also, to discover the relationship between connectivity satisfaction level and level of digital trust of people. Furthermore, this study aims to investigate the difference between participants according to their level of Social Technographic Ladder [9] on digital trust.

## 1.4. Research Questions

This study examined the following research questions:

- RQ1: Is there any significant difference between having different types of electronic devices (Smartphone, tablet, laptop computer, desktop computer, smartwatch) and not having these devices in terms of digital trust?
- RQ2: Is there any significant difference between having a social media account on different platforms (e.g., Facebook, Twitter, YouTube etc.) and not having a social media account on these platforms in terms of digital trust?
- RQ3: Is there any significant difference between people from different levels of Social Technographic Ladder in terms of digital trust?
- RQ4: Is there any significant difference between having different types of Internet connectivity (Wi-Fi connection at home, wired connection at home, pre-paid data plan, post-paid data plan) and not having that Internet connectivity in terms of digital trust?
- RQ5: Is there any relationship between satisfaction level in connecting to any of the Internet connectivity and the level of digital trust?

# CHAPTER 2

# LITERATURE REVIEW

In this section, the literature related to the current study will be analysed. Definition of trust, definition of digital trust, significance of trust in online environments, importance of social media sites for businesses and a detailed explanation of theoretical framework of the current study are presented respectively. Finally, a summary is given.

## 2.1. Definition of Trust

Trust is one of the most significant feelings that a person may have because it is possible to encounter trust itself or the trust related issues in every aspect of our lives. When the literature is analysed, it is found that different researchers have different point of views when the subject is trust. As Welter and Smallbone [10] stated, “there is no single comprehensive definition of trust”. Therefore, it can be said that researchers tried to define trust by using variety of definitions. A definition given by Sako [11] defines trust as an expectation of one side of exchange relationship, that the behaviours of other will be in a presumable manner. According to another study, trust is a belief of one party that its wants will be met by an action made by the other [12]. A study conducted by Morgan and Hunt [13] stated that trust is said to exist when one side believes in integrity and reliability of the other. In addition to all these definitions, some researchers tried to explain trust by presenting some characteristics for it rather than a single definition. Four characteristics of trust are explained by Wang and Emurian [14]. The first one is *trustor and trustee* which indicates that there should exist two different sides in any relationship for being able to talk about trust. Secondly, *vulnerability* is explained as there will be a need for trust only if there is an environment which consists of uncertainty. The third one is *produced actions* which

means there will always be a risk-taking action that led by trust. Finally, they explained the characteristic called *subjective matter* as trust will always be affected by different points of views of different individuals [14]. With all these definitions and various kind of explanations from the different point of views of different researchers, we can infer that trust is a subject that has been studied and thought about for many years.

## 2.2. Definition of Digital Trust

With the proliferation of technological devices in recent decades, it is nearly impossible for us to keep our lives away from digitalization. When it is considered that trust is an inevitable component of our lives, we can deduce that it is a crucial element for the digital world as well. Therefore, a concept was needed which we can consider it as the corresponding of traditional trust for the digital world. Related literature showed that some researchers tried to find this concept and call it digital trust. Similar to traditional trust, it is also possible to find variety of definitions for the concept of digital trust. According to [15], the term digital trust can be identified as the level of confidence of all the stakeholders including consumers, workers, and partners in the ability of an organisation for providing privacy and data protection. According to another study [16], "digital trust can be referred to as the confidence of stakeholders on the competence of actors, technologies, and processes for establishing reliable and secure business networks". Abraham et al. [17] defines digital trust as the rules for conduct and cultural values that consist of data privacy, security, protection, and stewardship. As seen in [18], digital trust is a belief that the previous/future attitudes of an entity are/will be the same with the attitudes stated by itself. From the different point of view of another study [19], "digital trust underpins every digital interaction by measuring and quantifying the expectation that an entity is who or what it claims to be and that it will behave in an expected manner". As it can be seen from different definitions provided above, researchers tried to examine digital trust from different kind of aspects. In addition to all these, some researchers decided to call this concept online trust rather than digital trust. As Wang and Emurian [14] stated, "online trust shares similar characteristics to those of offline trust, but there are some important

distinctions that are unique in an online environment". This study [14] presented four characteristics for the concept of online trust instead of a single definition like it is also did the same thing for traditional trust as it is explained above. *Trustor and trustee*, the first characteristic of online trust explains that the two parties imply specific entities such as a user who is trying to shop via an e-commerce web site and the e-commerce web site itself. *Vulnerability* describes the possibility of an online merchant to behave incalculable. The third one, *produced actions*, is explained as the two possible actions of consumer: (1) purchasing online, and (2) window-shopping which "refer to the activity in which potential buyers visit a brick-and-mortar store to examine a product but end up either not buying it or buying the product from an online retailer" [20]. In order to make consumer to choose one of these actions, they need to be convinced about the trustworthiness of the merchant. Finally, *subjective matter* means that each individual has a different threshold of trust that they feel to be enough for online transactions [14]. It is clear that digital trust is not a subject which has been studied as much as traditional trust due to being a much newer concept. It is important to mention that the prevalence of theoretical and illustrative case studies reveals how immature the idea of digital trust is [15]. While having some definitions about digital trust and trying to increase the number of them are important for the literature, it is also significant to reveal the different factors which may affect it. One of the main purposes of the current study is to have a contribution to the literature in terms of this need.

### 2.3. Significance of Trust in Online Environments

In order to gain the trust of the users in an online environment such as a social network or an e-commerce shopping site, the importance of this concept must be understood first. The relevant literature is analysed to find some explanations for the importance of trust when an online environment is considered, and it is obtained that there are some substantial implications in this regard in the current literature. It is found that trust is a part of great importance for digital interactions [21] and it has a crucial role for providing an adoption of information and communication technology (ICT) on both business and individual level [22]. In addition, according to [23], "trust is a central construct and plays a critical role in understanding Internet consumer behaviour". Not

only the rapid developments on technology are affecting the importance of trust in online environments, but there might also be some social situations which rise the need to emphasize it in a cleaner manner. As demonstrated in [24], trust is the key factor in online transactions, especially with the effect of COVID-19 on increasing online actions all around the world. As it is also explained by Gronroos [25], to be able to use computers as a mediator between the business and its customers, businesses must build a customer trust first. In addition to all these explanations, it is possible to say that two of the main purposes of a business are to attract new customers and keep the existing ones. According to Kumar and Pradhan [7], the essential way of finding new customers and keeping the existing ones loyal is to build the customer trust. Likewise, as seen in [15], "e-vendors need to create higher trustworthiness in the minds of customers who exhibit high levels of uncertainty avoidance in order to overcome said hazards". Furthermore, according to another study [26], the ability of a business to attract and retain customers depends on the level of digital trust that it can create. Besides, customers' trust in sellers, things they are not able to touch, and the computer systems they have never used before has a crucial role in deciding how successful an e-commerce operation is [27]. Wang et al. [28] indicated that as a key motivator for online purchase intention of consumers, trust is crucial in reducing concerns to facilitate real purchases. Moreover, as it is stated in [14], "the future of e-commerce is tenuous without a general climate of online trust". All these different explanations clearly demonstrate that in order for a business to be feasible and sustainable, it needs to benefit of gaining trust of its existing and potential customers.

Not only the importance of existence of the trust is mentioned in the literature, but also it is clearly stated that the deficiency of it may cause some problems for the businesses. According to [14], one of the toughest obstacles to individuals interacting with e-commerce has been frequently highlighted as the lack of trust. Moreover, Irshad et al. [5] stated that customers would be less willing to engage in online shopping if the factor of trust were absent. As it is clearly seen in these explanations from different studies, it can be inferred that preventing customers from dealing with this kind of a barrier is crucial for a business. Because it is one of the most important ways to encourage the customers to interact with the business's online channels such as an e-commerce shopping site.

In addition to businesses, governments also using digital technologies in order to provide public services to their citizens. By doing so, they can make their citizens to be able to reach any public services they need from any place, at any time. Since trust is one of the most significant components in online businesses, it is also impossible to ignore the importance of it when the subject is governmental processes that held in a digital way. According to Colesca [29], trust should be one of the most prominent considerations for the adoption of e-government applications. As it is explained in another study conducted by Hartanti et al. [30], given that the citizens are the ones who uses the public services, it is crucial to take into account their trust while providing smart public services. In addition, it is found that one of the problems for governments that is caused by being able to interact with citizens is the challenges related to trust [31]. As another example of the prominence of trust in e-government applications, Santamaría-Philco and Wimmer [32] stated that "the ease of access to e-participation processes has raised the issue of trustworthiness of both the institutions promoting processes and the citizens participating in these processes". Considering all the explanations provided above, it is found that the concept of trust is something crucial for being successful in an online environment both for businesses and the governments. While being aware of the significance of trust in online environments, it is also worth to mention that it is essential to know the factors affecting it. In other words, businesses or governments who are trying to provide services in an online world need to know how they can build consumer trust for being successful in providing online services. One of the purposes of the current study is to provide an insight about different factors that may affect the level of trust of people in an online environment.

### 2.4. Importance of Social Media Sites for Businesses

It is possible to say that social media sites are at the heart of many people's lives. They are one of the most widespread technologies which comes to our life with the digitalization of our world [33]. Millions of people are not just using these sites, but they are also making them an important part of their daily routines [34]. However, it cannot be said that the usage of social media sites is limited with just the individuals

who are trying to establish social connections. As Kahar et al. [35] stated, “the use of social media ranges from personal to business purposes.” In addition, since businesses are using social media sites to enhance the interaction with their customers, they need to be able to manage the relationship which is mediated by these sites [36]. As it is also explained by [37], businesses can be much more successful in establishing a relationship with their customers and satisfying their demands thanks to enhanced interactions via social media sites. Besides, businesses direct their investments into social media sites in order to create a digital presence for their brand and establish customer relationships efficiently [38]. Therefore, it needs to be emphasized that social media sites are one of the crucial components for the majority of businesses. In order to contribute on helping this issue, one of the purposes of this study is to reveal if there is any significant difference between having a social media account on different platforms (e.g., Facebook, Twitter, YouTube etc.) and not having a social media account on these platforms in terms of digital trust. In addition to these social media platforms, it might be helpful for the businesses to be aware of which devices are their consumer using to connect social media or make online transactions. By having this information, they may see the level of digital trust of their different users with different electronic devices and trying to create some specific strategies for specific electronic devices. Hence, this study also conducted to find if there is any significant difference between having different types of electronic devices (Smartphone, tablet, laptop computer, desktop computer, smartwatch) and not having these devices in terms of digital trust.

## 2.5. Theoretical Framework

Main purpose of the framework produced by Marcial and Launer [39] is to give an insight about the theoretical basis and the general concept of the study called “Digital Trust in the Workplace”. It is not only explaining each theory and principle in a detailed manner, but it also expresses how each theory is interconnected with the others. Forrester Social Technologic Ladder, Technology Adoption Theory, Management Theory, Information Systems Theory, Software Quality Model, General Data Protection Regulation Principles, Digital Citizenship Principles, and Caldicott

Principles are the theories and principles that the framework contains [39]. Besides, it establishes a link between Technology Diffusion Theory and demographic information as one of the factors that affects the level of digital trust. It is possible to find that the Technology Acceptance Model and social media usage can create a basis for technologic profiles. The framework [39] is also using the Innovation Theory in order to emphasize the details of technology integration. Hence, the theoretical framework of the current study is based on these principles and theories.

In accordance with Rogers [40], the Diffusion Theory is a process which requires time to occur. Knowledge, Persuasion, Decision, Implementation and Confirmation are the five different phases of this theory [40]. Personality attributes or the habits of a person are the affecting factors on these phases [39]. Furthermore, as it is explained by Marangunić and Granić [41], the Technology Acceptance Model is a model that allows us to figure out the factors that may affect if people will accept a technology or not. Consequently, it is possible to state that these theories and models can be used to describe the factors that affect the level of digital trust. Moreover, there are two more concepts that we can use to explain the affecting factors on digital trust which are the Digital Divide [42] and the Net Generation [43]. Due to proliferation of the use of Internet, an important social problem has raised called the Digital Divide [42]. Concept of Net Generation is explaining a specific generation in terms of teaching and learning habits [43].

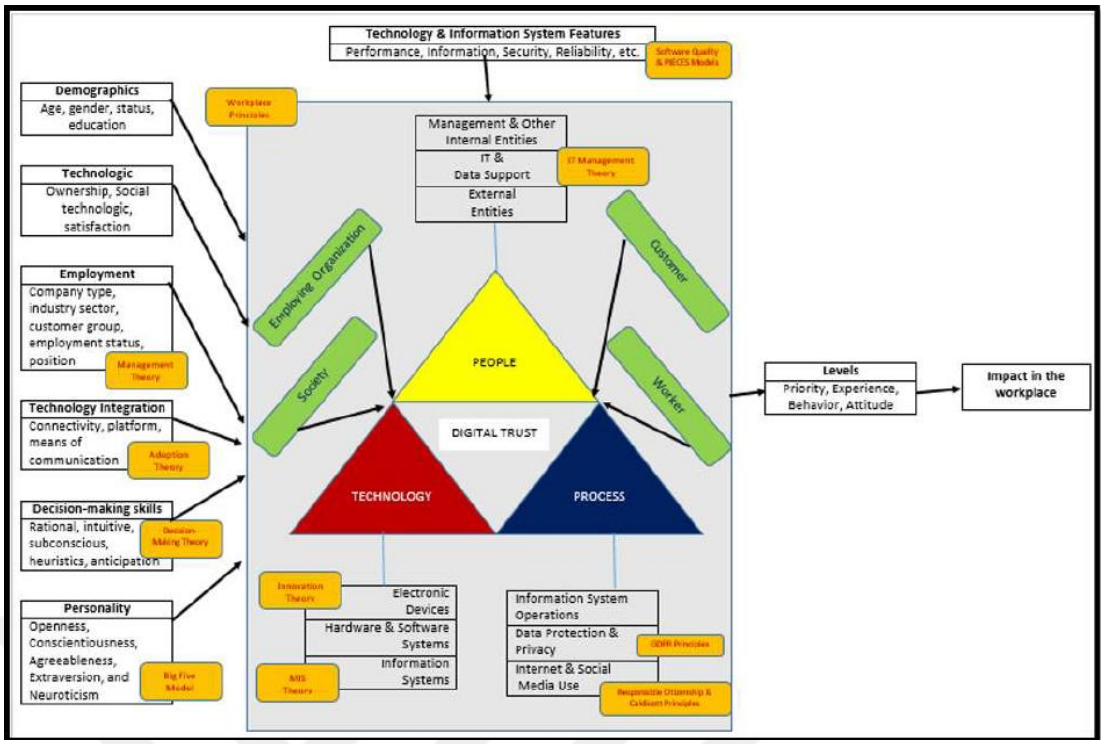


Figure 2.1 Theoretical Framework of the Study "Digital Trust in the Workplace [39]

Figure 2.1 is a demonstration of the theoretical framework that is developed by Marcial and Launer for the study called “Digital Trust in the Workplace”. Digital trust questionnaire which has 3 different levels such as technology, people and process is created by using these theories and principles as a foundation. These 3 levels consist of 10 different components in total which are priority level of software quality, hardware and software, electronic devices, information systems, management and other internal entities, IT and data support, external entities, data protection and privacy, organizational data protection and privacy, and internet and social media use.

## 2.6. Summary

When the related literature is analysed, it is found that there are different points of views of different researchers when the subject is trust, which is one of the most important feelings in human life. With the proliferation of Internet based technologies, trust is not only a crucial part of our traditional and physical lives, but it is also an essential component of the digital world that we are living in. This situation has emerged a need to define a new concept that is related to the level of trust of people

when they have in an online environment. While some researchers called this concept digital trust, some of them called online trust. In addition to these kind of definitions for these concepts, it is also possible to see that there are studies conducted to emphasize the significance of trust feeling in an online environment both for the businesses and the individuals. Hence, nowadays, the ability of being aware of possible factors that may affect the level of digital trust of people is something crucial. Therefore, it can be said that the literature requires some studies that are analysing the factors on the level of digital trust. This requirement is tried to be filled with this study by trying to demonstrate the impact of owning specific electronic devices or not, having an account on a social media platform or not, the level of social technographic ladder, type of Internet connectivity and connectivity satisfaction on digital trust.

# CHAPTER 3

# METHODOLOGY

In this section, the research methodology which includes the purpose of the study, research questions, design of the study, participants of the study, data collection procedures and instruments, and data analysis is presented.

## 3.1. Purpose of the Study and Research Questions

The main purpose of this study is to analyse the possible effects of personal and social ICT use on digital trust. In a more detailed manner, the goal of this study is to examine the differences between owning specific electronic devices or not, having an account on a social media platform or not, having different type of Internet connectivity on the level of digital trust of people. In addition, the other purpose of this study is to discover the relationship between connectivity satisfaction and the level of digital trust of people. Besides, this study aims to investigate the difference between participants according to their level of Social Technographic Ladder [9] on digital trust. To achieve these goals, following research questions are prepared:

- RQ1: Is there any significant difference between having different types of electronic devices (Smartphone, tablet, laptop computer, desktop computer, smartwatch) and not having these devices in terms of digital trust?
- RQ2: Is there any significant difference between having a social media account on different platforms (e.g., Facebook, Twitter, YouTube etc.) and not having a social media account on these platforms in terms of digital trust?
- RQ3: Is there any significant difference between people from different levels of Social Technographic Ladder in terms of digital trust?
- RQ4: Is there any significant difference between having different types of Internet connectivity (Wi-Fi connection at home, wired connection at home,

- pre-paid data plan, post-paid data plan) and not having that Internet connectivity in terms of digital trust?
- RQ5: Is there any relationship between satisfaction level in connecting to any of the Internet connectivity and the level of digital trust?

### 3.2. Design of the Study

Casual-comparative research design which is one of the quantitative research methodologies has been used in this study. It is a research design where the possible effects of the differences between a group of people are analysed [44]. In this study, there are five different groupings of independent variables that are created from technology integration. These groupings are electronic devices, social media platforms, different types of internet connectivity, different roles of Social Technographic Ladder and the connectivity satisfaction. The independent variables for electronic devices are smartphone, tablet, laptop computer, desktop computer and smartwatch. The independent variables for social media platforms are Facebook, Twitter, Alipay, WhatsApp, WeChat, LinkedIn, VK, OK, YouTube, Gmail, Yahoo Mail, Blog, and Website. Finally, the independent variables for internet connectivity are Wi-Fi connection at home, wired connection at home, pre-paid data plan, and post-paid data plan. There is also a dependent variable is required in order to analyse the differences between the groups. The dependent variable for this study is digital trust with its 10 components under 3 levels: priority level of software quality, hardware and software, electronic devices, information systems, management, and other internal entities, IT and data support, external entities, data protection and privacy, organizational data protection and privacy, internet and social media use.

### 3.3. Participants of the Study

Convenience sampling [44] method has been employed in order to select the participants of this study. It is a non-random approach where units have been picked for the sample based on their accessibility to the “e-Trust Project” [45]. Marcial and Launer [45] created a study called “e-Trust Project” on digital trust in the workplace and the data for the current study is taken from that project.

In total, there are 5329 people from 36 different countries around the world as the participators of this study (Figure 3.1). As the gender distribution, there are 2189 female, 2670 male and 470 LGBT-Q participants. The ages of the participants vary from 18 to 59; there are 40 participants who are 18 years old or younger, 1262 participants who are in between ages 19-28, 1332 participants who are in between ages 29-38, 1590 participants who are in between ages 39-48, 966 participants who are in between ages 49-58 and 139 participants who are 59 years old or older. There are 5147 people with smartphone, 3262 people with tablet, 4406 people with laptop computer, 3355 people with desktop computer and 1870 people with smartwatch (Figure 3.2). There are massive differences between yes and no answers in having Wi-Fi connection at home (4562 yes, 762 no) and Wired connection at home (3587 yes, 1742 no). Yes-no numbers are close to each other in having pre-paid data plan at home (2417 yes, 2912 no) and post-paid data plan at home (2673 yes, 2656 no) (Figure 3.3). There are 4631 participants with Facebook account, 2551 participants with Twitter account and 3754 participants with WhatsApp account. Detailed numbers for each social media platform can be found in Figure 3.4. Finally, as the social technographic ladder roles, most of the participants describe themselves as Creators (1332) and Spectators (1422). There are also 549 Conversationalists, 577 Critics, 298 Collectors, 806 Joiners and 345 Inactives (Figure 3.5).

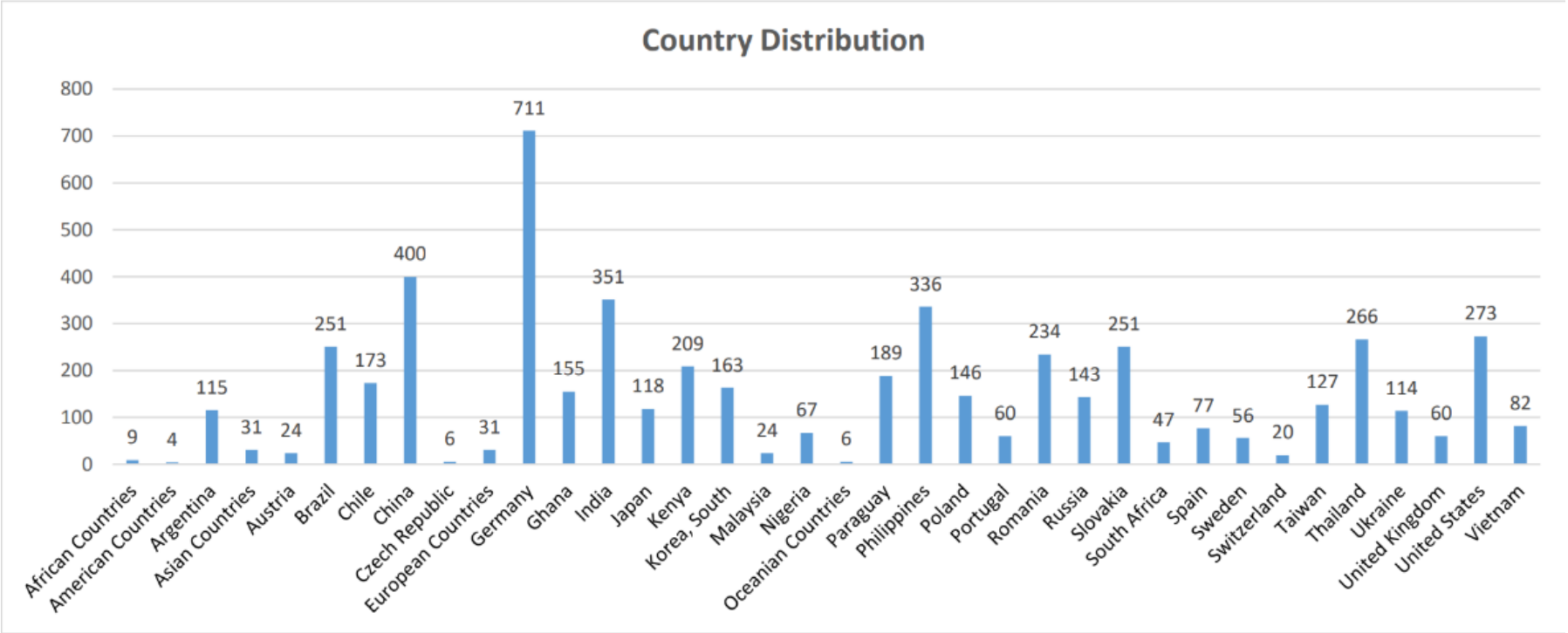


Figure 3.1 Country Distribution

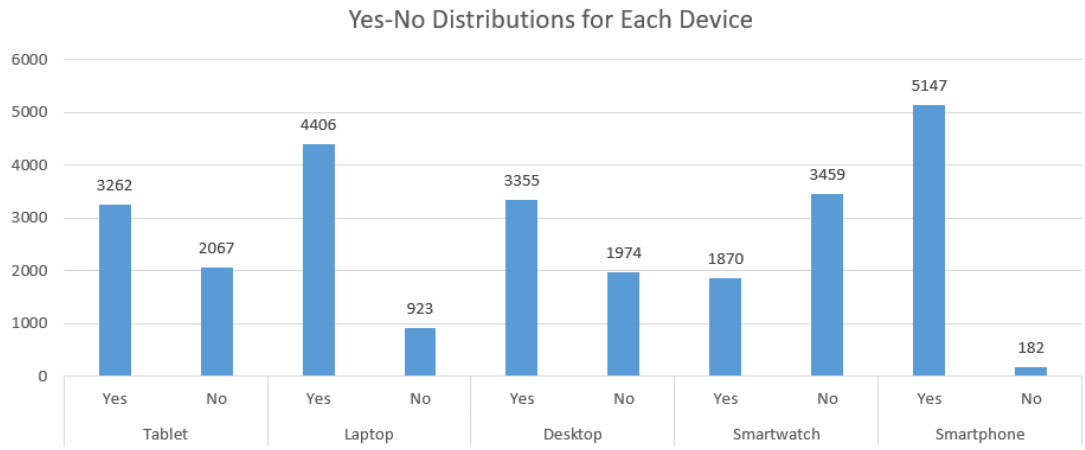


Figure 3.2 Yes-No Distributions for Each Device

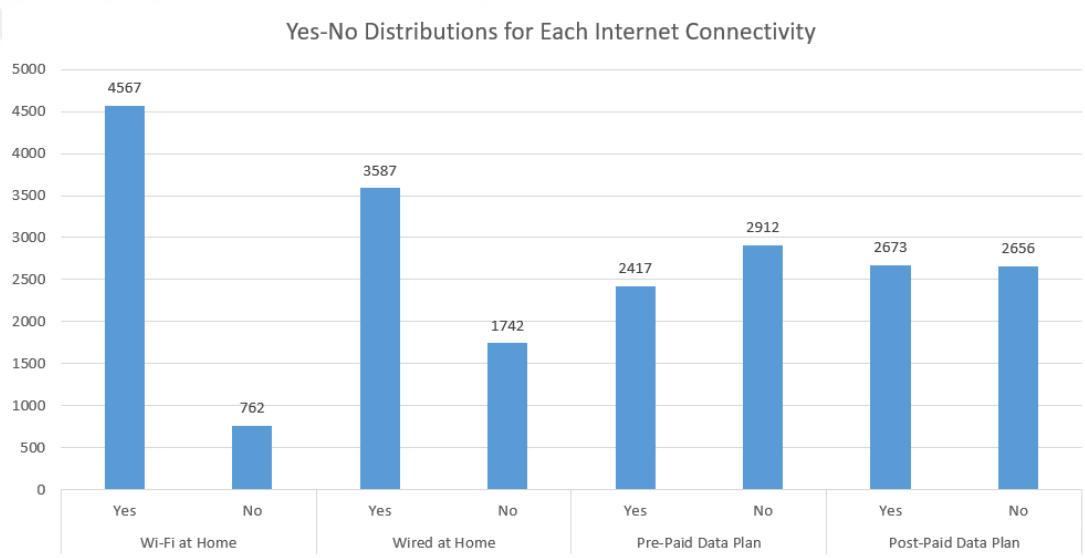


Figure 3.3 Yes-No Distributions for Each Internet Connectivity

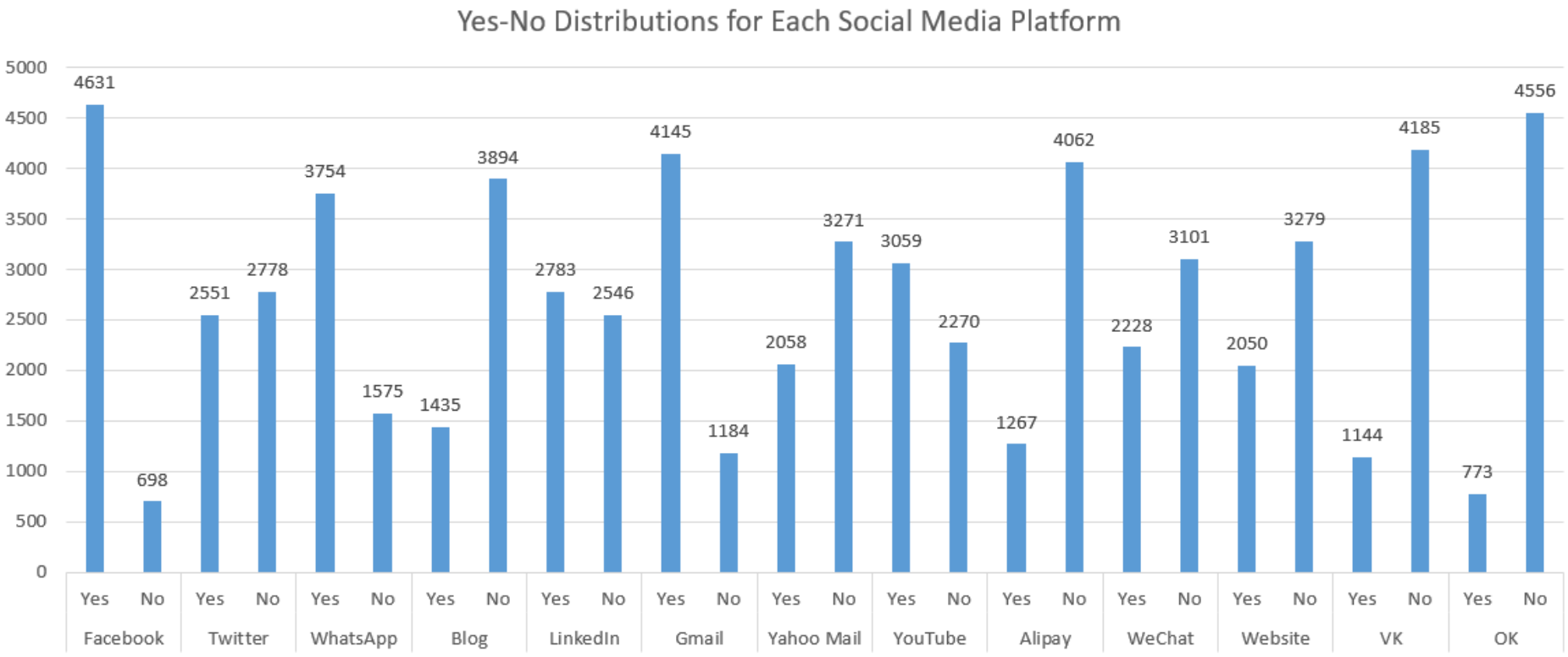


Figure 3.4 Yes-No Distributions for Each Social Media Platform

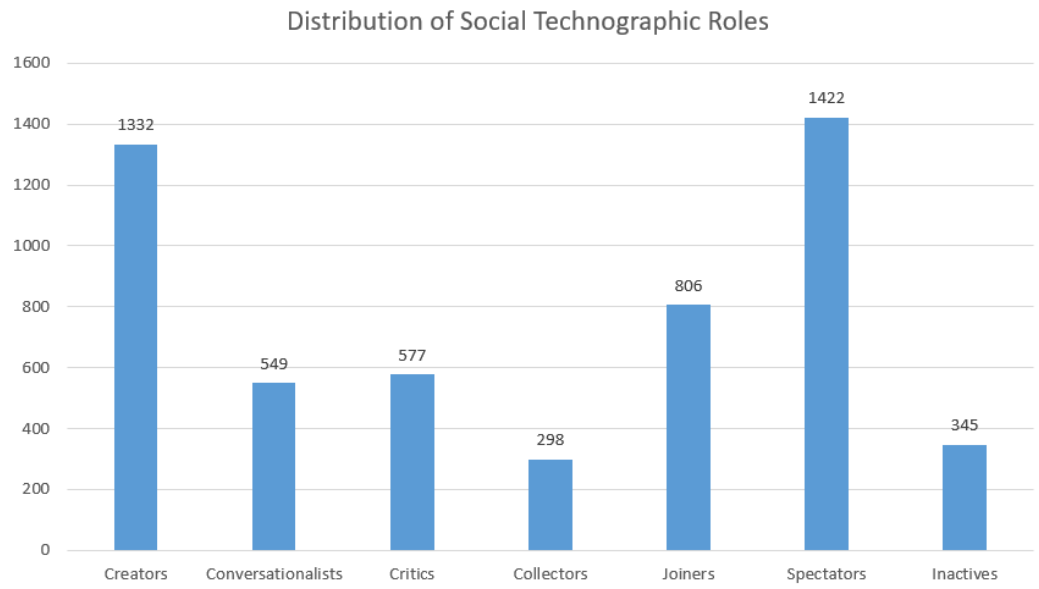


Figure 3.5 Distribution of Social Technographic Roles

## 3.4. Data Collection Procedures and Instruments

Technology information questionnaire, Survey e-Trust [45] and Social Technographic Ladder [9] were employed in this study. Technology information questionnaire consists of questions about personal and social ICT use. In a more detailed manner, there are questions about owning specific electronic devices or not, having a social media account on specific platforms or not, people's level on Social Technographic Ladder, internet connectivity and the connectivity satisfaction related to internet connectivity. Possible answers for the question about electronic devices are smartphone, tablet, laptop computer, desktop computer and smartwatch. Facebook, Twitter, Alipay, WhatsApp, WeChat, LinkedIn, VK, OK, YouTube, Gmail, Yahoo Mail, Blog, and Website are the different options that the participants can choose for the question related to having a social media account or not. Possible answers for the question related to internet connectivity are Wi-Fi connection at home, wired connection at home, pre-paid data plan, and post-paid data plan. There are 7 different roles on the Social Technographic Ladder [9] which vary from Creators to Inactives that participants can choose. Finally, there is a range that is changing from not at all satisfied to extremely satisfied for the question related to connectivity satisfaction. An

online survey is created with the combination of these questions and all data has been collected.

**Social Technographics Ladder:** It is a categorization where people are grouped according to their social computing behaviours [9]. There are 7 different roles which are changing from Creators to Inactives. Detailed explanations of each role are presented in Figure 3.6.


Figure 3.6 Roles and Their Explanations on Social Technographic Ladder [9]

**Survey e-Trust:** It is a survey that is prepared with the foundation of a global research to grasp digital trust in the workplace with 3 different levels as technology, people, and process. Schools from Europe, the United States of America, Latin America, and Asia are participated into this study as well. Headquarter of this project is an applied sciences higher institution in Germany and co-leader of it is a Center of Excellence in IT Higher Education from the Philippines. The European Regional Development Fund has financed the project [45]. In total, 376 participants from Germany, Philippines, China, Japan, South Korea, Paraguay, Russia, Brazil, Thailand, the United States of America, and the United Kingdom have responded this Survey e-Trust for test-retest reliability. It is found that each subscale of this survey has a p-value higher than .05 which indicates constancy of the test-retest. There are 3 different levels of this survey which are technology, people, and process. Under these 3 different levels, there are 10

components or subscales are presented. These components are priority level of software quality, hardware and software, electronic devices, information systems, management and other internal entities, IT and data support, external entities, data protection and privacy, organizational data protection and privacy, internet and social media use [45].

### 3.5. Data Analysis

Gathered data was analysed to reveal if there is any significant difference between personal and social ICT use in terms of digital trust. Information about personal and social ICT use has been collected through a survey. The related questions were about owning specific electronic devices or not, having a social media account on specific platforms or not, people's level on Social Technographic Ladder, internet connectivity and the connectivity satisfaction related to internet connectivity.

A non-parametric alternative of MANOVA, Munzel-Bruner analysis, was employed for the data analysis in this study. The reason of using this analysis method is that because the multivariate normality and the homogeneity of error covariance matrices were violated [46]. Munzel-Bruner analysis was conducted on the components of digital trust (priority level of software quality, hardware and software, electronic devices, information systems, management and other internal entities, IT and data support, external entities, data protection and privacy, organizational data protection and privacy, internet and social media use) with owning specific electronic devices or not, having a social media account on specific platforms or not, people's level on Social Technographic Ladder, and internet connectivity. For follow-up analysis, Mann-Whitney U tests for two-category (yes-no) questions about electronic devices (Smartphone, Tablet, Laptop computer, Desktop computer, Smartwatch), social media platforms (Facebook, Twitter, Alipay, WhatsApp, WeChat, LinkedIn, VK, OK, YouTube, Gmail, Yahoo Mail, Blog, and Website), and internet connectivity (Wi-Fi connection at home, wired connection at home, pre-paid data plan, post-paid data plan). In addition, Kruskal-Wallis H tests is used for the question with more than two categories (Creators, Conversationalists, Critics, Collectors, Joiners, Spectators, Inactives) related to Social Technographic Ladder [9]. Finally, Spearman's correlation

coefficients were performed to find the correlation between the connectivity satisfaction and the components of digital trust.

# CHAPTER 4

# RESULTS

In this section, the results of the study are presented according to the research questions of the study. The impact of owning specific electronic devices or not, having an account on different social media platforms or not, the level of social technographic ladder, type of Internet connectivity and connectivity satisfaction on digital trust components (priority level of software quality, hardware and software, electronic devices, information systems, management and other internal entities, IT and data support, external entities, data protection and privacy, organizational data protection and privacy, internet and social media use) explained separately in this section.

## 4.1. Digital Trust Components Across Owning Specific Electronic Devices

Munzel-Bruner analysis was conducted to explore digital trust components across owning different electronic devices such as smartphone, tablet, laptop computer, desktop computer, and smartwatch. For follow-up analysis, Mann-Whitney U analysis has been conducted for having different electronic devices mentioned above or not on each dependent variable which are priority level of software quality, hardware and software, electronic devices, information systems, management and other internal entities, IT and data support, external entities, data protection and privacy, organizational data protection and privacy, and internet and social media use. Results of Munzel-Bruner analysis showed that smartphone ownership has not a significant effect on digital trust components. Detailed statistical results about the other electronic devices are presented below.

### 4.1.1. Digital Trust Components Across Tablet Ownership

Table 4.1 Relative effects of digital trust components across tablet ownership

| Having Tablet | N | Priority level of software quality component - Technology | Hardware and software - Technology | Electronic devices - Technology | Information systems - Technology | Management and other internal entities - People | IT and data support - People | External entities - People | Data protection and privacy - Process | Organizational data protection and privacy - Process | Internet and social media use - Process |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Yes | 3262 | 0.5108366 | 0.5393556 | 0.5442634 | 0.5276258 | 0.5329571 | 0.5398353 | 0.5352505 | 0.4927149 | 0.5389049 | 0.5479319 |
| No | 2067 | 0.4815328 | 0.4599761 | 0.4590801 | 0.4682683 | 0.4666661 | 0.4604232 | 0.4636738 | 0.4899924 | 0.4633589 | 0.4555494 |

Table 4.2

Mean and standard deviations of each component of digital trust across tablet ownership

| | | Priority level of software quality components - Technology | | Hardware and software - Technology | | Electronic devices - Technology | | Information systems - Technology | | Management and other internal entities - People | | IT and data support - People | | External entities - People | | Data protection and privacy - Process | | Organizational data protection and privacy - Process | | Internet and social media use - Process | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD |
| Yes | 3262 | -,009 | ,528 | ,099 | ,795 | ,074 | ,569 | ,028 | ,597 | ,045 | ,557 | ,087 | ,669 | ,047 | ,541 | -,021 | ,657 | ,081 | ,629 | ,108 | ,644 |
| No | 2067 | ,009 | ,395 | -,156 | ,794 | -,117 | ,522 | -,044 | ,454 | -,072 | ,484 | -,137 | ,663 | -,074 | ,414 | ,033 | ,555 | -,127 | ,638 | -,170 | ,561 |

Results of Munzel-Bruner analysis revealed that tablet ownership has a significant effect on digital trust components, F (1.94, 5329) = 94.84, p<.01. Table 4.1 and Table 4.2 demonstrate the details of the analysis for digital trust components across tablet ownership. For follow-up, Mann-Whitney U analysis have been conducted and results revealed that there are significant differences in all digital trust components across tablet ownership. To start with, participants with a tablet have significantly higher level in all the components of technology level of digital trust than participants without a tablet. These components are priority level of software quality component (with mean rank=2722.75, without mean rank=2573.87), U=3182903.00, Z=-3.442, p<.01, hardware and software component (with mean rank=2874.73, without mean rank=2334.02), U=2687151.00, Z=-12.501, p<.01, electronic devices component (with mean rank=2900.88, without mean rank=2292.75), U=2601838.00, Z=-14.060, p<.01, and information systems component (with mean rank=2812.22, without mean rank=2432.67), U=2891052.00, Z=-8.775, p<.01. Besides, participants with a tablet have significantly higher level in all the components of people level of digital trust than participants without a tablet. These components are management and other internal entities component (with mean rank=2840.63, without mean rank=2387.84), U=2798377.00, Z=-10.469, p<.01, IT and data support component (with mean rank=2877.28, without mean rank=2329.99), U=2678812.00, Z=-12.654, p<.01, and external entities component (with mean rank=2852.85, without mean rank=2368.55), U=2758511.00, Z=-11.197, p<.01. Finally, when the components of process level of digital trust are examined, results revealed that participants with a tablet have significantly higher level than participants without a tablet in organizational data protection and privacy component (with mean rank=2872.32, without mean rank=2337.82), U=2694986.00, Z=-12.358, p<.01 and internet and social media use component (with mean rank=2920.43, without mean rank=2261.90), U=2538067.00, Z=-15.225, p<.01. However, participants without a tablet (mean rank=2726.27) have significantly higher level in data protection and privacy component of process level of digital trust than participants with a tablet (mean rank=2626.18), U=3497915.00, Z=2.314, p<.05. To conclude, participants with a tablet have significantly higher level in all the components of technology and people levels of digital trust than participants without a tablet. For the process level of digital trust, participants with a tablet have

significantly higher level in organizational data protection and privacy, and internet and social media use components than participants without a tablet, while participants without a tablet have significantly higher level in data protection and privacy component than participants with a tablet.

### 4.1.2. Digital Trust Components Across Laptop Computer Ownership

Table 4.3 Relative effects of digital trust components across laptop computer ownership

| Having Laptop Computer | N | Priority level of software quality component - Technology | Hardware and software - Technology | Electronic devices - Technology | Information systems - Technology | Management and other internal entities - People | IT and data support - People | External entities - People | Data protection and privacy - Process | Organizational data protection and privacy - Process | Internet and social media use - Process |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Yes | 4406 | 0.5110194 | 0.5289454 | 0.5286782 | 0.5161077 | 0.5219292 | 0.5286912 | 0.5169655 | 0.4848694 | 0.5284986 | 0.5267933 |
| No | 923 | 0.4941873 | 0.4890465 | 0.4897390 | 0.4927949 | 0.4910996 | 0.4889178 | 0.4913755 | 0.5010490 | 0.4905641 | 0.4901535 |

Table 4.4 Mean and standard deviations of each component of digital trust across laptop computer ownership

| | | Priority level of software quality components - Technology | | Hardware and software - Technology | | Electronic devices - Technology | | Information systems - Technology | | Management and other internal entities - People | | IT and data support - People | | External entities - People | | Data protection and privacy - Process | | Organizational data protection and privacy - Process | | Internet and social media use - Process | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD |
| Yes | 4406 | ,009 | ,489 | ,093 | ,744 | ,065 | ,517 | ,026 | ,549 | ,042 | ,516 | ,079 | ,623 | ,028 | ,500 | -,033 | ,613 | ,076 | ,585 | ,064 | ,606 |
| No | 923 | -,053 | ,434 | -,446 | ,921 | -,309 | ,642 | -,126 | ,517 | -,201 | ,566 | -,375 | ,782 | -,134 | ,473 | ,159 | ,626 | -,362 | ,760 | -,306 | ,639 |

Results of Munzel-Bruner analysis showed that laptop computer ownership has a significant effect on digital trust components, F (1.96, 5329) = 27.55, p<.01. Table 4.3 and Table 4.4 show the details of the analysis for digital trust components across laptop computer ownership. For follow-up, Mann-Whitney U analysis have been conducted and results revealed that there are significant differences in all digital trust components across laptop computer ownership. First, participants with a laptop computer have significantly higher level in all the components of technology level of digital trust than participants without a laptop computer. These components are priority level of software quality component (with mean rank=2723.72, without mean rank=2384.68), U=1774638.00, Z=-6.088, p<.01, hardware and software component (with mean rank=2819.25, without mean rank=1928.68), U=1353744.00, Z=-15.991, p<.01, electronic devices component (with mean rank=2817.83, without mean rank=1935.47), U=1360016.00, Z=-15.843, p<.01, and information systems component (with mean rank=2750.84, without mean rank=2255.25), U=1655167.00, Z=-8.899, p<.01. Likewise, participants with a laptop computer have significantly higher level in all the components of people level of digital trust than participants without a laptop computer. These components are management and other internal entities component (with mean rank=2781.86, without mean rank=2107.16), U=1518481.00, Z=-12.115, p<.01, IT and data support component (with mean rank=2817.90, without mean rank=1935.15), U=1359713.00, Z=-15.850, p<.01, and external entities component (with mean rank=2755.41, without mean rank=2233.43), U=1635026.00, Z=-9.373, p<.01. In addition, results revealed that participants with a laptop computer have significantly higher level than participants without a laptop computer in organizational data protection and privacy component (with mean rank=2816.87, without mean rank=1940.04), U=1364234.00, Z=-15.744, p<.01 and internet and social media use component (with mean rank=2807.78, without mean rank=1983.42), U=1404274.00, Z=-14.802, p<.01 of process level of digital trust. However, participants without a laptop computer (mean rank=3049.90) have significantly higher level in data protection and privacy component of process level of digital trust than participants with a laptop computer (mean rank=2584.37), U=2388629.00, Z=8.359, p<.01. In brief, participants with a laptop computer have significantly higher level in all the components of technology and people levels of

digital trust than participants without a laptop computer. For the process level of digital trust, participants with a laptop computer have significantly higher level in organizational data protection and privacy, and internet and social media use components than participants without a laptop computer, while participants without a laptop computer have significantly higher level in data protection and privacy component than participants with a laptop computer.

### 4.1.3. Digital Trust Components Across Desktop Computer Ownership

Table 4.5 Relative effects of digital trust components across desktop computer ownership

| Having Desktop Computer | N | Priority level of software quality component - Technology | Hardware and software - Technology | Electronic devices - Technology | Information systems - Technology | Management and other internal entities - People | IT and data support - People | External entities - People | Data protection and privacy - Process | Organizational data protection and privacy - Process | Internet and social media use - Process |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Yes | 3355 | 0.5168203 | 0.5092371 | 0.5112611 | 0.5115911 | 0.5100466 | 0.5098257 | 0.5144353 | 0.5194074 | 0.5086652 | 0.5134833 |
| No | 1974 | 0.4762912 | 0.4558697 | 0.4530872 | 0.4665620 | 0.4604375 | 0.4543688 | 0.4598229 | 0.4943989 | 0.4563455 | 0.4480342 |

Table 4.6 Mean and standard deviations of each component of digital trust across desktop computer ownership

| | | Priority level of software quality components - Technology | | Hardware and software - Technology | | Electronic devices - Technology | | Information systems - Technology | | Management and other internal entities - People | | IT and data support - People | | External entities - People | | Data protection and privacy - Process | | Organizational data protection and privacy - Process | | Internet and social media use - Process | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD |
| Yes | 3355 | ,037 | ,438 | ,025 | ,797 | ,024 | ,554 | ,032 | ,515 | ,024 | ,515 | ,024 | ,674 | ,032 | ,478 | ,043 | ,625 | ,018 | ,644 | ,029 | ,638 |
| No | 1974 | -,068 | ,540 | -,043 | ,814 | -,041 | ,564 | -,056 | ,594 | -,041 | ,559 | -,041 | ,676 | -,054 | ,529 | -,073 | ,604 | -,031 | ,634 | -,049 | ,606 |

According to results of Munzel-Bruner analysis, desktop computer ownership has a significant effect on digital trust components, F (2.02, 5329) = 53.56, p < .01. Table 4.5 and Table 4.6 demonstrate the details of the analysis for digital trust components across desktop computer ownership. For follow-up, Mann-Whitney U analysis have been conducted and results showed that there are significant differences in all digital trust components across desktop computer ownership. To begin, participants with a desktop computer have significantly higher level in all the components of technology level of digital trust than participants without a desktop computer. These components are priority level of software quality component (with mean rank=2754.64, without mean rank=2512.66), U=3010658.50, Z=-5.545, p<.01, hardware and software component (with mean rank=2714.22, without mean rank=2581.34), U=3146237.50, Z=-3.045, p<.01, electronic devices component (with mean rank=2725.01, without mean rank=2563.01), U=3110050.50, Z=-3.712, p<.01, and information systems component (with mean rank=2726.77, without mean rank=2560.02), U=3104149.50, Z=-3.821, p<.01. In addition, participants with a desktop computer have significantly higher level in all the components of people level of digital trust than participants without a desktop computer. These components are management and other internal entities component (with mean rank=2718.54, without mean rank=2574.01), U=3131764.50, Z=-3.312, p<.01, IT and data support component (with mean rank=2717.36, without mean rank=2576.01), U=3135712.50, Z=-3.239, p<.01, and external entities component (with mean rank=2741.93, without mean rank=2534.26), U=3053299.50, Z=-4.759, p<.01. Finally, when the process level of digital trust is considered, study found that participants with a desktop computer have significantly higher level in all the components of process level of digital trust than participants without a desktop computer. These components are data protection and privacy component (with mean rank=2768.42, without mean rank=2489.22), U=2964403.50, Z=-6.398, p<.01, organizational data protection and privacy component (with mean rank=2711.18, without mean rank=2586.52), U=3156462.50, Z=-2.856, p<.01, and Internet and social media use component (with mean rank=2736.85, without mean rank=2542.88), U=3070319.50, Z=-4.445, p<.01. To sum up, participants with a desktop computer have significantly higher level in all digital trust components than participants without a desktop computer.

### 4.1.4. Digital Trust Components Across Smartwatch Ownership

Table 4.7 Relative effects of digital trust components across smartwatch ownership

| Having Smartwatch | N | Priority level of software quality component - Technology | Hardware and software - Technology | Electronic devices - Technology | Information systems - Technology | Management and other internal entities - People | IT and data support - People | External entities - People | Data protection and privacy - Process | Organizational data protection and privacy - Process | Internet and social media use - Process |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Yes | 1870 | 0.5238610 | 0.5738842 | 0.5785768 | 0.5610543 | 0.5655504 | 0.5722276 | 0.5648656 | 0.5212188 | 0.5695509 | 0.5873086 |
| No | 3459 | 0.4804503 | 0.4267370 | 0.4217779 | 0.4483004 | 0.4388324 | 0.4283337 | 0.4423720 | 0.5116180 | 0.4278824 | 0.4149592 |

Table 4.8 Mean and standard deviations of each component of digital trust across smartwatch ownership

| | | Priority level of software quality components - Technology | | Hardware and software - Technology | | Electronic devices - Technology | | Information systems - Technology | | Management and other internal entities - People | | IT and data support - People | | External entities - People | | Data protection and privacy - Process | | Organizational data protection and privacy - Process | | Internet and social media use - Process | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD |
| Yes | 1870 | ,028 | ,484 | ,190 | ,761 | ,143 | ,539 | ,098 | ,561 | ,111 | ,523 | ,165 | ,638 | ,107 | ,509 | ,041 | ,662 | ,149 | ,602 | ,196 | ,635 |
| No | 3459 | -,018 | ,478 | -,103 | ,808 | -,078 | ,554 | -,053 | ,532 | -,060 | ,528 | -,089 | ,679 | -,058 | ,484 | -,023 | ,595 | -,081 | ,647 | -,106 | ,597 |

Results of Munzel-Bruner analysis revealed that smartwatch ownership has a significant effect on digital trust components, $F(2.05, 5329) = 190.88$, $p < .01$. Table 4.7 and Table 4.8 show the details of the analysis for digital trust components across smartwatch ownership. For follow-up, Mann-Whitney U analysis have been conducted and results revealed that there are significant differences in all digital trust components across smartwatch ownership. To start with, participants with a smartwatch have significantly higher level in all the components of technology level of digital trust than participants without a smartwatch. These components are priority level of software quality component (with mean rank=2792.16, without mean rank=2596.26), U=2996384.50, Z=-4.436, p<.01, hardware and software component (with mean rank=3058.73, without mean rank=2452.14), U=2497891.50, Z=-13.736, p<.01, electronic devices component (with mean rank=3083.74, without mean rank=2438.62), U=2451129.50, Z=-14.609, p<.01, and information systems component (with mean rank=2990.36, without mean rank=2489.11), U=2625744.50, Z=-11.351, p<.01. Likewise, participants with a smartwatch have significantly higher level in all the components of people level of digital trust than participants without a smartwatch. These components are management and other internal entities component (with mean rank=3014.32, without mean rank=2476.15), U=2580940.50, Z=-12.187, p<.01, IT and data support component (with mean rank=3049.90, without mean rank=2456.92), U=2514400.50, Z=-13.428, p<.01, and external entities component (with mean rank=3010.67, without mean rank=2478.13), U=2587764.50, Z=-12.060, p<.01. Lastly, study found that participants with a smartwatch have significantly higher level in all the components of process level of digital trust than participants without a smartwatch. These components are data protection and privacy component (with mean rank=2778.08, without mean rank=2603.87), U=3022714.50, Z=-3.945, p<.01, organizational data protection and privacy component (with mean rank=3035.64, without mean rank=2464.63), U=2541074.50, Z=-12.931, p<.01, and Internet and social media use component (with mean rank=3130.27, without mean rank=2413.47), U=2364114.50, Z=-16.232, p<.01. In short, participants with a smartwatch have significantly higher level in all the digital trust components than participants without a smartwatch.

## 4.2. Digital Trust Components Across Social Media Account Ownership

Munzel-Bruner analysis was conducted to explore digital trust components across social media account ownership on different social media platforms which are Facebook, Twitter, WhatsApp, Blog, LinkedIn, Gmail, Yahoo mail, Website, YouTube, Alipay, WeChat, VK and OK. For follow-up analysis, Mann-Whitney U analysis has been conducted for having a social media account on one of the social media platforms mentioned above or not on each dependent variable which are priority level of software quality, hardware and software, electronic devices, information systems, management and other internal entities, IT and data support, external entities, data protection and privacy, organizational data protection and privacy, and internet and social media use. Results of Munzel-Bruner analysis revealed that Facebook account ownership has not a significant effect on digital trust components. Detailed statistical results about the other social media platforms are presented below.

### 4.2.1. Digital Trust Components Across Twitter Account Ownership

Table 4.9 Relative effects of digital trust components across Twitter account ownership

| Having Twitter Account | N | Priority level of software quality component - Technology | Hardware and software - Technology | Electronic devices - Technology | Information systems - Technology | Management and other internal entities - People | IT and data support - People | External entities - People | Data protection and privacy - Process | Organizational data protection and privacy - Process | Internet and social media use - Process |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Yes | 2551 | 0.5148804 | 0.5394070 | 0.5341899 | 0.5245536 | 0.5224421 | 0.5310396 | 0.5279713 | 0.5217559 | 0.5255820 | 0.5425139 |
| No | 2778 | 0.4845818 | 0.4667797 | 0.4705265 | 0.4801859 | 0.4813729 | 0.4724785 | 0.4761756 | 0.4795280 | 0.4783574 | 0.4609510 |

Table 4.10 Mean and standard deviations of each component of digital trust across Twitter account ownership

| | | Priority level of software quality components - Technology | | Hardware and software - Technology | | Electronic devices - Technology | | Information systems - Technology | | Management and other internal entities - People | | IT and data support - People | | External entities - People | | Data protection and privacy - Process | | Organizational data protection and privacy - Process | | Internet and social media use - Process | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD |
| Yes | 2551 | -,018 | ,559 | ,083 | ,836 | ,042 | ,597 | ,007 | ,633 | ,015 | ,585 | ,055 | ,696 | ,023 | ,571 | ,044 | ,666 | ,043 | ,652 | ,094 | ,670 |
| No | 2778 | ,013 | ,395 | -,076 | ,766 | -,039 | ,518 | -,007 | ,453 | -,014 | ,480 | -,050 | ,653 | -,022 | ,422 | -,041 | ,571 | -,040 | ,628 | -,086 | ,572 |

Results of Munzel-Bruner analysis showed that Twitter account ownership has a significant effect on digital trust components, $F(1.95, 5329) = 46.72$, $p < .01$. Table 4.9 and Table 4.10 show the details of the analysis for digital trust components across Twitter account ownership. For follow-up, Mann-Whitney U analysis have been conducted and results revealed that there are significant differences in all digital trust components across Twitter account ownership. To start with, participants with a Twitter account have significantly higher level in all the components of technology level of digital trust than participants without a Twitter account. These components are priority level of software quality component (with mean rank=2744.30, without mean rank=2592.18), U=3341050.50, Z=-3.606, p<.01, hardware and software component (with mean rank=2875.00, without mean rank=2472.16), U=3007629.50, Z=-9.548, p<.01, electronic devices component (with mean rank=2847.20, without mean rank=2497.69), U=3078551.50, Z=-8.284, p<.01, and information systems component (with mean rank=2795.85, without mean rank=2544.85), U=3209550.50, Z=-5.949, p<.01. Likewise, participants with a Twitter account have significantly higher level in all the components of people level of digital trust than participants without a Twitter account. These components are management and other internal entities component (with mean rank=2784.59, without mean rank=2555.18), U=3238254.50, Z=-5.438, p<.01, IT and data support component (with mean rank=2830.41, without mean rank=2513.11), U=3121377.50, Z=-7.521, p<.01, and external entities component (with mean rank=2814.06, without mean rank=2528.12), U=3163089.50, Z=-6.778, p<.01. Finally, when the process level of digital trust is considered, it is found that participants with a Twitter account have significantly higher level in all the components of process level of digital trust than participants without a Twitter account. These components are data protection and privacy component (with mean rank=2780.94, without mean rank=2558.54), U=3247583.50, Z=-5.272, p<.01, organizational data protection and privacy component (with mean rank=2801.33, without mean rank=2539.81), U=3195569.50, Z=-6.199, p<.01, and Internet and social media use component (with mean rank=2891.56, without mean rank=2456.96), U=2965393.50, Z=-10.301, p<.01. In short, participants with a Twitter account have significantly higher level in all digital trust components than participants without a Twitter account.

### 4.2.2. Digital Trust Components Across WhatsApp Account Ownership

Table 4.11 Relative effects of digital trust components across WhatsApp account ownership

| Having WhatsApp Account | N | Priority level of software quality component - Technology | Hardware and software - Technology | Electronic devices - Technology | Information systems - Technology | Management and other internal entities - People | IT and data support - People | External entities - People | Data protection and privacy - Process | Organizational data protection and privacy - Process | Internet and social media use - Process |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Yes | 3754 | 0.5125140 | 0.5303453 | 0.5314958 | 0.5277862 | 0.5283860 | 0.5293337 | 0.5263279 | 0.4967340 | 0.5276044 | 0.5255757 |
| No | 1575 | 0.5064647 | 0.5087050 | 0.5086418 | 0.5119243 | 0.5084536 | 0.5066548 | 0.5117634 | 0.5196106 | 0.5051205 | 0.5110247 |

Table 4.12 Mean and standard deviations of each component of digital trust across WhatsApp account ownership

| | | Priority level of software quality components - Technology | | Hardware and software - Technology | | Electronic devices - Technology | | Information systems - Technology | | Management and other internal entities - People | | IT and data support - People | | External entities - People | | Data protection and privacy - Process | | Organizational data protection and privacy - Process | | Internet and social media use - Process | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD |
| Yes | 3754 | ,002 | ,509 | ,075 | ,801 | ,054 | ,561 | ,034 | ,576 | ,043 | ,543 | ,064 | ,670 | ,036 | ,523 | -,010 | ,638 | ,056 | ,635 | ,059 | ,642 |
| No | 1575 | -,011 | ,406 | -,179 | ,783 | -,130 | ,532 | -,082 | ,460 | -,102 | ,492 | -,151 | ,665 | -,087 | ,424 | ,023 | ,573 | -,134 | ,635 | -,140 | ,569 |

Results of Munzel-Bruner analysis revealed that there is a significant main effect of WhatsApp account ownership on digital trust components, $F(1.86, 5329) = 7.82$, $p<.01$. Table 4.11 and 4.12 demonstrate the details of the analysis for digital trust component across WhatsApp account ownership. For follow-up, Mann-Whitney U analysis have been conducted and results showed that there are significant differences in nine digital trust components across WhatsApp account ownership. There is not significant difference between participants with a WhatsApp account and participants without a WhatsApp account in data protection and privacy component of process level of digital trust. To begin, participants with a WhatsApp account have significantly higher level in all the components of technology level of digital trust than participants without a WhatsApp account. These components are priority level of software quality component (with mean rank=2731.69, without mean rank=2506.05), U=2705932.50, Z=-4.885, $p<.01$, hardware and software component (with mean rank=2826.71, without mean rank=2279.56), U=2349214.50, Z=-11.846, $p<.01$, electronic devices component (with mean rank=2832.84, without mean rank=2264.95), U=2326199.50, Z=-12.295, $p<.01$, and information systems component (with mean rank=2813.07, without mean rank=2312.07), U=2400410.50, Z=-10.847, $p<.01$. Besides, participants with a WhatsApp account have significantly higher level in all the components of people level of digital trust than participants without a WhatsApp account. These components are management and other internal entities component (with mean rank=2816.27, without mean rank=2304.45), U=2388411.50, Z=-11.081, $p<.01$, IT and data support component (with mean rank=2821.32, without mean rank=2292.41), U=2369451.50, Z=-11.451, $p<.01$, and external entities component (with mean rank=2805.30, without mean rank=2330.59), U=2429584.50, Z=-10.278, $p<.01$. Finally, participants with a WhatsApp account have significantly higher level in two components of process level of digital trust than participants without a WhatsApp account which are organizational data protection and privacy component (with mean rank=2812.10, without mean rank=2314.38), U=2404046.50, Z=-10.776, $p<.01$, and Internet and social media use component (with mean rank=2801.29, without mean rank=2340.15), U=2444630.50, Z=-9.984, $p<.01$. As a result, participants with a WhatsApp account have significantly higher level in all digital trust components except data protection and privacy than participants

without a WhatsApp account. Data protection and privacy component is not significantly affected by WhatsApp account ownership as it is mentioned above.

### 4.2.3. Digital Trust Components Across Blog Ownership

Table 4.13 Relative effects of digital trust components across Blog ownership

| Having Blog | N | Priority level of software quality component - Technology | Hardware and software - Technology | Electronic devices - Technology | Information systems - Technology | Management and other internal entities - People | IT and data support - People | External entities - People | Data protection and privacy - Process | Organizational data protection and privacy - Process | Internet and social media use - Process |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Yes | 1435 | 0.5205001 | 0.5466103 | 0.5506679 | 0.5372384 | 0.5344289 | 0.5392548 | 0.5483418 | 0.5530362 | 0.5277815 | 0.5794483 |
| No | 3894 | 0.4879702 | 0.4757448 | 0.4698210 | 0.4935127 | 0.4853937 | 0.4727160 | 0.4839006 | 0.5216916 | 0.4799016 | 0.4630729 |

Table 4.14 Mean and standard deviations of each component of digital trust across Blog ownership

| | | Priority level of software quality components - Technology | | Hardware and software - Technology | | Electronic devices - Technology | | Information systems - Technology | | Management and other internal entities - People | | IT and data support - People | | External entities - People | | Data protection and privacy - Process | | Organizational data protection and privacy - Process | | Internet and social media use - Process | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD |
| Yes | 1435 | -,001 | ,540 | ,108 | ,817 | ,079 | ,586 | ,042 | ,613 | ,045 | ,569 | ,082 | ,680 | ,068 | ,559 | ,109 | ,652 | ,055 | ,638 | ,175 | ,657 |
| No | 3894 | -,002 | ,457 | -,040 | ,796 | -,030 | ,546 | -,016 | ,520 | -,017 | ,518 | -,030 | ,672 | -,025 | ,473 | -,041 | ,603 | -,020 | ,641 | -,065 | ,604 |

Results of Munzel-Bruner analysis showed that Blog account ownership has a significant effect on digital trust components, $F(1.76, 5329) = 33.84$, $p < .01$. Table 4.13 and Table 4.14 show the details of the analysis for digital trust components across Blog account ownership. For follow-up, Mann-Whitney U analysis have been conducted and results revealed that there are significant differences in all digital trust components across Blog account ownership. First, participants with a Blog account have significantly higher level in all the components of technology level of digital trust than participants without a Blog account. These components are priority level of software quality component (with mean rank=2774.25, without mean rank=2624.74), U=2637178.00, Z=-3.147, p<.01, hardware and software component (with mean rank=2913.39, without mean rank=2573.47), U=2437511.00, Z=-7.155, p<.01, electronic devices component (with mean rank=2935.01, without mean rank=2565.50), U=2406482.00, Z=-7.777, p<.01, and information systems component (with mean rank=2863.44, without mean rank=2591.87), U=2509179.00, Z=-5.716, p<.01. Likewise, participants with a Blog account have significantly higher level in all the components of people level of digital trust than participants without a Blog account. These components are management and other internal entities component (with mean rank=2848.47, without mean rank=2597.39), U=2530663.00, Z=-5.285, p<.01, IT and data support component (with mean rank=2874.19, without mean rank=2587.91), U=2493759.00, Z=-6.026, p<.01, and external entities component (with mean rank=2922.61, without mean rank=2570.07), U=2424270.00, Z=-7.420, p<.01. Finally, when the process level of digital trust is considered, it is found that participants with a Blog account have significantly higher level in all the components of process level of digital trust than participants without a Blog account. These components are data protection and privacy component (with mean rank=2947.63, without mean rank=2560.85), U=2388371.00, Z=-8.141, p<.01, organizational data protection and privacy component (with mean rank=2813.05, without mean rank=2610.44), U=2581497.00, Z=-4.264, p<.01, and Internet and social media use component (with mean rank=3088.38, without mean rank=2508.98), U=2186395.00, Z=-12.195, p<.01. To sum up, participants with a Blog account have significantly higher level in all digital trust components than participants without a Blog account.

### 4.2.4. Digital Trust Components Across LinkedIn Account Ownership

Table 4.15 Relative effects of digital trust components across LinkedIn account ownership

| Having LinkedIn Account | N | Priority level of software quality component - Technology | Hardware and software - Technology | Electronic devices - Technology | Information systems - Technology | Management and other internal entities - People | IT and data support - People | External entities - People | Data protection and privacy - Process | Organizational data protection and privacy - Process | Internet and social media use - Process |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Yes | 2783 | 0.5390383 | 0.5534124 | 0.5528044 | 0.5433051 | 0.5458823 | 0.5504844 | 0.5364449 | 0.4900833 | 0.5468741 | 0.5377084 |
| No | 2546 | 0.4599080 | 0.4463286 | 0.4458216 | 0.4533373 | 0.4525277 | 0.4480057 | 0.4601588 | 0.5056861 | 0.4519204 | 0.4583632 |

Table 4.16 Mean and standard deviations of each component of digital trust across LinkedIn account ownership

| | | Priority level of software quality components - Technology | | Hardware and software - Technology | | Electronic devices - Technology | | Information systems - Technology | | Management and other internal entities - People | | IT and data support - People | | External entities - People | | Data protection and privacy - Process | | Organizational data protection and privacy - Process | | Internet and social media use - Process | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD |
| Yes | 2783 | ,050 | ,476 | ,150 | ,744 | ,103 | ,524 | ,070 | ,551 | ,079 | ,522 | ,123 | ,629 | ,058 | ,511 | -,024 | ,632 | ,110 | ,594 | ,091 | ,629 |
| No | 2546 | -,059 | ,480 | -,164 | ,835 | -,113 | ,574 | -,076 | ,531 | -,086 | ,531 | -,134 | ,699 | -,063 | ,478 | ,026 | ,605 | -,120 | ,668 | -,099 | ,611 |

Results of Munzel-Bruner analysis revealed that there is a significant main effect of LinkedIn account ownership on digital trust components, $F(2.01, 5329) = 134.85$, $p<.01$. Table 4.15 and 4.16 show the details of the analysis for digital trust component across LinkedIn account ownership. For follow-up, Mann-Whitney U analysis have been conducted and results showed that there are significant differences in all digital trust components across LinkedIn account ownership. First, participants with a LinkedIn account have significantly higher level in all the components of technology level of digital trust than participants without a LinkedIn account. These components are priority level of software quality component (with mean rank=2873.04, without mean rank=2437.60), U=2963797.00, Z=-10.320, p<.01, hardware and software component (with mean rank=2949.63, without mean rank=2353.87), U=2750621.00, Z=-14.120, p<.01, electronic devices component (with mean rank=2946.39, without mean rank=2357.41), U=2759638.00, Z=-13.960, p<.01, and information systems component (with mean rank=2895.77, without mean rank=2412.75), U=2900518.00, Z=-11.448, p<.01. Besides, participants with a LinkedIn account have significantly higher level in all the components of people level of digital trust than participants without a LinkedIn account. These components are management and other internal entities component (with mean rank=2909.51, without mean rank=2397.73), U=2862296.00, Z=-12.130, p<.01, IT and data support component (with mean rank=2934.03, without mean rank=2370.92), U=2794044.00, Z=-13.346, p<.01, and external entities component (with mean rank=2859.21, without mean rank=2452.71), U=3002259.00, Z=-9.635, p<.01. Finally, when the components of process level of digital trust are examined, results showed that participants with a LinkedIn account have significantly higher level than participants without a LinkedIn account in organizational data protection and privacy component (with mean rank=2914.79, without mean rank=2391.96), U=2847588.00, Z=-12.392, p<.01 and internet and social media use component (with mean rank=2865.95, without mean rank=2445.35), U=2983521.00, Z=-9.969, p<.01. However, participants without a LinkedIn account (mean rank=2722.77) have significantly higher level in data protection and privacy component of process level of digital trust than participants with a LinkedIn account (mean rank=2612.15), U=3689830.00, Z=2.622, p<.01. In conclusion, participants with a LinkedIn account have significantly higher level in all the components of

technology and people levels of digital trust than participants without a LinkedIn account. For the process level of digital trust, participants with a LinkedIn account have significantly higher level in components called organizational data protection and privacy, and internet and social media use than participants without a LinkedIn account, while participants without a LinkedIn account have significantly higher level in data protection and privacy component than participants with a LinkedIn account.

### 4.2.5. Digital Trust Components Across Gmail Account Ownership

Table 4.17 Relative effects of digital trust components across Gmail account ownership

| Having Gmail Account | N | Priority level of software quality component - Technology | Hardware and software - Technology | Electronic devices - Technology | Information systems - Technology | Management and other internal entities - People | IT and data support - People | External entities - People | Data protection and privacy - Process | Organizational data protection and privacy - Process | Internet and social media use - Process |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Yes | 4145 | 0.5122862 | 0.5234506 | 0.5226769 | 0.5164482 | 0.5192373 | 0.5216249 | 0.5145642 | 0.4901047 | 0.5227666 | 0.5183734 |
| No | 1184 | 0.5039379 | 0.5086719 | 0.5096512 | 0.5103159 | 0.5064624 | 0.5056461 | 0.5098709 | 0.5102536 | 0.5033716 | 0.5067659 |

Table 4.18 Mean and standard deviations of each component of digital trust across Gmail account ownership

| | | Priority level of software quality components - Technology | | Hardware and software - Technology | | Electronic devices - Technology | | Information systems - Technology | | Management and other internal entities - People | | IT and data support - People | | External entities - People | | Data protection and privacy - Process | | Organizational data protection and privacy - Process | | Internet and social media use - Process | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD |
| Yes | 4145 | ,016 | ,477 | ,077 | ,755 | ,053 | ,517 | ,028 | ,542 | ,041 | ,507 | ,063 | ,627 | ,026 | ,489 | -,020 | ,603 | ,061 | ,593 | ,045 | ,605 |
| No | 1184 | -,065 | ,491 | -,269 | ,908 | -,188 | ,653 | -,099 | ,554 | -,142 | ,593 | -,219 | ,786 | -,090 | ,524 | ,070 | ,672 | -,215 | ,748 | -,157 | ,677 |

Results of Munzel-Bruner analysis showed that Gmail account ownership has a significant effect on digital trust components, $F(1.92, 5329) = 4.52$, $p < .05$. Table 4.17 and Table 4.18 show the details of the analysis for digital trust components across Gmail account ownership. For follow-up, Mann-Whitney U analysis have been conducted and results revealed that there are significant differences in all digital trust components across Gmail account ownership. First, participants with a Gmail account have significantly higher level in all the components of technology level of digital trust than participants without a Gmail account. These components are priority level of software quality component (with mean rank=2730.47, without mean rank=2435.79), U=2182453.00, Z=-5.813, p<.01, hardware and software component (with mean rank=2789.97, without mean rank=2227.51), U=1935846.00, Z=-11.095, p<.01, electronic devices component (with mean rank=2785.85, without mean rank=2241.94), U=1952937.00, Z=-10.729, p<.01, and information systems component (with mean rank=2752.65, without mean rank=2358.14), U=2090520.00, Z=-7.782, p<.01. Besides, participants with a Gmail account have significantly higher level in all the components of people level of digital trust than participants without a Gmail account. These components are management and other internal entities component (with mean rank=2767.52, without mean rank=2306.11), U=2028914.00, Z=-9.101, p<.01, IT and data support component (with mean rank=2780.24, without mean rank=2261.57), U=1976173.00, Z=-10.231, p<.01, and external entities component (with mean rank=2742.61, without mean rank=2393.29), U=2132135.00, Z=-6.890, p<.01. Finally, when the components of process level of digital trust are examined, results showed that participants with a Gmail account have significantly higher level than participants without a Gmail account in organizational data protection and privacy component (with mean rank=2786.32, without mean rank=2240.27), U=1950955.00, Z=-10.771, p<.01 and internet and social media use component (with mean rank=2762.91, without mean rank=2322.23), U=2047996.00, Z=-8.693, p<.01. Yet, participants without a Gmail account (mean rank=2849.61) have significantly higher level in data protection and privacy component of process level of digital trust than participants with a Gmail account (mean rank=2612.27), U=2672414.00, Z=4.682, p<.01. Overall, in all the technology and people level components of digital trust, participants with a Gmail account have significantly higher level than participants without a Gmail account. When we look at the process level of

digital trust, participants with a Gmail account have significantly higher level in organizational data protection and privacy, and internet and social media use components than participants without a Gmail account, while participants without a Gmail account have significantly higher level in data protection and privacy component than participants with a Gmail account.

### 4.2.6. Digital Trust Components Across Yahoo Mail Account Ownership

Table 4.19 Relative effects of digital trust components across Yahoo Mail account ownership

| Having Yahoo Mail Account | N | Priority level of software quality component - Technology | Hardware and software - Technology | Electronic devices - Technology | Information systems - Technology | Management and other internal entities - People | IT and data support - People | External entities - People | Data protection and privacy - Process | Organizational data protection and privacy - Process | Internet and social media use - Process |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Yes | 2058 | 0.5165321 | 0.5340545 | 0.5294505 | 0.5180829 | 0.5182381 | 0.5253569 | 0.5246566 | 0.5442847 | 0.5197580 | 0.5554457 |
| No | 3271 | 0.5059375 | 0.4814874 | 0.4913212 | 0.5072129 | 0.4995744 | 0.4887371 | 0.4947579 | 0.4851385 | 0.4903959 | 0.4641693 |

Table 4.20 Mean and standard deviations of each component of digital trust across Yahoo Mail account ownership

| | | Priority level of software quality components - Technology | | Hardware and software - Technology | | Electronic devices - Technology | | Information systems - Technology | | Management and other internal entities - People | | IT and data support - People | | External entities - People | | Data protection and privacy - Process | | Organizational data protection and privacy - Process | | Internet and social media use - Process | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD |
| Yes | 2058 | -,006 | ,541 | ,082 | ,810 | ,044 | ,570 | ,007 | ,612 | ,016 | ,564 | ,051 | ,673 | ,025 | ,556 | ,096 | ,640 | ,042 | ,624 | ,122 | ,654 |
| No | 3271 | ,001 | ,439 | -,052 | ,796 | -,028 | ,550 | -,005 | ,501 | -,010 | ,512 | -,032 | ,676 | -,016 | ,459 | -,061 | ,599 | -,027 | ,650 | -,077 | ,598 |

Results of Munzel-Bruner analysis revealed that Yahoo Mail account ownership has a significant effect on digital trust components, $F(1.86, 5329) = 22.75$, $p < .01$. Table 4.19 and Table 4.20 demonstrate the details of the analysis for digital trust components across Yahoo Mail account ownership. For follow-up, Mann-Whitney U analysis have been conducted and results showed that there are significant differences in all digital trust components across Yahoo Mail account ownership. To start with, participants with a Yahoo Mail account have significantly higher level in all the components of technology level of digital trust than participants without a Yahoo Mail account. These components are priority level of software quality component (with mean rank=2753.10, without mean rank=2609.57), U=3184550.00, Z=-3.316, p<.01, hardware and software component (with mean rank=2846.48, without mean rank=2550.82), U=2992381.00, Z=-6.830, p<.01, electronic devices component (with mean rank=2821.94, without mean rank=2566.26), U=3042873.00, Z=-5.907, p<.01, and information systems component (with mean rank=2761.36, without mean rank=2604.37), U=3167542.00, Z=-3.627, p<.01. Likewise, participants with a Yahoo Mail account have significantly higher level in all the components of people level of digital trust than participants without a Yahoo Mail account. These components are management and other internal entities component (with mean rank=2762.19, without mean rank=2603.85), U=3165840.00, Z=-3.658, p<.01, IT and data support component (with mean rank=2800.13, without mean rank=2579.98), U=3087768.00, Z=-5.086, p<.01, and external entities component (with mean rank=2796.40, without mean rank=2582.33), U=3095448.00, Z=-4.945, p<.01. Lastly, when the process level of digital trust is considered, study found that participants with a Yahoo Mail account have significantly higher level in all the components of process level of digital trust than participants without a Yahoo Mail account. These components are data protection and privacy component (with mean rank=2900.99, without mean rank=2516.52), U=2880185.00, Z=-8.882, p<.01, organizational data protection and privacy component (with mean rank=2770.29, without mean rank=2598.75), U=3149171.00, Z=-3.963, p<.01, and Internet and social media use component (with mean rank=2960.47, without mean rank=2479.10), U=2757781.00, Z=-11.120, p<.01. In conclusion, participants with a Yahoo Mail account have significantly higher level in all digital trust components than participants without a Yahoo Mail account.

### 4.2.7. Digital Trust Components Across YouTube Account Ownership

Table 4.21 Relative effects of digital trust components across YouTube account ownership

| Having YouTube Account | N | Priority level of software quality component - Technology | Hardware and software - Technology | Electronic devices - Technology | Information systems - Technology | Management and other internal entities - People | IT and data support - People | External entities - People | Data protection and privacy - Process | Organizational data protection and privacy - Process | Internet and social media use - Process |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Yes | 3059 | 0.5184081 | 0.5297415 | 0.5310233 | 0.5244425 | 0.5288816 | 0.5311986 | 0.5250150 | 0.4966974 | 0.5291389 | 0.5275855 |
| No | 2270 | 0.4992818 | 0.4920301 | 0.4929329 | 0.4974293 | 0.4938402 | 0.4928262 | 0.4976089 | 0.5200792 | 0.4940952 | 0.4964967 |

Table 4.22 Mean and standard deviations of each component of digital trust across YouTube account ownership

| | | Priority level of software quality components - Technology | | Hardware and software - Technology | | Electronic devices - Technology | | Information systems - Technology | | Management and other internal entities - People | | IT and data support - People | | External entities - People | | Data protection and privacy - Process | | Organizational data protection and privacy - Process | | Internet and social media use - Process | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD |
| Yes | 3059 | ,034 | ,454 | ,096 | ,741 | ,074 | ,498 | ,050 | ,522 | ,063 | ,490 | ,088 | ,613 | ,049 | ,476 | -,005 | ,602 | ,080 | ,578 | ,067 | ,602 |
| No | 2270 | -,050 | ,511 | -,129 | ,866 | -,100 | ,617 | -,068 | ,572 | -,085 | ,575 | -,119 | ,736 | -,065 | ,522 | ,007 | ,643 | -,109 | ,703 | -,090 | ,649 |

Results of Munzel-Bruner analysis showed that there is a significant main effect of YouTube account ownership on digital trust components, $F(1.94, 5329) = 18.54$, $p<.01$. Table 4.21 and Table 4.22 show the details of the analysis for digital trust component across YouTube account ownership. For follow-up, Mann-Whitney U analysis have been conducted and results showed that there are significant differences in nine digital trust components across YouTube account ownership. There is not significant difference between participants with a YouTube account and participants without a YouTube account in data protection and privacy component of process level of digital trust. To begin, participants with a YouTube account have significantly higher level in all the components of technology level of digital trust than participants without a YouTube account. These components are priority level of software quality component (with mean rank=2763.10, without mean rank=2532.81), U=3171887.50, Z=-5.403, $p<.01$, hardware and software component (with mean rank=2823.49, without mean rank=2451.42), U=2987136.50, Z=-8.730, $p<.01$, electronic devices component (with mean rank=2830.32, without mean rank=2442.21), U=2966241.50, Z=-9.106, $p<.01$, and information systems component (with mean rank=2795.25, without mean rank=2489.47), U=3073518.50, Z=-7.175, $p<.01$. Likewise, participants with a YouTube account have significantly higher level in all the components of people level of digital trust than participants without a YouTube account. These components are management and other internal entities component (with mean rank=2818.91, without mean rank=2457.59), U=3001154.50, Z=-8.478, $p<.01$, IT and data support component (with mean rank=2831.26, without mean rank=2440.96), U=2963384.50, Z=-9.158, $p<.01$, and external entities component (with mean rank=2789.30, without mean rank=2485.36), U=3064185.50, Z=-7.343, $p<.01$. Finally, participants with a YouTube account have significantly higher level in two components of process level of digital trust than participants without a YouTube account which are organizational data protection and privacy component (with mean rank=2820.28, without mean rank=2455.75), U=2996959.50, Z=-8.553, $p<.01$, and Internet and social media use component (with mean rank=2812.00, without mean rank=2466.90), U=3022282.50, Z=-8.097, $p<.01$. In brief, participants with a YouTube account have significantly higher level in all digital trust components except data protection and privacy than participants without a YouTube account. Data

protection and privacy component is not significantly affected by YouTube account ownership as it is mentioned above.

### 4.2.8. Digital Trust Components Across Alipay Account Ownership

Table 4.23 Relative effects of digital trust components across Alipay account ownership

| Having Alipay Account | N | Priority level of software quality component - Technology | Hardware and software - Technology | Electronic devices - Technology | Information systems - Technology | Management and other internal entities - People | IT and data support - People | External entities - People | Data protection and privacy - Process | Organizational data protection and privacy - Process | Internet and social media use - Process |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Yes | 1267 | 0.5165008 | 0.5180848 | 0.5149691 | 0.5102932 | 0.5117596 | 0.5169720 | 0.5184205 | 0.5011096 | 0.5138753 | 0.5094386 |
| No | 4062 | 0.5198562 | 0.5228969 | 0.5187974 | 0.5384012 | 0.5226426 | 0.5070782 | 0.5333856 | 0.6055002 | 0.5059596 | 0.5297942 |

Table 4.24 Mean and standard deviations of each component of digital trust across Alipay account ownership

| | | Priority level of software quality components - Technology | | Hardware and software - Technology | | Electronic devices - Technology | | Information systems - Technology | | Management and other internal entities - People | | IT and data support - People | | External entities - People | | Data protection and privacy - Process | | Organizational data protection and privacy - Process | | Internet and social media use - Process | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD |
| Yes | 1267 | ,021 | ,475 | ,051 | ,784 | ,031 | ,549 | ,022 | ,537 | ,023 | ,527 | ,040 | ,665 | ,032 | ,491 | ,006 | ,611 | ,031 | ,633 | ,021 | ,626 |
| No | 4062 | -,012 | ,488 | -,014 | ,814 | -,011 | ,567 | -,005 | ,551 | -,010 | ,538 | -,020 | ,682 | -,007 | ,504 | ,027 | ,615 | -,018 | ,648 | ,000 | ,632 |

Results of Munzel-Bruner analysis revealed that there is a significant main effect of Alipay account ownership on digital trust components, $F(1.84, 5329) = 9.32$, $p<.01$. Table 4.23 and Table 4.24 demonstrate the details of the analysis for digital trust component across Alipay account ownership. For follow-up, Mann-Whitney U analysis have been conducted and results showed that there are significant differences in only five digital trust components across Alipay account ownership. There is not significant difference between participants with an Alipay account and participants without an Alipay account in information systems, management and other internal entities, data protection and privacy, organizational data protection and privacy, and Internet and social media use components of digital trust. However, participants with an Alipay account have significantly higher level in three components of technology level of digital trust. These components are priority level of software quality component (with mean rank=2752.93, without mean rank=2637.57), U=2461866.00, Z=-2.330, $p<.05$, hardware and software component (with mean rank=2761.37, without mean rank=2634.94), U=2451171.00, Z=-2.554, $p<.05$, and electronic devices component (with mean rank=2744.77, without mean rank=2640.12), U=2472208.00, Z=-2.114, $p<.05$. In addition, participants with an Alipay account have significantly higher level in IT and data support (with mean rank=2755.44, without mean rank=2636.79), U=2458685.00, Z=-2.397, $p<.05$ and external entities (with mean rank=2763.16, without mean rank=2634.38), U=2448905.00, Z=-2.601, $p<.01$ components of people level of digital trust than participants without an Alipay account. To sum up, participants with an Alipay account have significantly higher level in priority level of software quality, hardware and software, electronic devices, IT and data support, and external entities components of digital trust than participants without an Alipay account. However, study found that there is not significant difference between these participants in information systems, management and other internal entities, data protection and privacy, organizational data protection and privacy, and Internet and social media use components of digital trust.

### 4.2.9. Digital Trust Components Across WeChat Account Ownership

Table 4.25 Relative effects of digital trust components across WeChat account ownership

| Having WeChat Account | N | Priority level of software quality component - Technology | Hardware and software - Technology | Electronic devices - Technology | Information systems - Technology | Management and other internal entities - People | IT and data support - People | External entities - People | Data protection and privacy - Process | Organizational data protection and privacy - Process | Internet and social media use - Process |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Yes | 2228 | 0.5272556 | 0.5374434 | 0.5343339 | 0.5305639 | 0.5282297 | 0.5329317 | 0.5361411 | 0.5391422 | 0.5284283 | 0.5434348 |
| No | 3101 | 0.4800015 | 0.4799534 | 0.4790971 | 0.4851904 | 0.4783393 | 0.4694389 | 0.4771646 | 0.4949055 | 0.4723572 | 0.4678237 |

Table 4.26 Mean and standard deviations of each component of digital trust across WeChat account ownership

| | | Priority level of software quality components - Technology | | Hardware and software - Technology | | Electronic devices - Technology | | Information systems - Technology | | Management and other internal entities - People | | IT and data support - People | | External entities - People | | Data protection and privacy - Process | | Organizational data protection and privacy - Process | | Internet and social media use - Process | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD |
| Yes | 2228 | ,028 | ,496 | ,091 | ,801 | ,055 | ,568 | ,048 | ,562 | ,043 | ,543 | ,069 | ,679 | ,054 | ,525 | ,086 | ,646 | ,059 | ,637 | ,098 | ,661 |
| No | 3101 | -,023 | ,469 | -,065 | ,800 | -,040 | ,549 | -,035 | ,533 | -,031 | ,523 | -,050 | ,669 | -,039 | ,476 | -,062 | ,593 | -,042 | ,640 | -,070 | ,593 |

Results of Munzel-Bruner analysis revealed that WeChat account ownership has a significant effect on digital trust components, F (1.88, 5329) = 40.45, p < .01. Table 4.25 and Table 4.26 demonstrate the details of the analysis for digital trust components across WeChat account ownership. For follow-up, Mann-Whitney U analysis have been conducted and results showed that there are significant differences in all digital trust components across WeChat account ownership. To start with, participants with a WeChat account have significantly higher level in all the components of technology level of digital trust than participants without a WeChat account. These components are priority level of software quality component (with mean rank=2810.25, without mean rank=2560.64), U=3130908.00, Z=-5.842, p<.01, hardware and software component (with mean rank=2864.54, without mean rank=2521.64), U=3009948.00, Z=-8.025, p<.01, electronic devices component (with mean rank=2847.97, without mean rank=2533.54), U=3046867.00, Z=-7.359, p<.01, and information systems component (with mean rank=2827.87, without mean rank=2547.98), U=3091629.00, Z=-6.551, p<.01. Besides, participants with a WeChat account have significantly higher level in all the components of people level of digital trust than participants without a WeChat account. These components are management and other internal entities component (with mean rank=2815.44, without mean rank=2556.92), U=3119343.00, Z=-6.050, p<.01, IT and data support component (with mean rank=2840.49, without mean rank=2538.91), U=3063515.00, Z=-7.058, p<.01, and external entities component (with mean rank=2857.60, without mean rank=2526.62), U=3025410.00, Z=-7.746, p<.01. Finally, when the process level of digital trust is considered, it is found that participants with a WeChat account have significantly higher level in all the components of process level of digital trust than participants without a WeChat account. These components are data protection and privacy component (with mean rank=2873.59, without mean rank=2515.13), U=2989778.00, Z=-8.389, p<.01, organizational data protection and privacy component (with mean rank=2816.49, without mean rank=2556.15), U=3116985.00, Z=-6.093, p<.01, and Internet and social media use component (with mean rank=2896.46, without mean rank=2498.70), U=2938812.00, Z=-9.309, p<.01. In brief, participants with a WeChat account have significantly higher level in all digital trust components than participants without a WeChat account.

### 4.2.10. Digital Trust Components Across Website Account Ownership

Table 4.27 Relative effects of digital trust components across Website account ownership

| Having Website Account | N | Priority level of software quality component - Technology | Hardware and software - Technology | Electronic devices - Technology | Information systems - Technology | Management and other internal entities - People | IT and data support - People | External entities - People | Data protection and privacy - Process | Organizational data protection and privacy - Process | Internet and social media use - Process |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Yes | 2050 | 0.5172138 | 0.5316735 | 0.5395261 | 0.5341415 | 0.5390017 | 0.5375258 | 0.5402867 | 0.5118868 | 0.5395781 | 0.5414469 |
| No | 3279 | 0.5002737 | 0.4922429 | 0.4888149 | 0.4974490 | 0.4895259 | 0.4857227 | 0.4853285 | 0.5094070 | 0.4870665 | 0.4813824 |

Table 4.28 Mean and standard deviations of each component of digital trust across Website account ownership

| | | Priority level of software quality components - Technology | | Hardware and software - Technology | | Electronic devices - Technology | | Information systems - Technology | | Management and other internal entities - People | | IT and data support - People | | External entities - People | | Data protection and privacy - Process | | Organizational data protection and privacy - Process | | Internet and social media use - Process | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD |
| Yes | 2050 | ,031 | ,457 | ,088 | ,772 | ,078 | ,534 | ,063 | ,532 | ,071 | ,517 | ,089 | ,652 | ,070 | ,498 | ,025 | ,624 | ,088 | ,612 | ,095 | ,626 |
| No | 3279 | -,022 | ,494 | -,055 | ,819 | -,049 | ,568 | -,040 | ,552 | -,045 | ,538 | -,056 | ,684 | -,044 | ,495 | -,016 | ,617 | -,055 | ,652 | -,060 | ,621 |

Results of Munzel-Bruner analysis revealed that website account ownership has a significant effect on digital trust components, $F(1.88, 5329) = 23.46$, $p < .01$. Table 4.27 and Table 4.28 show the details of the analysis for digital trust components across website account ownership. For follow-up, Mann-Whitney U analysis have been conducted and results showed that there are significant differences in all digital trust components across website account ownership. First, participants with a website account have significantly higher level in all the components of technology level of digital trust than participants without a website account. These components are priority level of software quality component (with mean rank=2756.73, without mean rank=2607.65), U=3172923.50, Z=-3.442, p<.01, hardware and software component (with mean rank=2833.79, without mean rank=2559.48), U=3014959.50, Z=-6.332, p<.01, electronic devices component (with mean rank=2875.63, without mean rank=2533.31), U=2929174.50, Z=-7.902, p<.01, and information systems component (with mean rank=2846.94, without mean rank=2551.25), U=2987997.50, Z=-6.826, p<.01. Likewise, participants with a website account have significantly higher level in all the components of people level of digital trust than participants without a website account. These components are management and other internal entities component (with mean rank=2872.84, without mean rank=2535.06), U=2934902.50, Z=-7.798, p<.01, IT and data support component (with mean rank=2864.97, without mean rank=2539.98), U=2951026.50, Z=-7.503, p<.01, and external entities component (with mean rank=2879.69, without mean rank=2530.78), U=2920865.50, Z=-8.055, p<.01. Lastly, when the process level of digital trust is considered, it is found that participants with a website account have significantly higher level in all the components of process level of digital trust than participants without a website account. These components are data protection and privacy component (with mean rank=2728.34, without mean rank=2625.40), U=3231118.50, Z=-2.377, p<.05, organizational data protection and privacy component (with mean rank=2875.91, without mean rank=2533.14), U=2928605.50, Z=-7.913, p<.01, and Internet and social media use component (with mean rank=2885.87, without mean rank=2526.91), U=2908190.50, Z=-8.286, p<.01. To conclude, participants with a website account have significantly higher level in all digital trust components than participants without a website account.

### 4.2.11. Digital Trust Components Across VK Account Ownership

Table 4.29 Relative effects of digital trust components across VK account ownership

| Having VK Account | N | Priority level of software quality component - Technology | Hardware and software - Technology | Electronic devices - Technology | Information systems - Technology | Management and other internal entities - People | IT and data support - People | External entities - People | Data protection and privacy - Process | Organizational data protection and privacy - Process | Internet and social media use - Process |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Yes | 1144 | 0.5135829 | 0.5078529 | 0.5109602 | 0.5054650 | 0.5018343 | 0.5073866 | 0.5076886 | 0.5051658 | 0.5092366 | 0.5154401 |
| No | 4185 | 0.5261984 | 0.5388456 | 0.5399469 | 0.5457961 | 0.5373642 | 0.5312436 | 0.5426784 | 0.6096554 | 0.5313994 | 0.5506726 |

Table 4.30 Mean and standard deviations of each component of digital trust across VK account ownership

| | | Priority level of software quality components - Technology | | Hardware and software - Technology | | Electronic devices - Technology | | Information systems - Technology | | Management and other internal entities - People | | IT and data support - People | | External entities - People | | Data protection and privacy - Process | | Organizational data protection and privacy - Process | | Internet and social media use - Process | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD |
| Yes | 1144 | ,015 | ,483 | ,027 | ,786 | ,032 | ,541 | ,019 | ,534 | ,013 | ,515 | ,027 | ,650 | ,021 | ,492 | ,010 | ,624 | ,033 | ,613 | ,036 | ,628 |
| No | 4185 | -,009 | ,485 | -,005 | ,813 | -,010 | ,569 | -,003 | ,552 | -,006 | ,541 | -,015 | ,686 | -,003 | ,504 | ,025 | ,611 | -,017 | ,653 | -,003 | ,631 |

Results of Munzel-Bruner analysis showed that there is a significant main effect of VK account ownership on digital trust components, $F(1.87, 5329) = 13.24$, $p<.01$. Table 4.29 and Table 4.30 show the details of the analysis for digital trust component across VK account ownership. For follow-up, Mann-Whitney U analysis have been conducted and results showed that there is a significant difference in only one digital trust component across VK account ownership. Participants with a VK account (mean rank=2747.28) have significantly higher level in Internet and social media use component of process level of digital trust than participants without a VK account (mean rank=2642.51), $U=2299691.50$, $Z=-2.041$, $p<.05$. Study found that there are not significant differences between participants with a VK account and participants without a VK account in priority level of software quality, hardware and software, electronic devices, information systems, management and other internal entities, IT and data support, external entities, data protection and privacy, and organizational data protection and privacy components of digital trust.

### 4.2.12. Digital Trust Components Across OK Account Ownership

Table 4.31 Relative effects of digital trust components across OK account ownership

| Having OK Account | N | Priority level of software quality component - Technology | Hardware and software - Technology | Electronic devices - Technology | Information systems - Technology | Management and other internal entities - People | IT and data support - People | External entities - People | Data protection and privacy - Process | Organizational data protection and privacy - Process | Internet and social media use - Process |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Yes | 773 | 0.5143904 | 0.5108357 | 0.5106514 | 0.4954967 | 0.502376 | 0.5119060 | 0.4967930 | 0.4930832 | 0.5110386 | 0.5114620 |
| No | 4556 | 0.5002992 | 0.4995877 | 0.5031383 | 0.5133103 | 0.503031 | 0.4910523 | 0.5136033 | 0.6040402 | 0.4983566 | 0.5145168 |

Table 4.32 Mean and standard deviations of each component of digital trust across OK account ownership

| | | Priority level of software quality components - Technology | | Hardware and software - Technology | | Electronic devices - Technology | | Information systems - Technology | | Management and other internal entities - People | | IT and data support - People | | External entities - People | | Data protection and privacy - Process | | Organizational data protection and privacy - Process | | Internet and social media use - Process | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD |
| Yes | 773 | ,031 | ,445 | ,039 | ,769 | ,032 | ,525 | ,009 | ,513 | ,015 | ,505 | ,041 | ,626 | ,006 | ,483 | -,008 | ,584 | ,041 | ,583 | ,030 | ,612 |
| No | 4556 | -,007 | ,487 | -,007 | ,810 | -,006 | ,564 | -,002 | ,552 | -,003 | ,537 | -,007 | ,683 | -,001 | ,502 | ,001 | ,626 | -,007 | ,650 | -,005 | ,630 |

Table 4.31 and Table 4.32 show the details of the analysis for digital trust component across OK account ownership. Even though results of Munzel-Bruner analysis showed that there is a significant main effect of OK account ownership on digital trust components, results of follow-up analysis with Mann-Whitney U test revealed that there is no significant difference between participants with and without OK account.

### 4.3. Digital Trust Components Across Level of Social Technographic Ladder

To examine digital trust components across level of social technographic ladder, Munzel-Bruner analysis was conducted. For follow-up analysis, Kruskal-Wallis analysis has been applied for levels on social technographic ladder (Creators, Conversationalists, Critics, Collectors, Joiners, Spectators, Inactives) on each dependent variable which are priority level of software quality, hardware and software, electronic devices, information systems, management and other internal entities, IT and data support, external entities, data protection and privacy, organizational data protection and privacy, internet and social media use.

Table 4.33 Relative effects of digital trust components across level on Social Technographic Ladder

| Roles on Technographic Ladder | N | Priority level of software quality component - Technology | Hardware and software - Technology | Electronic devices - Technology | Information systems - Technology | Management and other internal entities - People | IT and data support - People | External entities - People | Data protection and privacy - Process | Organizational data protection and privacy - Process | Internet and social media use - Process |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Creators | 1332 | 0.5297562 | 0.5716623 | 0.5750854 | 0.5694162 | 0.5630673 | 0.5651491 | 0.5857118 | 0.5855574 | 0.5595333 | 0.6049334 |
| Conversationalists | 549 | 0.5422233 | 0.5640952 | 0.5677474 | 0.5711237 | 0.5658247 | 0.5684004 | 0.5787392 | 0.5524419 | 0.5609990 | 0.5803246 |
| Critics | 577 | 0.4897346 | 0.5011226 | 0.5095887 | 0.5065683 | 0.5064658 | 0.5100870 | 0.5191274 | 0.5132360 | 0.5054588 | 0.5285775 |
| Collectors | 298 | 0.4760697 | 0.4794851 | 0.4863205 | 0.4878546 | 0.4886171 | 0.4885958 | 0.4944490 | 0.4845183 | 0.4840403 | 0.5008134 |
| Joiners | 806 | 0.4818250 | 0.4724101 | 0.4773832 | 0.4838032 | 0.4810429 | 0.4741698 | 0.4817561 | 0.5069773 | 0.4725259 | 0.4791961 |
| Spectators | 1422 | 0.4978026 | 0.4892573 | 0.4764050 | 0.4741841 | 0.4779731 | 0.4801424 | 0.4571717 | 0.4455191 | 0.4893595 | 0.4388509 |
| Inactives | 345 | 0.4957498 | 0.4781715 | 0.4683708 | 0.4653574 | 0.4703861 | 0.4693130 | 0.4514020 | 0.4513186 | 0.4747643 | 0.4380533 |

Table 4.34 Mean and standard deviations of each component of digital trust across level on Social Technographic Ladder

| | | Priority level of software quality components - Technology | | Hardware and software - Technology | | Electronic devices - Technology | | Information systems - Technology | | Management and other internal entities - People | | IT and data support - People | | External entities - People | | Data protection and privacy - Process | | Organizational data protection and privacy - Process | | Internet and social media use - Process | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD |
| Creators | 1332 | -,018 | ,601 | ,129 | ,904 | ,091 | ,653 | ,066 | ,681 | ,065 | ,624 | ,108 | ,746 | ,106 | ,617 | ,176 | ,719 | ,089 | ,705 | ,229 | ,730 |
| Conversationalists | 549 | ,066 | ,405 | ,037 | ,743 | ,050 | ,502 | ,062 | ,492 | ,075 | ,495 | ,090 | ,631 | ,045 | ,471 | -,125 | ,590 | ,075 | ,594 | -,011 | ,584 |
| Critics | 577 | -,087 | ,493 | -,066 | ,765 | -,046 | ,539 | -,074 | ,546 | -,069 | ,515 | -,072 | ,632 | -,029 | ,495 | ,048 | ,600 | -,074 | ,592 | ,046 | ,576 |
| Collectors | 298 | -,057 | ,455 | -,177 | ,894 | -,100 | ,637 | -,060 | ,572 | -,067 | ,594 | -,119 | ,781 | -,052 | ,513 | -,034 | ,634 | -,106 | ,724 | -,069 | ,616 |
| Joiners | 806 | ,013 | ,419 | -,079 | ,798 | -,048 | ,546 | -,022 | ,487 | -,038 | ,508 | -,062 | ,677 | -,043 | ,440 | -,021 | ,578 | -,068 | ,650 | -,105 | ,589 |
| Spectators | 1422 | ,024 | ,416 | -,004 | ,727 | -,026 | ,491 | -,021 | ,463 | -,021 | ,472 | -,033 | ,626 | -,058 | ,421 | -,101 | ,549 | -,015 | ,606 | -,129 | ,548 |
| Inactives | 345 | -,001 | ,428 | -,093 | ,709 | -,052 | ,439 | -,040 | ,435 | -,023 | ,425 | -,058 | ,543 | -,046 | ,373 | -,066 | ,469 | -,028 | ,506 | -,104 | ,494 |

Munzel-Bruner analysis showed that there are significant effects of level of social technographic ladder on digital trust components, F (10.70096, 5329) = 33.37051, p<.01. Table 4.33 and Table 4.34 show the details of the analysis for digital trust components across level of social technographic ladder. Kruskal-Wallis analysis showed that there are significant differences in all digital trust components across level of social technographic ladder. When the technology level of digital trust is considered, it is found that there are significant differences on priority level of software quality component F(6, 5329) = 51.565, p<.01, hardware and software component F(6, 5329) = 123.879, p<.01, electronic devices component F(6, 5329) = 134.643, p<.01, and information systems component F(6, 5329) = 122.147, p<.01 across level of social technographic ladder. Study also found that all components of people level of digital trust have significant differences across level of social technographic ladder. These components are management and other internal entities component F(6, 5329) = 108.640, p<.01, IT and data support component F(6, 5329) = 116.708, p<.01, and external entities component F(6, 5329) = 179.235, p<.01. Finally, results showed that there are significant differences across level of social technographic ladder in all components of process level of digital trust; these components are data protection and privacy component F(6, 5329) = 195.563, p<.01, organizational data protection and privacy component F(6, 5329) = 100.010, p<.01, and internet and social media use component F(6, 5329) = 278.154, p<.01. The detailed information about each component of digital trust which has significant difference across level of social technographic ladder is presented in this section.


Figure 4.1 Pairwise comparisons of Level of Social Technographic Ladder in Priority Level of Software Quality Component

There are significant differences across level of social technographic ladder in priority level of software quality component. Figure 4.1 shows the visual representation of groups' relation. According to results, critics have significantly less priority level of software quality than joiners and spectators (joiners: H=-271.333, Z=-3.234, p<.05 spectators: H=-309.194, Z=-4.072, p<.01). However, critics have significantly higher priority level of software quality than conversationalists and creators (conversationalists: H=461.140, Z=5.027, p<.01; creators: H=463.471, Z=6.045, p<.01). In addition, collectors have significantly higher priority level of software quality than participants whose level of social technographic ladder is conversationalists or creators (conversationalists: H=406.781, Z=3.675, p<.01; creators: H=409.113, Z=4.150, p<.01).

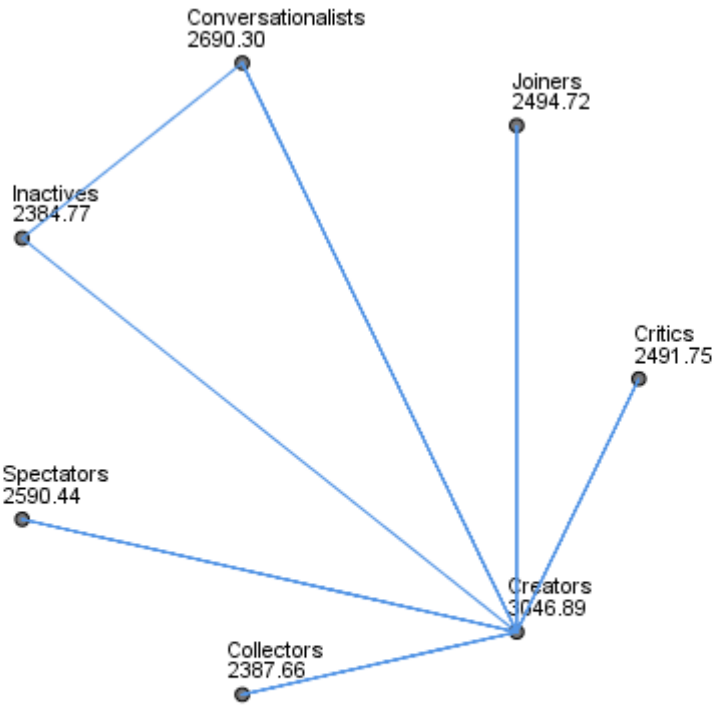


Figure 4.7 Pairwise comparisons of Level of Social Technographic Ladder in Hardware and Software Component

It is also found that, as seen in Figure 4.2, conversationalists, critics, collectors, joiners, spectators and inactives have significantly higher level in hardware and software component of digital trust than creators (conversationalists: H=356.592, Z=4.570, p<.01; critics: H=555.139, Z=7.240, p<.01; collectors: H=659.229, Z=6.687, p<.01; joiners: H=552.165, Z=8.042, p<.01; spectators: H=456.449, Z=7.781, p<.01; inactives: H=662.120, Z=7.124, p<.01). Even though Figure 2 shows that there is a significant difference between inactives and conversationalists, there is no significant difference between these participants according to statistical analysis.


Figure 4.8 Pairwise comparisons of Level of Social Technographic Ladder in Electronic Devices Component

When electronic devices component examined, as seen in Figure 4.3, inactives have significantly higher level in electronic devices component of digital trust than conversationalists (H=344.634, Z=3.261, p<.023). In addition, conversationalists, critics, collectors, joiners, spectators and inactives have significantly higher level in electronic devices component of digital trust than creators (conversationalists: H=324.832, Z=4.163, p<.01; critics: H=554.110, Z=7.227, p<.01; collectors: H=637.605, Z=6.467, p<.01; joiners: H=560.918, Z=8.170, p<.01; spectators: H=535.278, Z=9.124, p<.01; inactives: H=669.466, Z=7.203, p<.01).

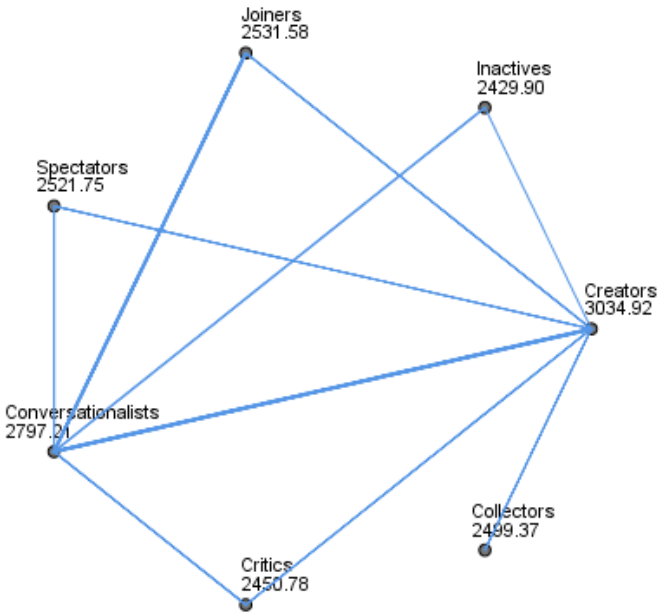


Figure 4.9 Pairwise comparisons of Level of Social Technographic Ladder in Information Systems Component

Results also revealed that there are significant differences across level of social technographic ladder in information systems component. Figure 4.4 shows the visual representation of groups' relation. To start with, conversationalists, critics, collectors, joiners, spectators and inactives have significantly higher level in information systems component of digital trust than creators (conversationalists: H=237.712, Z=3.046, p<.05; critics: H=584.140, Z=7.618, p<.01; collectors: H=535.548, Z=5.432, p<.01; joiners: H=503.339, Z=7.331, p<.01; spectators: H=513.172, Z=8.748, p<.01; inactives: H=605.015, Z=6.510, p<.01). Also, critics, joiners, spectators and inactives have significantly higher level in information systems component of digital trust than conversationalists (critics: H=346.428, Z=3.777, p<.01; joiners: H=265.627, Z=3.120, p<.05; spectators: H=275.640, Z=3.563, p<.01; inactives: H=367.302, Z=3.475, p<.05).

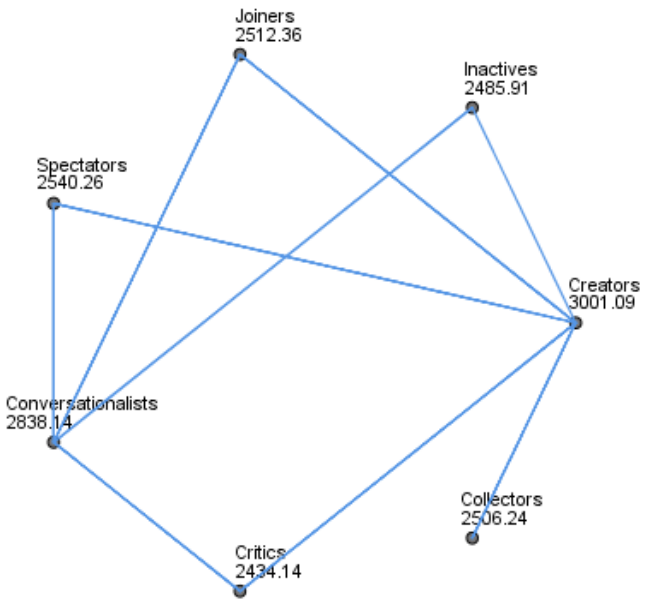


Figure 4.10 Pairwise comparisons of Level of Social Technographic Ladder in Management and Other Internal Entities Component

When management and other internal entities component examined, as seen in Figure 4.5, critics, collectors, joiners, spectators and inactives have significantly higher level in this component of digital trust than creators (critics: H=566.948, Z=7.394, p<.01; collectors: H=494.842, Z=5.019, p<.01; joiners: H=488.729, Z=7.118, p<.01; spectators: H=460.829, Z=7.855, p<.01; inactives: H=515.175, Z=5.543, p<.01). In addition, critics, joiners, spectators and inactives have significantly higher level in management and other internal entities component of digital trust than conversationalists (critics: H=404.000, Z=4.404, p<.01; joiners: H=325.781, Z=3.827, p<.01; spectators: H=297.881, Z=3.853, p<.01; inactives: H=352.227, Z=3.332, p<.05).

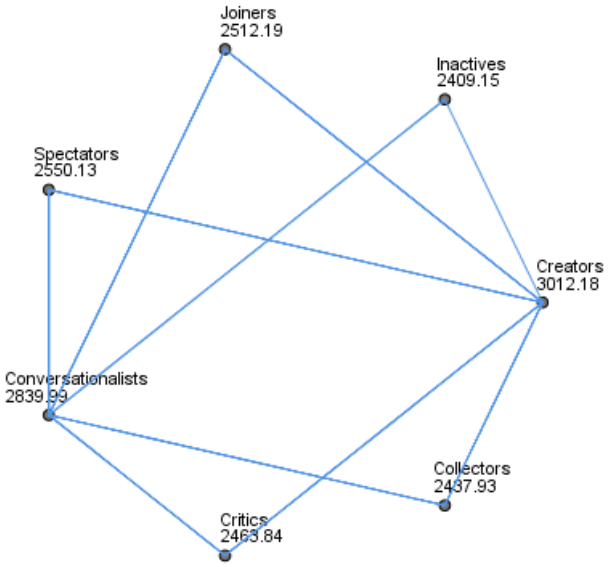


Figure 4.11 Pairwise comparisons of Level of Social Technographic Ladder in IT and Data Support Component

It is also found that, as seen in Figure 4.6, critics, collectors, joiners, spectators and inactives have significantly higher level in IT and data support component of digital trust than creators (critics: H=548.341, Z=7.151, p<.01; collectors: H=574.252, Z=5.825, p<.01; joiners: H=499.987, Z=7.282, p<.01; spectators: H=462.050, Z=7.876, p<.01; inactives: H=603.029, Z=6.488, p<.01). Study also revealed that critics, collectors, joiners, spectators and inactives have significantly higher level in IT and support component of digital trust than conversationalists (critics: H=376.156, Z=4.101, p<.01; collectors: H=402.066, Z=3.632, p<.01; joiners: H=327.801, Z=3.850, p<.01; spectators: H=289.864, Z=3.750, p<.01; inactives: H=430.843, Z=4.076, p<.01).

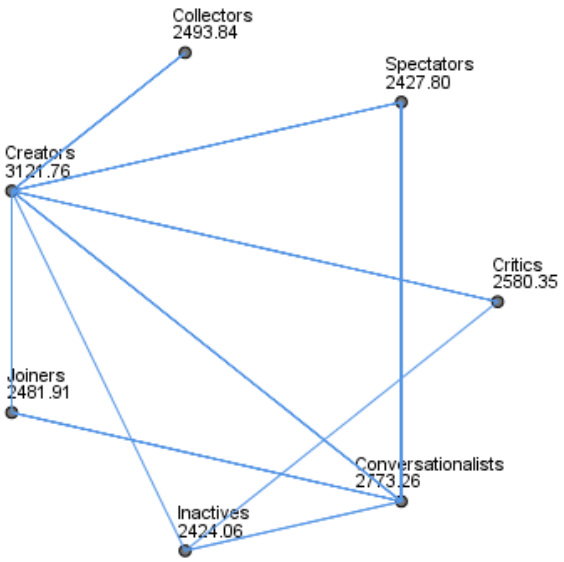


Figure 4.12 Pairwise comparisons of Level of Social Technographic Ladder in External Entities Component

Results also revealed that there are significant differences across level of social technographic ladder in external entities component. Figure 4.7 demonstrates the visual representation of groups' relation. According to results, conversationalists, critics, collectors, joiners, spectators and inactives have significantly higher level in external entities component of digital trust than creators (conversationalists: $H=348.501$, $Z=4.466$, $p<.01$; critics: $H=541.404$, $Z=7.061$, $p<.01$; collectors: $H=627.921$, $Z=6.369$, $p<.01$; joiners: $H=639.848$, $Z=9.320$, $p<.01$; spectators: $H=693.955$, $Z=11.829$, $p<.01$; inactives: $H=697.697$, $Z=7.507$, $p<.01$). Besides, joiners, spectators and inactives have significantly higher level in external entities component of digital trust than conversationalists (joiners: $H=291.348$, $Z=3.422$, $p<.05$; spectators: $H=345.455$, $Z=4.469$, $p<.01$; inactives: $H=349.197$, $Z=3.304$, $p<.05$). Even though Figure 7 shows that there is a significant difference between inactives and critics, there is no significant difference between these participants according to statistical analysis.

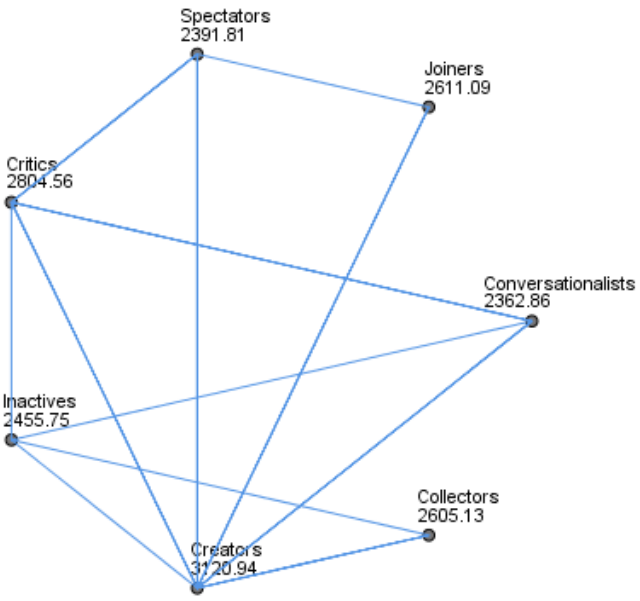


Figure 4.13 Pairwise comparisons of Level of Social Technographic Ladder in Data Protection and Privacy Component

When data protection and privacy component examined, as seen in Figure 4.8, conversationalists, critics, collectors, joiners, spectators and inactives have significantly higher level in data protection and privacy component of digital trust than creators (conversationalists: H=758.080, Z=9.715, p<.01; critics: H=316.380, Z=4.126, p<.01; collectors: H=515.803, Z=5.232, p<.01; joiners: H=509.843, Z=7.426, p<.01; spectators: H=729.121, Z=12.429, p<.01; inactives: H=665.188, Z=7.157, p<.01). Moreover, inactives have significantly higher level in this component than critics (H=348.808, Z=3.331, p<.05). Results also showed that spectators have significantly higher level in this component than joiners (H=219.278, Z=3.233, p<.05) and critics (H=412.741, Z=5.435, p<.01). Finally, conversationalists have significantly less level in data protection and privacy component of digital trust than critics (H=-441.700, Z=-4.815, p<.01). Although Figure 8 shows that there are significant differences between inactives and collectors and between conversationalists and inactives, statistical analysis revealed that there are no significant differences between these participants.

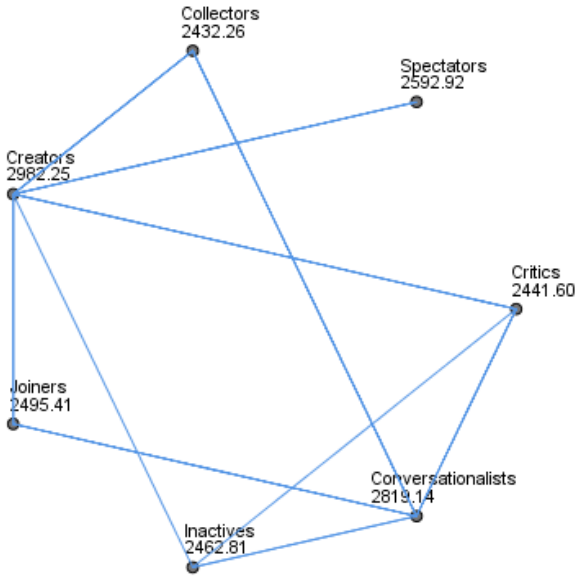


Figure 4.14 Pairwise comparisons of Level of Social Technographic Ladder in Organizational Data Protection and Privacy Component

It is also found that, as seen in Figure 4.9, critics, collectors, joiners, spectators and inactives have significantly higher level in organizational data protection and privacy component of digital trust than creators (critics: H=540.652, Z=7.051, p<.01; collectors: H=549.993, Z=5.579, p<.01; joiners: H=486.839, Z=7.091, p<.01; spectators: H=389.337, Z=6.637, p<.01; inactives: H=519.444, Z=5.589, p<.01). In addition, critics, collectors, joiners and inactives have significantly higher level in this component than conversationalists (critics: H=377.539, Z=4.116, p<.01; collectors: H=386.879, Z=3.495, p<.01; joiners: H= 323.726, Z=3.802, p<.01; inactives: H=356.331, Z=3.371, p<.05). Even though Figure 9 shows that there is a significant difference between inactives and critics, there is no significant difference between these participants according to statistical analysis.

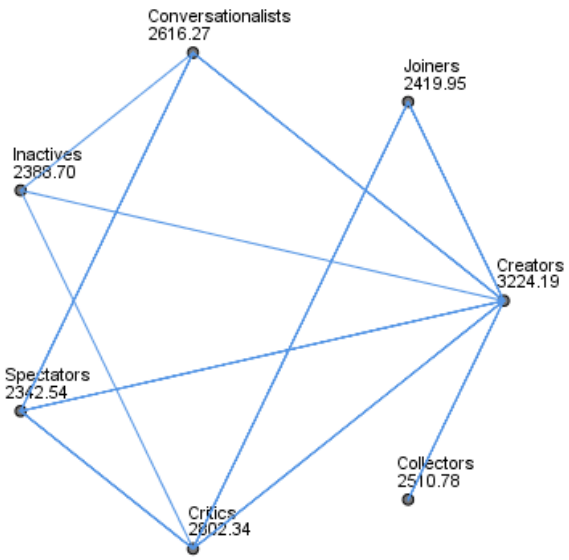


Figure 4.15 Pairwise comparisons of Level of Social Technographic Ladder in Internet and Social Media Use Component

Results also revealed that there are significant differences across level of social technographic ladder in Internet and social media use component. Figure 4.10 shows the visual representation of groups' relation. According to results, conversationalists, critics, collectors, joiners, spectators and inactives have significantly higher level in Internet and social media use component of digital trust than creators (conversationalists: H=607.919, Z=7.791, p<.01; critics: H=421.853, Z=5.502, p<.01; collectors: H=713.410, Z=7.236, p<.01; joiners: H=804.244, Z=11.714, p<.01; spectators: H=881.648, Z=15.029, p<.01; inactives: H=835.494, Z=8.990, p<.01). Besides, joiners, spectators and inactives have significantly higher level in this component than critics (joiners: H=382.391, Z=4.558, p<.01; spectators: H=459.796, Z=6.055, p<.01; inactives: H=413.641, Z=3.951, p<.01). Finally, it is found that spectators have significantly higher level in Internet and social media use component of digital trust than conversationalists (H=273.729, Z=3.541, p<.01). Although Figure 10 shows that there is a significant difference between inactives and conversationalists, statistical analysis revealed that there is no significant difference between these participants.

### 4.4. Digital Trust Components Across Internet Connectivity

Munzel-Bruner analysis was conducted to explore digital trust components across different Internet connectivity types which are Wi-Fi connection at home, wired connection at-home, pre-paid data plan at home and post-paid data plan at home. For follow-up analysis, Mann-Whitney U analysis has been conducted for having the different types of Internet connection mentioned above or not on each dependent variable which are priority level of software quality, hardware and software, electronic devices, information systems, management and other internal entities, IT and data support, external entities, data protection and privacy, organizational data protection and privacy, and internet and social media use.

### 4.4.1. Digital Trust Components Across Having Wi-Fi Connection at Home

Table 4.35 Relative effects of digital trust components across having Wi-Fi Connection at Home

| Having Wi-Fi Connection at Home | N | Priority level of software quality component - Technology | Hardware and software - Technology | Electronic devices - Technology | Information systems - Technology | Management and other internal entities - People | IT and data support - People | External entities - People | Data protection and privacy - Process | Organizational data protection and privacy - Process | Internet and social media use - Process |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Yes | 4567 | 0.5176645 | 0.5337739 | 0.5356955 | 0.5281214 | 0.5326417 | 0.5354296 | 0.5297691 | 0.4984745 | 0.5346823 | 0.5321454 |
| No | 762 | 0.4982807 | 0.5028189 | 0.5031225 | 0.5042667 | 0.5008466 | 0.5001275 | 0.5033868 | 0.5064946 | 0.4991468 | 0.5059827 |

Table 4.36 Mean and standard deviations of each component of digital trust across having Wi-Fi Connection at Home

| | | Priority level of software quality components - Technology | | Hardware and software - Technology | | Electronic devices - Technology | | Information systems - Technology | | Management and other internal entities - People | | IT and data support - People | | External entities - People | | Data protection and privacy - Process | | Organizational data protection and privacy - Process | | Internet and social media use - Process | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD |
| Yes | 4567 | ,035 | ,446 | ,110 | ,727 | ,084 | ,490 | ,059 | ,509 | ,071 | ,480 | ,100 | ,600 | ,059 | ,463 | ,000 | ,598 | ,093 | ,569 | ,077 | ,591 |
| No | 762 | -,221 | ,606 | -,662 | ,917 | -,508 | ,665 | -,358 | ,623 | -,427 | ,624 | -,597 | ,787 | -,354 | ,558 | ,001 | ,738 | -,558 | ,752 | -,458 | ,643 |

Results of Munzel-Bruner analysis revealed that having Wi-Fi connection at home has a significant effect on digital trust components, $F(1.95, 5329) = 21.87$, $p < .01$. Table 4.35 and Table 4.36 shows the details of the analysis for digital trust components across having Wi-Fi connection at home. For follow-up, Mann-Whitney U analysis have been conducted and results showed that there are significant differences in nine digital trust components across having Wi-Fi connection at home. There is not significant difference between participants with Wi-Fi connection at home and participants without Wi-Fi connection at home in data protection and privacy component of process level of digital trust. To start with, participants with Wi-Fi connection have significantly higher level in all the components of technology level of digital trust than participants without Wi-Fi connection at home. These components are priority level of software quality component (with mean rank=2759.13, without mean rank=2100.81), U=1310117.00, Z=-10.935, p<.01, hardware and software component (with mean rank=2844.98, without mean rank=1586.30), U=918054.00, Z=-20.907, p<.01, electronic devices component (with mean rank=2855.22, without mean rank=1524.92), U=871287.00, Z=-22.097, p<.01, and information systems component (with mean rank=2814.86, without mean rank=1766.83), U=1055621.00, Z=-17.408, p<.01. Likewise, participants with Wi-Fi connection have significantly higher level in all the components of people level of digital trust than participants without Wi-Fi connection at home. These components are management and other internal entities component (with mean rank=2838.95, without mean rank=1622.46), U=945609.00, Z=-20.206, p<.01, IT and data support component (with mean rank=2853.80, without mean rank=1533.41), U=877757.00, Z=-21.932, p<.01, and external entities component (with mean rank=2823.64, without mean rank=1714.20), U=1015520.00, Z=-18.428, p<.01. Finally, participants with Wi-Fi connection at home have significantly higher level in two components of process level of digital trust than participants without Wi-Fi connection at home. These components are organizational data protection and privacy component (with mean rank=2849.82, without mean rank=1557.28), U=895846.00, Z=-21.469, p<.01, and Internet and social media use component (with mean rank=2836.30, without mean rank=1638.31), U=957686.00, Z=-19.899, p<.01. As a result, participants with Wi-Fi connection at home have significantly higher level in all digital trust components except data

protection and privacy than participants without Wi-Fi connection at home. Data protection and privacy component is not significantly affected by having Wi-Fi connection at home as it is mentioned above.

### 4.4.2. Digital Trust Components Across Having Wired Connection at Home

Table 4.37 Relative effects of digital trust components across having Wired Connection at Home

| Having Wired Connection at Home | N | Priority level of software quality component - Technology | Hardware and software - Technology | Electronic devices - Technology | Information systems - Technology | Management and other internal entities - People | IT and data support - People | External entities - People | Data protection and privacy - Process | Organizational data protection and privacy - Process | Internet and social media use - Process |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Yes | 3587 | 0.5205736 | 0.5275843 | 0.5329913 | 0.5281816 | 0.5290376 | 0.5315467 | 0.5319124 | 0.5222950 | 0.5311128 | 0.5328871 |
| No | 1742 | 0.4945819 | 0.4877965 | 0.4867197 | 0.4919541 | 0.4892544 | 0.4858131 | 0.4886180 | 0.4986883 | 0.4883983 | 0.4843435 |

Table 4.38 Mean and standard deviations of each component of digital trust across having Wired Connection at Home

| | | Priority level of software quality components - Technology | | Hardware and software - Technology | | Electronic devices - Technology | | Information systems - Technology | | Management and other internal entities - People | | IT and data support - People | | External entities - People | | Data protection and privacy - Process | | Organizational data protection and privacy - Process | | Internet and social media use - Process | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD |
| Yes | 3587 | ,038 | ,449 | ,067 | ,801 | ,058 | ,560 | ,056 | ,527 | ,051 | ,528 | ,068 | ,678 | ,059 | ,494 | ,049 | ,650 | ,062 | ,641 | ,074 | ,647 |
| No | 1742 | -,083 | ,532 | -,139 | ,794 | -,121 | ,537 | -,117 | ,567 | -,105 | ,526 | -,140 | ,650 | -,121 | ,488 | -,102 | ,539 | -,129 | ,621 | -,151 | ,556 |

Results of Munzel-Bruner analysis showed that having wired connection at home has a significant effect on digital trust components, $F(1.93, 5329) = 33.42$, $p < .01$. Table 4.37 and Table 4.38 shows the details of the analysis for digital trust components across having wired connection at home. For follow-up, Mann-Whitney U analysis has been conducted and results revealed that there are significant differences in all digital trust components across having wired connection at home. To start with, participants with wired connection at home have significantly higher level in all the components of technology level of digital trust than participants without wired connection at home. These components are priority level of software quality component (with mean rank=2774.64, without mean rank=2439.24), U=2731010.50, Z=-7.465, p<.01, hardware and software component (with mean rank=2812.00, without mean rank=2362.32), U=2597000.50, Z=-10.009, p<.01, electronic devices component (with mean rank=2840.81, without mean rank=2302.98), U=2493643.50, Z=-11.971, p<.01, and information systems component (with mean rank=2815.18, without mean rank=2355.76), U=2585582.50, Z=-10.225, p<.01. Besides, participants with wired connection at home have significantly higher level in all the components of people level of digital trust than participants without wired connection at home. These components are management and other internal entities component (with mean rank=2819.74, without mean rank=2346.37), U=2569219.50, Z=-10.536, p<.01, IT and data support component (with mean rank=2833.11, without mean rank=2318.83), U=2521257.50, Z=-11.446, p<.01, and external entities component (with mean rank=2835.06, without mean rank=2314.82), U=2514267.50, Z=-11.579, p<.01. Finally, when the process level of digital trust is examined, it is found that participants with wired connection at home have significantly higher level in all the components of process level of digital trust than participants without wired connection at home. These components are data protection and privacy component (with mean rank=2783.81, without mean rank=2420.36), U=2698105.50, Z=-8.089, p<.01, organizational data protection and privacy component (with mean rank=2830.80, without mean rank=2323.60), U=2529551.50, Z=-11.289, p<.01, and Internet and social media use component (with mean rank=2840.26, without mean rank=2304.13), U=2495636.50, Z=-11.933, p<.01. In short, participants with wired connection at

home have significantly higher level in all digital trust components than participants without wired connection at home.

### 4.4.3. Digital Trust Components Across Pre-Paid Data Plan at Home

Table 4.39 Relative effects of digital trust components across having Pre-paid Data Plan at Home

| Having Pre-paid Data Plan | N | Priority level of software quality component - Technology | Hardware and software - Technology | Electronic devices - Technology | Information systems - Technology | Management and other internal entities - People | IT and data support - People | External entities - People | Data protection and privacy - Process | Organizational data protection and privacy - Process | Internet and social media use - Process |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Yes | 2417 | 0.4530432 | 0.4155640 | 0.4085902 | 0.4258658 | 0.4152450 | 0.4101815 | 0.4241781 | 0.5036248 | 0.4092064 | 0.4169752 |
| No | 2912 | 0.5474107 | 0.5800606 | 0.5846650 | 0.5709982 | 0.5791543 | 0.5818492 | 0.5716611 | 0.5085166 | 0.5814073 | 0.5765611 |

Table 4.40 Mean and standard deviations of each component of digital trust across having Pre-paid Data Plan at Home

| | | Priority level of software quality components - Technology | | Hardware and software - Technology | | Electronic devices - Technology | | Information systems - Technology | | Management and other internal entities - People | | IT and data support - People | | External entities - People | | Data protection and privacy - Process | | Organizational data protection and privacy - Process | | Internet and social media use - Process | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD |
| Yes | 2417 | -,089 | ,530 | -,245 | ,857 | -,191 | ,597 | -,143 | ,569 | -,163 | ,559 | -,222 | ,710 | -,139 | ,512 | ,006 | ,614 | -,214 | ,679 | -,188 | ,620 |
| No | 2912 | ,070 | ,422 | ,204 | ,694 | ,158 | ,469 | ,118 | ,498 | ,135 | ,469 | ,185 | ,585 | ,115 | ,457 | -,005 | ,624 | ,177 | ,547 | ,157 | ,590 |

Results of Munzel-Bruner analysis revealed that there is a significant main effect of having pre-paid data plan at home on digital trust components, $F(2.03, 5329) = 339.20$, $p<.01$. Table 4.39 and Table 4.40 demonstrates the details of the analysis for digital trust component across having pre-paid data plan at home. For follow-up, Mann-Whitney U analysis have been conducted and results showed that there are significant differences in nine digital trust components across having pre-paid data plan at home. There is not significant difference between participants with pre-paid data plan at home and participants without pre-paid data plan at home in data protection and privacy component of process level of digital trust. To begin, participants without pre-paid data plan at home have significantly higher level in all the components of technology level of digital trust than participants with pre-paid data plan at home. These components are priority level of software quality component (with mean rank=2414.77, without mean rank=2872.70), $U=4123964.50$, $Z=10.817$, $p<.01$, hardware and software component (with mean rank=2215.04, without mean rank=3038.47), $U=4606703.50$, $Z=19.451$, $p<.01$, electronic devices component (with mean rank=2177.88, without mean rank=3069.32), $U=4696527.50$, $Z=21.058$, $p<.01$, and information systems component (with mean rank=2269.94, without mean rank=2992.91), $U=4474014.50$, $Z=17.078$, $p<.01$. Likewise, participants without pre-paid data plan at home have significantly higher level in all the components of people level of digital trust than participants with pre-paid data plan at home. These components are management and other internal entities component (with mean rank=2213.34, without mean rank=3039.88), $U=4610812.50$, $Z=19.525$, $p<.01$, IT and data support component (with mean rank=2186.36, without mean rank=3062.28), $U=4676031.50$, $Z=20.691$, $p<.01$, and external entities component (with mean rank=2260.95, without mean rank=3000.37), $U=4495752.50$, $Z=17.467$, $p<.01$. Finally, participants without pre-paid data plan at home have significantly higher level in two components of process level of digital trust than participants with pre-paid plan at home. These components are organizational data protection and privacy component (with mean rank=2181.16, without mean rank=3066.59), $U=4688590.50$, $Z=20.916$, $p<.01$, and Internet and social media use component (with mean rank=2222.56, without mean rank=3032.23), $U=4588527.50$, $Z=19.126$, $p<.01$. To sum up, participants without pre-paid data plan at home have significantly higher level in all

digital trust components except data protection and privacy component than participants with pre-paid data plan at home. Data protection and privacy component is not significantly affected by having pre-paid data plan at home as it is mentioned above.

### 4.4.4. Digital Trust Components Across Post-Paid Data Plan at Home

Table 4.41 Relative effects of digital trust components across having Post-paid Data Plan at Home

| Having Post-paid Data Plan | N | Priority level of software quality component - Technology | Hardware and software - Technology | Electronic devices - Technology | Information systems - Technology | Management and other internal entities - People | IT and data support - People | External entities - People | Data protection and privacy - Process | Organizational data protection and privacy - Process | Internet and social media use - Process |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Yes | 2673 | 0.5515653 | 0.5807919 | 0.5878935 | 0.5738548 | 0.5812087 | 0.5855339 | 0.5771676 | 0.5099979 | 0.5802451 | 0.5783096 |
| No | 2656 | 0.4477703 | 0.4181903 | 0.4110563 | 0.4248242 | 0.4176272 | 0.4134876 | 0.4220981 | 0.4895193 | 0.4190930 | 0.4210852 |

Table 4.42 Mean and standard deviations of each component of digital trust across having Post-paid Data Plan at Home

| | | Priority level of software quality components - Technology | | Hardware and software - Technology | | Electronic devices - Technology | | Information systems - Technology | | Management and other internal entities - People | | IT and data support - People | | External entities - People | | Data protection and privacy - Process | | Organizational data protection and privacy - Process | | Internet and social media use - Process | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD |
| Yes | 2673 | ,089 | ,414 | ,231 | ,681 | ,182 | ,461 | ,144 | ,485 | ,158 | ,457 | ,213 | ,572 | ,143 | ,444 | ,022 | ,629 | ,190 | ,544 | ,179 | ,597 |
| No | 2656 | -,094 | ,524 | -,233 | ,850 | -,183 | ,589 | -,146 | ,567 | -,159 | ,555 | -,214 | ,704 | -,144 | ,510 | -,022 | ,609 | -,192 | ,673 | -,180 | ,606 |

Results of Munzel-Bruner analysis showed that having post-paid data plan at home has a significant effect on digital trust components, F (2.06, 5329) = 382.02, p < .01. Table 4.41 and Table 4.42 shows the details of the analysis for digital trust components across having post-paid data plan at home. For follow-up, Mann-Whitney U analysis have been conducted and results revealed that there are significant differences in all digital trust components across having post-paid data plan at home. To start with, participants with post-paid data plan at home have significantly higher level in all the components of technology level of digital trust than participants without post-paid data plan at home. These components are priority level of software quality component (with mean rank=2939.79, without mean rank=2388.45), U=2815226.00, Z=-13.080, p<.01, hardware and software component (with mean rank=3095.54, without mean rank=2231.70), U=2398910.00, Z=-20.494, p<.01, electronic devices component (with mean rank=3133.38, without mean rank=2193.62), U=2297752.00, Z=-22.295, p<.01, and information systems component (with mean rank=3058.57, without mean rank=2268.91), U=2497725.00, Z=-18.734, p<.01. In addition, participants with post-paid data plan at home have significantly higher level in all the components of people level of digital trust than participants without post-paid data plan at home. These components are management and other internal entities component (with mean rank=3097.76, without mean rank=2229.47), U=2392974.00, Z=-20.600, p<.01, IT and data support component (with mean rank=3120.81, without mean rank=2206.27), U=2331363.00, Z=-21.697, p<.01, and external entities component (with mean rank=3076.23, without mean rank=2251.14), U=2450536.00, Z=-19.575, p<.01. Finally, participants with post-paid data plan at home have significantly higher level in all the components of process level of digital trust than participants without post-paid data plan at home. These components are data protection and privacy component (with mean rank=2718.28, with mean rank=2611.38), U=3407330.00, Z=-2.536, p<.05, organizational data protection and privacy component (with mean rank=3092.63, without mean rank=2234.64), U=2406700.00, Z=-20.355, p<.01, and Internet and social media use component (with mean rank=3082.31, without mean rank=2245.02), U=2434269.00, Z=-19.864, p<.01. In brief, participants with post-paid data plan at home have significantly higher level in all digital trust components than participants without post-paid data plan at home.

## 4.5. Digital Trust Components Across Connectivity Satisfaction

Spearman's correlation coefficient is used to evaluate the correlation between connectivity satisfaction and digital trust components. Since 37 participants preferred to leave this question unanswered, the analysis of this question was made with 5292 participants.

Table 4.43 Correlation coefficients between connectivity satisfaction and components of digital trust

| | Priority level of software quality component - Technology | Hardware and software - Technology | Electronic devices - Technology | Information systems - Technology | Management and other internal entities - People | IT and data support - People | External entities - People | Data protection and privacy - Process | Organizational data protection and privacy - Process | Internet and social media use - Process |
|---|---|---|---|---|---|---|---|---|---|---|
| Connectivity Satisfaction | ,219** | ,450** | ,487** | ,358** | ,424** | ,474** | ,388** | ,003 | ,471** | ,466** |

Ns=not significant (p>.05), *p<.05, **p<.01

Table 4.43 shows the result for each component. According to this result, connectivity satisfaction is significantly correlated with all the components of technology level of digital trust which are priority level of software quality, r = .219, hardware and software, r = .450, electronic devices, r = .487, and information systems, r = .358. It is also significantly correlated with management and other internal entities, r = .424, IT and data support, r = .474, external entities, r = .388 components of people level of digital trust. Finally, connectivity satisfaction is significantly related to organizational data protection and privacy, r = .471, and Internet and social media use, r = .466 components of process level of digital trust.

However, study found that connectivity satisfaction is not significantly correlated with data protection and privacy component of process level of digital trust. In brief, connectivity satisfaction is significantly correlated with all the components of digital trust except data protection and privacy.

### 4.6 Summary

All results obtained by this study were summarized by using a table in order to provide a cleaner understanding (See Appendix A).

# CHAPTER 5

## DISCUSSION AND CONCLUSION

The main purpose of this study is to analyse the possible effects of personal and social ICT use on digital trust. In a more detailed manner, the goal of this study is to examine the differences between owning specific electronic devices or not, having an account on a social media platform or not, having different type of Internet connectivity on the level of digital trust of people. In addition, the other purpose of this study is to discover the relationship between connectivity satisfaction and the level of digital trust of people. Besides, this study aims to investigate the difference between participants according to their level of Social Technographic Ladder [9] on digital trust. Descriptive research methodology, one of the quantitative research methodologies, has been used in order to examine the possible effects of personal and social ICT use on the level of digital trust. Independent variables of this study are as follows:

- ownership of different electronic devices such as smartphone, tablet, laptop computer, desktop computer, or smartwatch,
- ownership of a social media account on Facebook, Twitter, Alipay, WhatsApp, WeChat, LinkedIn, VK, OK, YouTube, Gmail, Yahoo Mail, Blog, or Website,
- type of Internet connectivity such as Wi-Fi connection at home, wired connection at home, pre-paid data plan at home, or post-paid data plan at home,
- connectivity satisfaction related to Internet connectivity,
- people's level on Social Technographic Ladder such as creators, conversationalists, critics, collectors, joiners, spectators, or inactives.

Dependent variable of the study is the level of digital trust under 10 components which are priority level of software quality, hardware and software, electronic devices, information systems, management and other internal entities, IT and data support, external entities, data protection and privacy, organizational data protection and privacy, internet and social media use. In order to analyse the gathered data, Munzel-

Bruner analysis which is a non-parametric alternative of MANOVA was employed on 10 components of digital trust across the information about personal and social ICT use (ownership of different electronic devices, ownership of a social media account, type of Internet connectivity, level on Social Technographic Ladder). For follow-up analysis, Mann-Whitney U and Kruskal Wallis H tests were used. Additionally, Spearmen's correlation coefficient was employed to find the correlation between connectivity satisfaction and digital trust components.

### 5.1. Ownership of Different Electronic Devices

After conducting Munzel-Bruner analysis, it is found that tablet, laptop computer, desktop computer and smartwatch ownership have significant main effects on digital trust components. However, results revealed that having smartphone or not has not a significant effect on digital trust components. Mann-Whitney U analysis has been applied for follow-up and the results are presented below.

Results showed that participants with a tablet have significantly higher level in nine components of digital trust than participants without a tablet. These nine components are priority level of software quality, hardware and software, electronic devices, information systems, management and other internal entities, IT and data support, external entities, organizational data protection and privacy, and internet and social media use. The only digital trust component that participants without a tablet have significantly higher level of digital trust than participants with a tablet is data protection and privacy.

It is found that participants with a laptop computer have significantly higher level when compared to participants without a laptop computer in nine components of digital trust which are priority level of software quality, hardware and software, electronic devices, information systems, management and other internal entities, IT and data support, external entities, organizational data protection and privacy, and internet and social media use. However, study found that participants without a laptop computer have significantly higher level than participants with a laptop computer in data protection and privacy component of process level of digital trust.

Study revealed that participants with a desktop computer have significantly higher level than participants without a desktop computer in all digital trust components which are priority level of software quality, hardware and software, electronic devices, information systems, management and other internal entities, IT and data support, external entities, data protection and privacy, organizational data protection and privacy, internet and social media use.

When the subject is smartwatches, study found that participants with a smartwatch have significantly higher level than participants without a smartwatch in all digital trust components which are priority level of software quality, hardware and software, electronic devices, information systems, management and other internal entities, IT and data support, external entities, data protection and privacy, organizational data protection and privacy, internet and social media use.

Hence, it is possible to say that ownership of these devices is positively affecting most of the components of digital trust. This result may be related to Technology Acceptance Model (TAM) [48]. There are two main factors affecting people's decision on adopting a technology: (1) *perceived usefulness* is "the degree to which a person believes that using a particular system would enhance their job performance", (2) *perceived ease-of-use* is the degree to which a person believes that using a particular system would be free from effort" [48]. If people are using these devices, it means that they probably have the satisfaction about at least one of these factors. Being satisfied with these factors might be affecting their level of digital trust positively.

### 5.2. Ownership of a Social Media Account

Results of Munzel-Bruner analysis revealed that having a social media account or not on Twitter, WhatsApp, Blog, LinkedIn, Gmail, Yahoo Mail, Website, YouTube, Alipay, WeChat, VK, or OK has significant main effects on digital trust components. However, it is found that having or not having a Facebook account has not a significant effect on digital trust components. Mann-Whitney U analysis has been employed for follow-up analysis and the results are presented below.

Results showed that participants with Twitter, Blog, Yahoo Mail, WeChat, or Website account have significantly higher level in all digital trust components than participants without Twitter, Blog, Yahoo Mail, WeChat, or Website account.

It is also found that participants with a WhatsApp account have significantly higher level in all digital trust components except data protection and privacy than participants without a WhatsApp account. Data protection and privacy component of digital trust is not significantly affected by WhatsApp account ownership.

When LinkedIn account ownership is examined, study revealed that participants with LinkedIn account have significantly higher level than participants without LinkedIn account in nine components of digital trust which are priority level of software quality, hardware and software, electronic devices, information systems, management and other internal entities, IT and data support, external entities, organizational data protection and privacy, and internet and social media use. Yet, participants without LinkedIn account have significantly higher level in data protection and privacy component than participants with LinkedIn account.

Similarly, it is found that participants with Gmail account have significantly higher level than participants without Gmail account in all digital trust components except data protection and privacy. Participants without Gmail account have significantly higher level in data protection and privacy component of digital trust than participants with Gmail account.

Study also revealed that participants with YouTube account have significantly higher level in all digital trust components except data protection and privacy than participants without YouTube account. Data protection and privacy component of digital trust is not significantly affected by YouTube account ownership.

When the subject is Alipay account ownership, it is found that participants with Alipay account have significantly higher level in five digital trust components which are priority level of software quality, hardware and software, electronic devices, IT and data support, and external entities than participants without an Alipay account. Study revealed that information systems, management and other internal entities, data protection and privacy, organizational data protection and privacy, and Internet and

social media use components of digital trust are not significantly affected by Alipay account ownership.

Results showed that there is a significant difference between participants with VK account and participants without VK account in only one digital trust component. Participants with VK account have significantly higher level in Internet and social media use component of digital trust than participants without VK account. Other nine digital trust components, priority level of software quality, hardware and software, electronic devices, information systems, management and other internal entities, IT and data support, external entities, data protection and privacy, and organizational data protection and privacy, are not affected by VK account ownership.

Even though results of Munzel-Bruner analysis showed that there is a significant main effect of OK account ownership on digital trust components, results of follow-up analysis with Mann-Whitney U test revealed that there is no significant difference between participants with and without OK account.

To conclude, results indicated that there is a general tendency of level of digital trust to be increased when people have a social media account on one of these platforms. The Social Cognitive Theory [47] might be the cause of this result. It says that people are being affected by the behaviours of others and they tend to learn from the acts of other people. Considering this, using social media might be one of the things that they learn from other people that they know and trust. This situation might be affecting their level of digital trust positively. Only digital trust component that is affected negatively by social media account ownership on some of the social media platforms is data protection and privacy. In other words, for only some of the social media platforms, participants without an account have significantly higher level on data protection and privacy component of digital trust than participants with an account. This may be due to the fact that people with an account on those social media platforms might be much more aware of the possible dangers about privacy. This might be impacting their level of data protection and privacy component of digital trust negatively.

## 5.3. Internet Connectivity

Results of Munzel-Bruner analysis showed that having Wi-Fi connection, wired connection, pre-paid data plan and post-paid data plan at home have significant main effects on digital trust components. Mann-Whitney U analysis has been employed for follow-up analysis and the results are presented below.

Study found that participants with Wi-Fi connection at home have significantly higher level in nine digital trust components than participants without Wi-Fi connection at home. These components are priority level of software quality, hardware and software, electronic devices, information systems, management and other internal entities, IT and data support, external entities, organizational data protection and privacy, and internet and social media use. Data protection and privacy component of digital trust is not significantly affected by having Wi-Fi connection at home or not.

Study also revealed that participants with a wired connection at home have significantly higher level than participants without a wired connection at home in all digital trust components which are priority level of software quality, hardware and software, electronic devices, information systems, management and other internal entities, IT and data support, external entities, data protection and privacy, organizational data protection and privacy, internet and social media use.

One of the other findings of this study is that participants without pre-paid data plan at home have significantly higher level in all digital trust components except data protection and privacy. Data protection and privacy component is not significantly affected by having pre-paid data plan at home or not.

It is also revealed that participants with post-paid data plan at home have significantly higher level in all digital trust components than participants without post-paid data plan at home.

## 5.4. Connectivity Satisfaction

Spearmen’s correlation coefficient was applied in order to find the relationship between satisfaction level in Internet connectivity and the level of digital trust. Results revealed that connectivity satisfaction is significantly correlated with nine digital trust

components which are priority level of software quality, hardware and software, electronic devices, information systems, management and other internal entities, IT and data support, external entities, organizational data protection and privacy, and internet and social media use. Yet, it is found that connectivity satisfaction is not significantly correlated with data protection and privacy component of process level of digital trust.

### 5.5. Level on Social Technographic Ladder

Results of Munzel-Bruner analysis showed that people's level on Social Technographic Ladder [9] has significant main effects on digital trust components. Kruskal-Wallis H analysis has been applied for follow-up analysis and it is found that there are significant differences in all digital trust components across level of social technographic ladder. According to results of the study, level of digital trust tends to be decreased as the level on Social Technographic Ladder increases. For instance, as it is explained in detail in the Results section of this study, conversationalists, critics, collectors, joiners, spectators, and inactives have significantly higher level in most of the components of digital trust than creators, which is the top-level role of Social Technographic Ladder. One of the possible causes of this result might be that as the level of Social Technographic Ladder of people increases, their awareness of possible problems and dangers of technology also increases. This situation may have a negative impact on their level of digital trust.

### 5.6. Summary

This study investigated the possible impacts of personal and social ICT use on the level of digital trust of people. It is found that there are significant differences between owning specific electronic devices or not, having an account on a social media platform or not, having different type of Internet connectivity in terms of the level of digital trust of people. In addition, it is also revealed that connectivity satisfaction is significantly correlated with digital trust. Finally, this study showed that people's level on Social Technographic Ladder [9] has significant main effects on their level of digital trust.

## 5.7. Implications for Practice

Businesses need to be careful on building digital trust of their consumers effectively because the essential way of finding new customers and keeping the existing ones loyal is to build the customer trust [7]. In addition, trust is one of the key elements in encouraging people to buy products online [5]. Considering the importance of consumer's digital trust, this study can help businesses in making them more aware of the possible factors that are affecting people's level of digital trust. By being aware of these possible factors, they can manage to build digital trust of their consumers and ultimately, they can find more and more consumers to interact with their e-commerce presence [14]. Consequently, with the help of this study, businesses can find a way to strengthen their brand by building digital trust of their consumers. This will affect their feasibility and sustainability in a positive manner, which are the key elements for a business to achieve its goals.

## 5.8. Recommendation for Future Research

In order to enhance our knowledge about the factors affecting level of digital trust, datasets that would allow the researcher to analyse these factors from different points of views might be used for future research. For instance, when the relationship between level of digital trust of people and social media is considered, the possible effects having an Instagram account on digital trust should be focused. Since Instagram is one of the most used social media platforms in the world with its more than 1 billion users [48], being aware of the effects of having an Instagram account on digital trust might be useful both for the literature and the businesses. In addition, like social media platforms, video games are also important mediators between people in terms of socialization processes [49]. Considering this, evaluating the relationship between gaming habits and the level of digital trust might be one of the main purposes for future works.

## REFERENCES


[1] G. Warner-Søderholm *et al.*, "Who trusts social media?," *Comput Human Behav*, vol. 81, pp. 303–315, Apr. 2018.

[2] T. Miyamoto and N. Rexha, "Determinants of three facets of customer trust: A marketing model of Japanese buyer–supplier relationship," *J Bus Res*, vol. 57, no. 3, pp. 312–319, Mar. 2004.

[3] A. D. MIYAZAKI and A. FERNANDEZ, "Consumer Perceptions of Privacy and Security Risks for Online Shopping," *Journal of Consumer Affairs*, vol. 35, no. 1, pp. 27–44, Jun. 2001.

[4] B. J. Corbitt, T. Thanasankit, and H. Yi, "Trust and e-commerce: a study of consumer perceptions," *Electron Commer Res Appl*, vol. 2, no. 3, pp. 203–215, Sep. 2003.

[5] M. Irshad, M. S. Ahmad, and O. F. Malik, "Understanding consumers' trust in social media marketing environment," *International Journal of Retail & Distribution Management*, vol. 48, no. 11, pp. 1195–1212, Oct. 2020.

[6] S. Grabner-Kräuter, "Consumer trust in electronic commerce: Conceptualization and classification of trust building measures Electronic Word-of-Mouth: Antecedents and Consequences View project," 2008, [Online]. Available: https://www.researchgate.net/publication/292009188

[7] V. Kumar and P. Pradhan, "Trust Management Issues in Social-Media Marketing," *International Journal of Online Marketing*, vol. 5, no. 3, pp. 47–64, Jul. 2015.

[8] S. Kim and H. Park, "Effects of various characteristics of social commerce (s-commerce) on consumers' trust and trust performance," *Int J Inf Manage*, vol. 33, no. 2, pp. 318–332, Apr. 2013.

[9] C. Li, "Making Leaders Successful Every Day Social Technographics®." 2007. [Online]. Available: www.forrester.com.

[10] F. Welter and D. Smallbone, "Exploring the Role of Trust in Entrepreneurial Activity," *Entrepreneurship Theory and Practice*, vol. 30, no. 4, pp. 465–475, Jun. 2006.

[11] M. Sako, *Prices, quality and trust*. Cambridge University Press, 1992.

[12] E. Anderson and B. Weitz, "Determinants of Continuity in Conventional Industrial Channel Dyads," *Marketing Science*, vol. 8, no. 4, pp. 310–323, Jun. 1989.

[13] R. M. Morgan and S. D. Hunt, "The Commitment-Trust Theory of Relationship Marketing," *J Mark*, vol. 58, no. 3, pp. 20–38, Jun. 1994.

[14] Y. D. Wang and H. H. Emurian, "An overview of online trust: Concepts, elements, and implications," *Comput Human Behav*, vol. 21, no. 1, pp. 105–125, Jun. 2005.

[15] P. Pietrzak and J. Takala, "Digital trust– asystematic literature review," *Forum Scientiae Oeconomia*, vol. 9, no. 3, pp. 59–71, Jun. 2021.

[16] M. F. Mubarak and M. Petraite, “Industry 4.0 technologies, digital trust and technological orientation: What matters in open innovation?,” *Technol Forecast Soc Change*, vol. 161, p. 120332, Dec. 2020.

[17] C. Abraham, R. R. Sims, S. Daultrey, A. Buff, and A. Fealey, “How Digital Trust Drives Culture Change”, Accessed: Jun. 03, 2023. [Online]. Available: https://mitsmr.com/2UKeepW

[18] R. N. Akram and R. K. L. Ko, “Digital Trust - Trusted Computing and Beyond: A Position Paper,” in *2014 IEEE 13th International Conference on Trust, Security and Privacy in Computing and Communications*, IEEE, Sep. 2014, pp. 884–892.

[19] “Definition: Digital Trust.” https://www.gartner.com/en/documents/3727718 (accessed Jun. 03, 2023).

[20] O. Shy, “Window Shopping,” *SSRN Electronic Journal*, p. 1, Jun. 2014.

[21] G. Baldini, I. Kounelis, J. Löschner, and M. Tallacchini, “European Citizens and Their Trust in Social Networks,” *Learning and Collaboration Technologies*, pp. 363–374, 2014.

[22] P. Kirs and K. Bagchi, “The impact of trust and changes in trust: A national comparison of individual adoptions of information and communication technologies and related phenomenon,” *Int J Inf Manage*, vol. 32, no. 5, pp. 431–441, Oct. 2012.

[23] K. D. Aiken, R. Mackoy, B. S.-C. Liu, R. Fetter, and G. Osland, “Dimensions of Internet Commerce Trust,” *Journal of Internet Commerce*, vol. 6, no. 4, pp. 1–25, Aug. 2007.

[24] T. Zhghenti and V. Chkareuli, “Enhancing online business sector: digital trust formation process,” *Marketing and Management of Innovations*, vol. 5, no. 2, pp. 87–93, 2021.

[25] C. Gronroos, “From Marketing Mix to Relationship Marketing: Towards a Paradigm Shift in Marketing,” *Asia-Australia Marketing Journal*, vol. 2, no. 1, pp. 9–29, Aug. 1994.

[26] KPMG LLP, “Digital Trust,” *https://assets.kpmg.com/content/dam/kpmg/pdf/2015/12/digital-trust.pdf*, 2015.

[27] M. K. O. Lee and E. Turban, “A Trust Model for Consumer Internet Shopping,” *International Journal of Electronic Commerce*, vol. 6, no. 1, pp. 75–91, Sep. 2001.

[28] L. Wang, R. Law, B. D. Guillet, K. Hung, and D. K. C. Fong, “Impact of hotel website quality on online booking intentions: eTrust as a mediator,” *Int J Hosp Manag*, vol. 47, pp. 108–115, May 2015.

[29] S. E. Colesca, “Understanding Trust in e-Government,” *Inzinerine Ekonomika-Engineering Economics*, vol. 63, no. 3, 2009.

[30] F. T. Hartanti, J. H. Abawajy, M. Chowdhury, and W. Shalannanda, “Citizens’ Trust Measurement in Smart Government Services,” *IEEE Access*, vol. 9, pp. 150663–150676, 2021.

[31] C. Fernandes and F. Patten, “Digital Distrust: Assuring Security and Trust in Egovernment,” *Dalhousie Journal of Interdisciplinary Management*, vol. 15, 2019.

[32] A. Santamaría-Philco and M. A. Wimmer, “Trust in e-participation,” in *Proceedings of the 19th Annual International Conference on Digital Government Research: Governance in the Data Age*, New York, NY, USA: ACM, May 2018, pp. 1–10.

[33] K. Kapanova and K. Koidl, “Towards a model of interpersonal trust in social media applications,” *ACM International Conference Proceeding Series*, pp. 120–123, Sep. 2019.

[34] danah m. boyd and N. B. Ellison, “Social Network Sites: Definition, History, and Scholarship,” *Journal of Computer-Mediated Communication*, vol. 13, no. 1, pp. 210–230, Oct. 2007.

[35] R. Kahar, F. Yamimi, G. Bunari, and H. Habil, “Trusting the Social Media in Small Business,” *Procedia Soc Behav Sci*, vol. 66, pp. 564–570, Dec. 2012.

[36] A. Singhal, P. J. Hopkinson, P. Hopkinson, S. Fattah, and R. Perez Vega, “Measuring and Managing the Relationship Quality of Social Media based customer relationships Perceived impact of short-term rentals in Europe View project Improving Research Methods Teaching View project Measuring and Managing the Relationship Quality of Social Media based customer relationships,” 2018, [Online]. Available: https://www.researchgate.net/publication/325929050

[37] Y. Wang, Q. Min, and S. Han, “Understanding the effects of trust and risk on individual behavior toward social media platforms: A meta-analysis of the empirical evidence,” *Comput Human Behav*, vol. 56, pp. 34–44, Mar. 2016.

[38] F. Calefato, F. Lanubile, and N. Novielli, “The role of social media in affective trust building in customer–supplier relationships,” *Electronic Commerce Research*, vol. 15, no. 4, pp. 453–482, Dec. 2015.

[39] D. E. Marcial and M. A. Launer, “Towards the Measurement of Digital Trust in the Workplace: A Proposed Framework,” *International Journal of Scientific Engineering and Science*, vol. 3, pp. 1–7, 2019, [Online]. Available: http://ijses.com/

[40] E. M. Rogers, *Diffusion of innovations*. Free Press, 1983.

[41] N. Marangunić and A. Granić, “Technology acceptance model: a literature review from 1986 to 2013,” *Univers Access Inf Soc*, vol. 14, no. 1, pp. 81–95, Mar. 2015.

[42] E. M. Rogers, “The Digital Divide,” *Convergence: The International Journal of Research into New Media Technologies*, vol. 7, no. 4, pp. 96–111, Dec. 2001.

[43] C. Jones and S. Cross, “0299 Is there a Net generation coming to university?” [Online]. Available: www.guardian.co.uk/uk/2009/feb/24/

[44] J. R. Fraenkel and N. E. Wallen, *How to Design and Evaluate Research in Education*. 1990.

[45] D. Marcial, M. Launer, D. E. Marcial, and M. A. Launer, “Test-retest Reliability and Internal Consistency of the Survey Questionnaire on Digital Trust in the Workplace.” [Online]. Available: www.solidstatetechnology.us

[46] A. Field, *Discovering Statistics Using IBM SPSS Statistics 2*, 5th ed. 2017.

[47] D. R. Compeau and C. A. Higgins, “Application of Social Cognitive Theory to Training for Computer Skills,” *Information Systems Research*, vol. 6, no. 2, pp. 118–143, Jun. 1995.

[48] M. Fuciu, “THE RISE OF INSTAGRAM-EVOLUTION, STATISTICS, ADVANTAGES AND DISATVANTAGES,” 2019. [Online]. Available: https://keymediasolutions.com/news/social-media/evolution-of-social-media-

[49] K. E. Dill and K. P. Thill, “Video Game Characters and the Socialization of Gender Roles: Young People’s Perceptions Mirror Sexist Media Depictions,” *Sex Roles*, vol. 57, no. 11–12, pp. 851–864, Dec. 2007.

# APPENDICES

## APPENDIX A

## VARIABLES, ANALYSES, AND RESULTS

| Related Research Question | Independent Variable | Dependent Variable | Conducted Analysis | Results |
|---|---|---|---|---|
| RQ1 – Is there any significant difference between having different types of electronic devices and not having these devices in terms of digital trust? | Electronic Device Ownership (Yes, No) | 10 components of Digital trust (priority level of software quality, hardware and software, electronic devices, information systems, management and other internal entities, IT and data support, external entities, data protection and privacy, organizational data protection and privacy, internet and social media use | Munzel-Bruner analysis which is non-parametric alternative of MANOVA | Provided below |
| RQ1(a) | Smartphone | 10 components of Digital trust (priority level of software quality, hardware and software, electronic devices, | Munzel-Bruner analysis which is non-parametric alternative of MANOVA | No Significant Main Effect |

| | | | | |
|---|---|---|---|---|
| | | information systems, management and other internal entities, IT and data support, external entities, data protection and privacy, organizational data protection and privacy, internet and social media use | | |
| RQ1(b) | Tablet | 10 components of Digital trust (priority level of software quality, hardware and software, electronic devices, information systems, management and other internal entities, IT and data support, external entities, data protection and privacy, organizational data protection and privacy, internet and social media use | Munzel-Bruner analysis which is non-parametric alternative of MANOVA | Significant Main Effect F (1.94, 5329) = 94.84, p<.01 |

| | | | | |
|---|---|---|---|---|
| RQ1(b) | Tablet | Priority level of software quality (technology level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=3182903.00, Z=-3.442 p<.01 |
| RQ1(b) | Tablet | Hardware and software (technology level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=2687151.00, Z=-12.501 p<.01 |
| RQ1(b) | Tablet | Electronic Devices (technology level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=2601838.00, Z=-14.060 p<.01 |
| RQ1(b) | Tablet | Information Systems (technology level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=2891052.00, Z=-8.775 p<.01 |
| RQ1(b) | Tablet | Management and other internal entities (people level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=2798377.00, Z=-10.469 p<.01 |
| RQ1(b) | Tablet | IT and data support (people level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=2678812.00, Z=-12.654 p<.01 |
| RQ1(b) | Tablet | External entities (people level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=2758511.00, Z=-11.197 p<.01 |
| RQ1(b) | Tablet | Data protection and privacy (process level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=3497915.00, Z=2.314 p<.05 |
| RQ1(b) | Tablet | Organizational data protection | Mann-Whitney U | Significant Difference |

| | | | | |
|---|---|---|---|---|
| | | and privacy (process level of digital trust) | analysis (follow-up) | U=2694986.00, Z=-12.358 p<.01 |
| RQ1(b) | Tablet | Internet and social media use (process level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=2538067.00, Z=-15.225 p<.01 |
| RQ1(c) | Laptop Computer | 10 components of Digital trust (priority level of software quality, hardware and software, electronic devices, information systems, management and other internal entities, IT and data support, external entities, data protection and privacy, organizational data protection and privacy, internet and social media | Munzel-Bruner analysis which is non-parametric alternative of MANOVA | Significant Main Effect F (1.96, 5329) = 27.55, p<.01 |
| RQ1(c) | Laptop Computer | Priority level of software quality (technology level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=1774638.00, Z=-6.088 p<.01 |
| RQ1(c) | Laptop Computer | Hardware and software (technology level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=1353744.00, Z=-15.991 p<.01 |

| | | | | |
|---|---|---|---|---|
| RQ1(c) | Laptop Computer | Electronic Devices (technology level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=1360016.00, Z=-15.843 p<.01 |
| RQ1(c) | Laptop Computer | Information Systems (technology level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=1655167.00, Z=-8.899 p<.01 |
| RQ1(c) | Laptop Computer | Management and other internal entities (people level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=1518481.00, Z=-12.115 p<.01 |
| RQ1(c) | Laptop Computer | IT and data support (people level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=1359713.00, Z=-15.850 p<.01 |
| RQ1(c) | Laptop Computer | External entities (people level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=1635026.00, Z=-9.373 p<.01 |
| RQ1(c) | Laptop Computer | Data protection and privacy (process level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=2388629.00, Z=8.359 p<.01 |
| RQ1(c) | Laptop Computer | Organizational data protection and privacy (process level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=1364234.00, Z=-15.744 p<.01 |
| RQ1(c) | Laptop Computer | Internet and social media use (process level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=1404274.00, Z=-14.802 p<.01 |

| | | | | |
|---|---|---|---|---|
| RQ1(d) | Desktop Computer | 10 components of Digital trust (priority level of software quality, hardware and software, electronic devices, information systems, management and other internal entities, IT and data support, external entities, data protection and privacy, organizational data protection and privacy, internet and social media | Munzel-Bruner analysis which is non-parametric alternative of MANOVA | Significant Main Effect F (2.02, 5329) = 53.56, p<.01 |
| RQ1(d) | Desktop Computer | Priority level of software quality (technology level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=3010658.50, Z=-5.545 p<.01 |
| RQ1(d) | Desktop Computer | Hardware and software (technology level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=3146237.50, Z=-3.045 p<.01 |
| RQ1(d) | Desktop Computer | Electronic Devices (technology level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=3110050.50, Z=-3.712 p<.01 |
| RQ1(d) | Desktop Computer | Information Systems (technology | Mann-Whitney U | Significant Difference U=3104149.50, |

| | | | | |
|---|---|---|---|---|
| | | level of digital trust) | analysis (follow-up) | Z=-3.821 p<.01 |
| RQ1(d) | Desktop Computer | Management and other internal entities (people level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=3131764.50, Z=-3.312 p<.01 |
| RQ1(d) | Desktop Computer | IT and data support (people level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=3135712.50, Z=-3.239 p<.01 |
| RQ1(d) | Desktop Computer | External entities (people level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=3053299.50, Z=-4.759 p<.01 |
| RQ1(d) | Desktop Computer | Data protection and privacy (process level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=2964403.50, Z=-6.398 p<.01 |
| RQ1(d) | Desktop Computer | Organizational data protection and privacy (process level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=3156462.50, Z=-2.856 p<.01 |
| RQ1(d) | Desktop Computer | Internet and social media use (process level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=3070319.50, Z=-4.445 p<.01 |
| RQ1(e) | Smartwatch | 10 components of Digital trust (priority level of software quality, hardware and software, electronic devices, information systems, | Munzel-Bruner analysis which is non-parametric alternative of MANOVA | Significant Main Effect F (2.05, 5329) = 190.88, p<.01 |

| | | | | |
|---|---|---|---|---|
| | | management and other internal entities, IT and data support, external entities, data protection and privacy, organizational data protection and privacy, internet and social media | | |
| RQ1(e) | Smartwatch | Priority level of software quality (technology level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=2996384.50, Z=-4.436 p<.01 |
| RQ1(e) | Smartwatch | Hardware and software (technology level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=2497891.50, Z=-13.736 p<.01 |
| RQ1(e) | Smartwatch | Electronic Devices (technology level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=2451129.50, Z=-14.609 p<.01 |
| RQ1(e) | Smartwatch | Information Systems (technology level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=2625744.50, Z=-11.351 p<.01 |
| RQ1(e) | Smartwatch | Management and other internal entities (people level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=2580940.50, Z=-12.187 p<.01 |
| RQ1(e) | Smartwatch | IT and data support (people | Mann-Whitney U | Significant Difference |

| | | | | |
|---|---|---|---|---|
| | | level of digital trust) | analysis (follow-up) | U=2514400.50, Z=-13.428 p<.01 |
| RQ1(e) | Smartwatch | External entities (people level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=2587764.50, Z=-12.060 p<.01 |
| RQ1(e) | Smartwatch | Data protection and privacy (process level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=3022714.50, Z=-3.945 p<.01 |
| RQ1(e) | Smartwatch | Organizational data protection and privacy (process level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=2541074.50, Z=-12.931 p<.01 |
| RQ1(e) | Smartwatch | Internet and social media use (process level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=2364114.50, Z=-16.232 p<.01 |
| RQ2 - Is there any significant difference between having a social media account on different platforms and not having a social media account on these platforms in terms of digital trust? | Social Media Account Ownership (Yes, No) | 10 components of Digital trust (priority level of software quality, hardware and software, electronic devices, information systems, management and other internal entities, IT and data support, external entities, data protection and privacy, | Munzel-Bruner analysis which is non-parametric alternative of MANOVA | Provided below |

| | | | | |
|---|---|---|---|---|
| | | organizational data protection and privacy, internet and social media use | | |
| RQ2(a) | Facebook | 10 components of Digital trust (priority level of software quality, hardware and software, electronic devices, information systems, management and other internal entities, IT and data support, external entities, data protection and privacy, organizational data protection and privacy, internet and social media use | Munzel-Bruner analysis which is non-parametric alternative of MANOVA | No Significant Main Effect |
| RQ2(b) | Twitter | 10 components of Digital trust (priority level of software quality, hardware and software, electronic devices, information systems, | Munzel-Bruner analysis which is non-parametric alternative of MANOVA | Significant Main Effect F (1.95, 5329) = 46.72, p<.01 |

| | | | | |
|---|---|---|---|---|
| | | management and other internal entities, IT and data support, external entities, data protection and privacy, organizational data protection and privacy, internet and social media use | | |
| RQ2(b) | Twitter | Priority level of software quality (technology level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=3341050.50, Z=-3.606 p<.01 |
| RQ2(b) | Twitter | Hardware and software (technology level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=3007629.50, Z=-9.548 p<.01 |
| RQ2(b) | Twitter | Electronic Devices (technology level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=3078551.50, Z=-8.284 p<.01 |
| RQ2(b) | Twitter | Information Systems (technology level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=3209550.50, Z=-5.949 p<.01 |
| RQ2(b) | Twitter | Management and other internal entities (people level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=3238254.50, Z=-5.438 p<.01 |
| RQ2(b) | Twitter | IT and data support (people | Mann-Whitney U | Significant Difference |

| | | | | |
|---|---|---|---|---|
| | | level of digital trust) | analysis (follow-up) | U=3121377.50, Z=-7.521 p<.01 |
| RQ2(b) | Twitter | External entities (people level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=3163089.50, Z=-6.778 p<.01 |
| RQ2(b) | Twitter | Data protection and privacy (process level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=3247583.50, Z=-5.272 p<.01 |
| RQ2(b) | Twitter | Organizational data protection and privacy (process level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=3195569.50, Z=-6.199 p<.01 |
| RQ2(b) | Twitter | Internet and social media use (process level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=2965393.50, Z=-10.301 p<.01 |
| RQ2(c) | WhatsApp | 10 components of Digital trust (priority level of software quality, hardware and software, electronic devices, information systems, management and other internal entities, IT and data support, external entities, data protection and privacy, | Munzel-Bruner analysis which is non-parametric alternative of MANOVA | Significant Main Effect F (1.86, 5329) = 7.82, p<.01 |

| | | | | |
|---|---|---|---|---|
| | | organizational data protection and privacy, internet and social media use | | |
| RQ2(c) | WhatsApp | Priority level of software quality (technology level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=2705932.50, Z=-4.885 p<.01 |
| RQ2(c) | WhatsApp | Hardware and software (technology level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=2349214.50, Z=-11.846 p<.01 |
| RQ2(c) | WhatsApp | Electronic Devices (technology level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=2326199.50, Z=-12.295 p<.01 |
| RQ2(c) | WhatsApp | Information Systems (technology level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=2400410.50, Z=-10.847 p<.01 |
| RQ2(c) | WhatsApp | Management and other internal entities (people level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=2388411.50, Z=-11.081 p<.01 |
| RQ2(c) | WhatsApp | IT and data support (people level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=2369451.50, Z=-11.451 p<.01 |
| RQ2(c) | WhatsApp | External entities (people level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=2429584.50, Z=-10.278 p<.01 |

| | | | | |
|---|---|---|---|---|
| RQ2(c) | WhatsApp | Data protection and privacy (process level of digital trust) | Mann-Whitney U analysis (follow-up) | No Significant Difference |
| RQ2(c) | WhatsApp | Organizational data protection and privacy (process level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=2404046.50, Z=-10.776 p<.01 |
| RQ2(c) | WhatsApp | Internet and social media use (process level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=2444630.50, Z=-9.984 p<.01 |
| RQ2(d) | Blog | 10 components of Digital trust (priority level of software quality, hardware and software, electronic devices, information systems, management and other internal entities, IT and data support, external entities, data protection and privacy, organizational data protection and privacy, internet and social media use | Munzel-Bruner analysis which is non-parametric alternative of MANOVA | Significant Main Effect F (1.76, 5329) = 33.84, p<.01 |
| RQ2(d) | Blog | Priority level of software quality | Mann-Whitney U | Significant Difference |

| | | | | |
|---|---|---|---|---|
| | | (technology level of digital trust) | analysis (follow-up) | U=2637178.00, Z=-3.147 p<.01 |
| RQ2(d) | Blog | Hardware and software (technology level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=2437511.00, Z=-7.155 p<.01 |
| RQ2(d) | Blog | Electronic Devices (technology level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=2406482.00, Z=-7.777 p<.01 |
| RQ2(d) | Blog | Information Systems (technology level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=2509179.00, Z=-5.716 p<.01 |
| RQ2(d) | Blog | Management and other internal entities (people level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=2530663.00, Z=-5.285 p<.01 |
| RQ2(d) | Blog | IT and data support (people level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=2493759.00, Z=-6.026 p<.01 |
| RQ2(d) | Blog | External entities (people level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=2424270.00, Z=-7.420 p<.01 |
| RQ2(d) | Blog | Data protection and privacy (process level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=2388371.00, Z=-8.141 p<.01 |
| RQ2(d) | Blog | Organizational data protection and privacy | Mann-Whitney U analysis (follow-up) | Significant Difference U=2581497.00, Z=-4.264 |

| | | | | |
|---|---|---|---|---|
| | | (process level of digital trust) | | p<.01 |
| RQ2(d) | Blog | Internet and social media use (process level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=2186395.00, Z=-12.195 p<.01 |
| RQ2(e) | LinkedIn | 10 components of Digital trust (priority level of software quality, hardware and software, electronic devices, information systems, management and other internal entities, IT and data support, external entities, data protection and privacy, organizational data protection and privacy, internet and social media use | Munzel-Bruner analysis which is non-parametric alternative of MANOVA | Significant Main Effect F (2.01, 5329) = 134.85, p<.01 |
| RQ2(e) | LinkedIn | Priority level of software quality (technology level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=2963797.00, Z=-10.320 p<.01 |
| RQ2(e) | LinkedIn | Hardware and software (technology level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=2750621.00, Z=-14.120 p<.01 |

| | | | | |
|---|---|---|---|---|
| RQ2(e) | LinkedIn | Electronic Devices (technology level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=2759638.00, Z=-13.960 p<.01 |
| RQ2(e) | LinkedIn | Information Systems (technology level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=2900518.00, Z=-11.448 p<.01 |
| RQ2(e) | LinkedIn | Management and other internal entities (people level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=2862296.00, Z=-12.130 p<.01 |
| RQ2(e) | LinkedIn | IT and data support (people level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=2794044.00, Z=-13.346 p<.01 |
| RQ2(e) | LinkedIn | External entities (people level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=3002259.00, Z=-9.635 p<.01 |
| RQ2(e) | LinkedIn | Data protection and privacy (process level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=3689830.00, Z=2.622 p<.01 |
| RQ2(e) | LinkedIn | Organizational data protection and privacy (process level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=2847588.00, Z=-12.392 p<.01 |
| RQ2(e) | LinkedIn | Internet and social media use (process level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=2983521.00, Z=-9.969 p<.01 |

| | | | | |
|---|---|---|---|---|
| RQ2(f) | Gmail | 10 components of Digital trust (priority level of software quality, hardware and software, electronic devices, information systems, management and other internal entities, IT and data support, external entities, data protection and privacy, organizational data protection and privacy, internet and social media use | Munzel-Bruner analysis which is non-parametric alternative of MANOVA | Significant Main Effect F (1.92, 5329) = 4.52, p<.05 |
| RQ2(f) | Gmail | Priority level of software quality (technology level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=2182453.00, Z=-5.813 p<.01 |
| RQ2(f) | Gmail | Hardware and software (technology level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=1935846.00, Z=-11.095 p<.01 |
| RQ2(f) | Gmail | Electronic Devices (technology level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=1952937.00, Z=-10.729 p<.01 |
| RQ2(f) | Gmail | Information Systems (technology | Mann-Whitney U | Significant Difference U=2090520.00, |

| | | | | |
|---|---|---|---|---|
| | | level of digital trust) | analysis (follow-up) | Z=-7.782 p<.01 |
| RQ2(f) | Gmail | Management and other internal entities (people level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=2028914.00, Z=-9.101 p<.01 |
| RQ2(f) | Gmail | IT and data support (people level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=1976173.00, Z=-10.231 p<.01 |
| RQ2(f) | Gmail | External entities (people level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=2132135.00, Z=-6.890 p<.01 |
| RQ2(f) | Gmail | Data protection and privacy (process level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=2672414.00, Z=4.682 p<.01 |
| RQ2(f) | Gmail | Organizational data protection and privacy (process level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=1950955.00, Z=-10.771 p<.01 |
| RQ2(f) | Gmail | Internet and social media use (process level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=2047996.00, Z=-8.693 p<.01 |
| RQ2(g) | Yahoo Mail | 10 components of Digital trust (priority level of software quality, hardware and software, electronic devices, information systems, | Munzel-Bruner analysis which is non-parametric alternative of MANOVA | Significant Main Effect F (1.86, 5329) = 22.75, p<.01 |

| | | | | |
|---|---|---|---|---|
| | | management and other internal entities, IT and data support, external entities, data protection and privacy, organizational data protection and privacy, internet and social media use | | |
| RQ2(g) | Yahoo Mail | Priority level of software quality (technology level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=3184550.00, Z=-3.316 p<.01 |
| RQ2(g) | Yahoo Mail | Hardware and software (technology level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=2992381.00, Z=-6.830 p<.01 |
| RQ2(g) | Yahoo Mail | Electronic Devices (technology level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=3042873.00, Z=-5.907 p<.01 |
| RQ2(g) | Yahoo Mail | Information Systems (technology level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=3167542.00, Z=-3.627 p<.01 |
| RQ2(g) | Yahoo Mail | Management and other internal entities (people level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=3165840.00, Z=-3.658 p<.01 |
| RQ2(g) | Yahoo Mail | IT and data support (people | Mann-Whitney U | Significant Difference |

| | | | | |
|---|---|---|---|---|
| | | level of digital trust) | analysis (follow-up) | U=3087768.00, Z=-5.086 p<.01 |
| RQ2(g) | Yahoo Mail | External entities (people level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=3095448.00, Z=-4.945 p<.01 |
| RQ2(g) | Yahoo Mail | Data protection and privacy (process level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=2880185.00, Z=-8.882 p<.01 |
| RQ2(g) | Yahoo Mail | Organizational data protection and privacy (process level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=3149171.00, Z=-3.963 p<.01 |
| RQ2(g) | Yahoo Mail | Internet and social media use (process level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=2757781.00, Z=-11.120 p<.01 |
| RQ2(h) | YouTube | 10 components of Digital trust (priority level of software quality, hardware and software, electronic devices, information systems, management and other internal entities, IT and data support, external entities, data protection and privacy, | Munzel-Bruner analysis which is non-parametric alternative of MANOVA | Significant Main Effect F (1.94, 5329) = 18.54, p<.01 |

| | | | | |
|---|---|---|---|---|
| | | organizational data protection and privacy, internet and social media use | | |
| RQ2(h) | YouTube | Priority level of software quality (technology level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=3171887.50, Z=-5.403 p<.01 |
| RQ2(h) | YouTube | Hardware and software (technology level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=2987136.50, Z=-8.730 p<.01 |
| RQ2(h) | YouTube | Electronic Devices (technology level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=2966241.50, Z=-9.106 p<.01 |
| RQ2(h) | YouTube | Information Systems (technology level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=3073518.50, Z=-7.175 p<.01 |
| RQ2(h) | YouTube | Management and other internal entities (people level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=3001154.50, Z=-8.478 p<.01 |
| RQ2(h) | YouTube | IT and data support (people level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=2963384.50, Z=-9.158 p<.01 |
| RQ2(h) | YouTube | External entities (people level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=3064185.50, Z=-7.343 p<.01 |

| | | | | |
|---|---|---|---|---|
| RQ2(h) | YouTube | Data protection and privacy (process level of digital trust) | Mann-Whitney U analysis (follow-up) | No Significant Difference |
| RQ2(h) | YouTube | Organizational data protection and privacy (process level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=2996959.50, Z=-8.553 p<.01 |
| RQ2(h) | YouTube | Internet and social media use (process level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=3022282.50, Z=-8.097 p<.01 |
| RQ2(i) | Alipay | 10 components of Digital trust (priority level of software quality, hardware and software, electronic devices, information systems, management and other internal entities, IT and data support, external entities, data protection and privacy, organizational data protection and privacy, internet and social media use | Munzel-Bruner analysis which is non-parametric alternative of MANOVA | Significant Main Effect F (1.84, 5329) = 9.32, p<.01 |
| RQ2(i) | Alipay | Priority level of software quality (technology | Mann-Whitney U analysis (follow-up) | Significant Difference U=2461866.00, Z=-2.330 |

| | | | | |
|---|---|---|---|---|
| | | level of digital trust) | | p<.05 |
| RQ2(i) | Alipay | Hardware and software (technology level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=2451171.00, Z=-2.554 p<.05 |
| RQ2(i) | Alipay | Electronic Devices (technology level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=2472208.00, Z=-2.114 p<.05 |
| RQ2(i) | Alipay | Information Systems (technology level of digital trust) | Mann-Whitney U analysis (follow-up) | No Significant Difference |
| RQ2(i) | Alipay | Management and other internal entities (people level of digital trust) | Mann-Whitney U analysis (follow-up) | No Significant Difference |
| RQ2(i) | Alipay | IT and data support (people level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=2458685.00, Z=-2.397 p<.05 |
| RQ2(i) | Alipay | External entities (people level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=2448905.00, Z=-2.601 p<.01 |
| RQ2(i) | Alipay | Data protection and privacy (process level of digital trust) | Mann-Whitney U analysis (follow-up) | No Significant Difference |
| RQ2(i) | Alipay | Organizational data protection and privacy (process level of digital trust) | Mann-Whitney U analysis (follow-up) | No Significant Difference |

| | | | | |
|---|---|---|---|---|
| RQ2(i) | Alipay | Internet and social media use (process level of digital trust) | Mann-Whitney U analysis (follow-up) | No Significant Difference |
| RQ2(j) | WeChat | 10 components of Digital trust (priority level of software quality, hardware and software, electronic devices, information systems, management and other internal entities, IT and data support, external entities, data protection and privacy, organizational data protection and privacy, internet and social media use | Munzel-Bruner analysis which is non-parametric alternative of MANOVA | Significant Main Effect F (1.88, 5329) = 40.45, p<.01 |
| RQ2(j) | WeChat | Priority level of software quality (technology level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=3130908.00, Z=-5.842 p<.01 |
| RQ2(j) | WeChat | Hardware and software (technology level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=3009948.00, Z=-8.025 p<.01 |
| RQ2(j) | WeChat | Electronic Devices (technology | Mann-Whitney U analysis (follow-up) | Significant Difference U=3046867.00, Z=-7.359 |

| | | | | |
|---|---|---|---|---|
| | | level of digital trust) | | p<.01 |
| RQ2(j) | WeChat | Information Systems (technology level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=3091629.00, Z=-6.551 p<.01 |
| RQ2(j) | WeChat | Management and other internal entities (people level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=3119343.00, Z=-6.050 p<.01 |
| RQ2(j) | WeChat | IT and data support (people level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=3063515.00, Z=-7.058 p<.01 |
| RQ2(j) | WeChat | External entities (people level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=3025410.00, Z=-7.746 p<.01 |
| RQ2(j) | WeChat | Data protection and privacy (process level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=2989778.00, Z=-8.389 p<.01 |
| RQ2(j) | WeChat | Organizational data protection and privacy (process level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=3116985.00, Z=-6.093 p<.01 |
| RQ2(j) | WeChat | Internet and social media use (process level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=2938812.00, Z=-9.309 p<.01 |
| RQ2(k) | Website | 10 components of Digital trust (priority level of software quality, | Munzel-Bruner analysis which is | Significant Main Effect F (1.88, 5329) = 23.46, p<.01 |

| | | | | |
|---|---|---|---|---|
| | | hardware and software, electronic devices, information systems, management and other internal entities, IT and data support, external entities, data protection and privacy, organizational data protection and privacy, internet and social media use | non-parametric alternative of MANOVA | |
| RQ2(k) | Website | Priority level of software quality (technology level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=3172923.50, Z=-3.442 p<.01 |
| RQ2(k) | Website | Hardware and software (technology level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=3014959.50, Z=-6.332 p<.01 |
| RQ2(k) | Website | Electronic Devices (technology level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=2929174.50, Z=-7.902 p<.01 |
| RQ2(k) | Website | Information Systems (technology level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=2987997.50, Z=-6.826 p<.01 |
| RQ2(k) | Website | Management and other | Mann-Whitney U | Significant Difference |

| | | | | |
|---|---|---|---|---|
| | | internal entities (people level of digital trust) | analysis (follow-up) | U=2934902.50, Z=-7.798 p<.01 |
| RQ2(k) | Website | IT and data support (people level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=2951026.50, Z=-7.503 p<.01 |
| RQ2(k) | Website | External entities (people level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=2920865.50, Z=-8.055 p<.01 |
| RQ2(k) | Website | Data protection and privacy (process level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=3231118.50, Z=-2.377 p<.05 |
| RQ2(k) | Website | Organizational data protection and privacy (process level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=2928605.50, Z=-7.913 p<.01 |
| RQ2(k) | Website | Internet and social media use (process level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=2908190.50, Z=-8.286 p<.01 |
| RQ2(l) | VK | 10 components of Digital trust (priority level of software quality, hardware and software, electronic devices, information systems, management and other internal entities, IT and | Munzel-Bruner analysis which is non-parametric alternative of MANOVA | Significant Main Effect F (1.87, 5329) = 13.24, p<.01 |

| | | | | |
|---|---|---|---|---|
| | | data support, external entities, data protection and privacy, organizational data protection and privacy, internet and social media use | | |
| RQ2(l) | VK | Priority level of software quality (technology level of digital trust) | Mann-Whitney U analysis (follow-up) | No Significant Difference |
| RQ2(l) | VK | Hardware and software (technology level of digital trust) | Mann-Whitney U analysis (follow-up) | No Significant Difference |
| RQ2(l) | VK | Electronic Devices (technology level of digital trust) | Mann-Whitney U analysis (follow-up) | No Significant Difference |
| RQ2(l) | VK | Information Systems (technology level of digital trust) | Mann-Whitney U analysis (follow-up) | No Significant Difference |
| RQ2(l) | VK | Management and other internal entities (people level of digital trust) | Mann-Whitney U analysis (follow-up) | No Significant Difference |
| RQ2(l) | VK | IT and data support (people level of digital trust) | Mann-Whitney U analysis (follow-up) | No Significant Difference |

| | | | | |
|---|---|---|---|---|
| RQ2(l) | VK | External entities (people level of digital trust) | Mann-Whitney U analysis (follow-up) | No Significant Difference |
| RQ2(l) | VK | Data protection and privacy (process level of digital trust) | Mann-Whitney U analysis (follow-up) | No Significant Difference |
| RQ2(l) | VK | Organizational data protection and privacy (process level of digital trust) | Mann-Whitney U analysis (follow-up) | No Significant Difference |
| RQ2(l) | VK | Internet and social media use (process level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=2299691.50, Z=-2.041 p<.05 |
| RQ3 – Is there any significant difference between people from different levels of Social Technographic Ladder in terms of digital trust? | Levels of Social Technographic Ladder (Creators, Conversationalists, Critics, Collectors, Joiners, Spectators, Inactives) | 10 components of Digital trust (priority level of software quality, hardware and software, electronic devices, information systems, management and other internal entities, IT and data support, external entities, data protection and privacy, organizational data protection and privacy, internet and social media use | Munzel-Bruner analysis which is non-parametric alternative of MANOVA | Significant Main Effect F (10.70096, 5329) = 33.37051, p<.01 |

| | | | | |
|---|---|---|---|---|
| RQ3 | Levels of Social Technographic Ladder | Priority level of software quality (technology level of digital trust) | Kruskal-Wallis analysis (follow-up) | Significant Difference F (6, 5329) = 51.565, p<.01 |
| RQ3 | Levels of Social Technographic Ladder | Hardware and software (technology level of digital trust) | Kruskal-Wallis analysis (follow-up) | Significant Difference F (6, 5329) = 123.879, p<.01 |
| RQ3 | Levels of Social Technographic Ladder | Electronic Devices (technology level of digital trust) | Kruskal-Wallis analysis (follow-up) | Significant Difference F (6, 5329) = 134.643, p<.01 |
| RQ3 | Levels of Social Technographic Ladder | Information Systems (technology level of digital trust) | Kruskal-Wallis analysis (follow-up) | Significant Difference F (6, 5329) = 122.147, p<.01 |
| RQ3 | Levels of Social Technographic Ladder | Management and other internal entities (people level of digital trust) | Kruskal-Wallis analysis (follow-up) | Significant Difference F (6, 5329) = 108.640, p<.01 |
| RQ3 | Levels of Social Technographic Ladder | IT and data support (people level of digital trust) | Kruskal-Wallis analysis (follow-up) | Significant Difference F (6, 5329) = 116.708, p<.01 |
| RQ3 | Levels of Social Technographic Ladder | External entities (people level of digital trust) | Kruskal-Wallis analysis (follow-up) | Significant Difference F (6, 5329) = 179.235, p<.01 |
| RQ3 | Levels of Social Technographic Ladder | Data protection and privacy (process level of digital trust) | Kruskal-Wallis analysis (follow-up) | Significant Difference F (6, 5329) = 195.563, p<.01 |
| RQ3 | Levels of Social Technographic Ladder | Organizational data protection and privacy (process level of digital trust) | Kruskal-Wallis analysis (follow-up) | Significant Difference F (6, 5329) = 100.010, p<.01 |

| | | | | |
|---|---|---|---|---|
| RQ3 | Levels of Social Technographic Ladder | Internet and social media use (process level of digital trust) | Kruskal-Wallis analysis (follow-up) | Significant Difference F (6, 5329) = 278.154, p<.01 |
| RQ4 – Is there any significant difference between having different types of Internet connectivity and not having that Internet connectivity in terms of digital trust? | Internet Connectivity<br><br>(Wi-Fi connection at home, Wired connection at home, Pre-paid data plan, Post-paid data plan) | 10 components of Digital trust (priority level of software quality, hardware and software, electronic devices, information systems, management and other internal entities, IT and data support, external entities, data protection and privacy, organizational data protection and privacy, internet and social media use | Munzel-Bruner analysis which is non-parametric alternative of MANOVA | Provided below |
| RQ4(a) | Wi-Fi connection at home | 10 components of Digital trust (priority level of software quality, hardware and software, electronic devices, information systems, management and other internal entities, IT and | Munzel-Bruner analysis which is non-parametric alternative of MANOVA | Significant Main Effect F (1.95, 5329) = 21.87, p<.01 |

| | | | | |
|---|---|---|---|---|
| | | data support, external entities, data protection and privacy, organizational data protection and privacy, internet and social media use | | |
| RQ4(a) | Wi-Fi connection at home | Priority level of software quality (technology level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=1310117.00, Z=-10.935 p<.01 |
| RQ4(a) | Wi-Fi connection at home | Hardware and software (technology level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=918054.00, Z=-20.907 p<.01 |
| RQ4(a) | Wi-Fi connection at home | Electronic Devices (technology level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=871287.00, Z=-22.097 p<.01 |
| RQ4(a) | Wi-Fi connection at home | Information Systems (technology level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=1055621.00, Z=-17.408 p<.01 |
| RQ4(a) | Wi-Fi connection at home | Management and other internal entities (people level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=945609.00, Z=-20.206 p<.01 |
| RQ4(a) | Wi-Fi connection at home | IT and data support (people level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=877757.00, Z=-21.932 p<.01 |

| | | | | |
|---|---|---|---|---|
| RQ4(a) | Wi-Fi connection at home | External entities (people level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=1015520.00, Z=-18.428 p<.01 |
| RQ4(a) | Wi-Fi connection at home | Data protection and privacy (process level of digital trust) | Mann-Whitney U analysis (follow-up) | No Significant Difference |
| RQ4(a) | Wi-Fi connection at home | Organizational data protection and privacy (process level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=895846.00, Z=-21.469 p<.01 |
| RQ4(a) | Wi-Fi connection at home | Internet and social media use (process level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=957686.00, Z=-19.899 p<.01 |
| RQ4(b) | Wired connection at home | 10 components of Digital trust (priority level of software quality, hardware and software, electronic devices, information systems, management and other internal entities, IT and data support, external entities, data protection and privacy, organizational data protection and privacy, internet and social media | Munzel-Bruner analysis which is non-parametric alternative of MANOVA | Significant Main Effect F (1.93, 5329) = 33.42, p<.01 |

| | | | | |
|---|---|---|---|---|
| | | use | | |
| RQ4(b) | Wired connection at home | Priority level of software quality (technology level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=2731010.50, Z=-7.465 p<.01 |
| RQ4(b) | Wired connection at home | Hardware and software (technology level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=2597000.50, Z=-10.009 p<.01 |
| RQ4(b) | Wired connection at home | Electronic Devices (technology level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=2493643.50, Z=-11.971 p<.01 |
| RQ4(b) | Wired connection at home | Information Systems (technology level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=2585582.50, Z=-17.408 p<.01 |
| RQ4(b) | Wired connection at home | Management and other internal entities (people level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=2569219.50, Z=-10.536 p<.01 |
| RQ4(b) | Wired connection at home | IT and data support (people level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=2521257.50, Z=-11.446 p<.01 |
| RQ4(b) | Wired connection at home | External entities (people level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=2514267.50, Z=-11.579 p<.01 |
| RQ4(b) | Wired connection at home | Data protection and privacy (process level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=2698105.50, Z=-8.089 p<.01 |

| | | | | |
|---|---|---|---|---|
| RQ4(b) | Wired connection at home | Organizational data protection and privacy (process level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=2529551.50, Z=-11.289 p<.01 |
| RQ4(b) | Wired connection at home | Internet and social media use (process level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=2495636.50, Z=-11.933 p<.01 |
| RQ4(c) | Pre-paid data plan at home | 10 components of Digital trust (priority level of software quality, hardware and software, electronic devices, information systems, management and other internal entities, IT and data support, external entities, data protection and privacy, organizational data protection and privacy, internet and social media use | Munzel-Bruner analysis which is non-parametric alternative of MANOVA | Significant Main Effect F (2.03, 5329) = 339.20, p<.01 |
| RQ4(c) | Pre-paid data plan at home | Priority level of software quality (technology level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=4123964.50, Z=10.817 p<.01 |
| RQ4(c) | Pre-paid data plan at home | Hardware and software (technology | Mann-Whitney U | Significant Difference U=4606703.50, |

| | | | | |
|---|---|---|---|---|
| | | level of digital trust) | analysis (follow-up) | Z=19.451 p<.01 |
| RQ4(c) | Pre-paid data plan at home | Electronic Devices (technology level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=4696527.50, Z=21.058 p<.01 |
| RQ4(c) | Pre-paid data plan at home | Information Systems (technology level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=4474014.50, Z=17.078 p<.01 |
| RQ4(c) | Pre-paid data plan at home | Management and other internal entities (people level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=4610812.50, Z=19.525 p<.01 |
| RQ4(c) | Pre-paid data plan at home | IT and data support (people level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=4676031.50, Z=20.691 p<.01 |
| RQ4(c) | Pre-paid data plan at home | External entities (people level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=4495752.50, Z=17.467 p<.01 |
| RQ4(c) | Pre-paid data plan at home | Data protection and privacy (process level of digital trust) | Mann-Whitney U analysis (follow-up) | No Significant Difference |
| RQ4(c) | Pre-paid data plan at home | Organizational data protection and privacy (process level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=4688590.50, Z=20.916 p<.01 |
| RQ4(c) | Pre-paid data plan at home | Internet and social media use (process level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=4588527.50, Z=19.126 p<.01 |

| | | | | |
|---|---|---|---|---|
| RQ4(d) | Post-paid data plan at home | 10 components of Digital trust (priority level of software quality, hardware and software, electronic devices, information systems, management and other internal entities, IT and data support, external entities, data protection and privacy, organizational data protection and privacy, internet and social media use | Munzel-Bruner analysis which is non-parametric alternative of MANOVA | Significant Main Effect F (2.06, 5329) = 382.02, p<.01 |
| RQ4(d) | Post-paid data plan at home | Priority level of software quality (technology level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=2815226.00, Z=-13.080 p<.01 |
| RQ4(d) | Post-paid data plan at home | Hardware and software (technology level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=2398910.00, Z=-20.494 p<.01 |
| RQ4(d) | Post-paid data plan at home | Electronic Devices (technology level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=2297752.00, Z=-22.295 p<.01 |
| RQ4(d) | Post-paid data plan at home | Information Systems (technology | Mann-Whitney U | Significant Difference U=2497725.00, |

| | | | | |
|---|---|---|---|---|
| | | level of digital trust) | analysis (follow-up) | Z=-18.734 p<.01 |
| RQ4(d) | Post-paid data plan at home | Management and other internal entities (people level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=2392974.00, Z=-20.600 p<.01 |
| RQ4(d) | Post-paid data plan at home | IT and data support (people level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=2331363.00, Z=-21.697 p<.01 |
| RQ4(d) | Post-paid data plan at home | External entities (people level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=2450536.00, Z=-19.575 p<.01 |
| RQ4(d) | Post-paid data plan at home | Data protection and privacy (process level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=3407330.00, Z=-2.536 p<.05 |
| RQ4(d) | Post-paid data plan at home | Organizational data protection and privacy (process level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=2406700.00, Z=-20.355 p<.01 |
| RQ4(d) | Post-paid data plan at home | Internet and social media use (process level of digital trust) | Mann-Whitney U analysis (follow-up) | Significant Difference U=2434269.00, Z=-19.864 p<.01 |
| RQ5 – Is there any relationship between satisfaction level in connection to any of the Internet connectivity and the level of digital trust? | Connectivity satisfaction | Priority level of software quality (technology level of digital trust) | Spearmen's Correlation Coefficient | Correlated r = .219 |

| | | | | |
|---|---|---|---|---|
| RQ5 | Connectivity satisfaction | Hardware and software (technology level of digital trust) | Spearmen's Correlation Coefficient | Correlated r = .450 |
| RQ5 | Connectivity satisfaction | Electronic Devices (technology level of digital trust) | Spearmen's Correlation Coefficient | Correlated r = .487 |
| RQ5 | Connectivity satisfaction | Information Systems (technology level of digital trust) | Spearmen's Correlation Coefficient | Correlated r = .358 |
| RQ5 | Connectivity satisfaction | Management and other internal entities (people level of digital trust) | Spearmen's Correlation Coefficient | Correlated r = .424 |
| RQ5 | Connectivity satisfaction | IT and data support (people level of digital trust) | Spearmen's Correlation Coefficient | Correlated r = .474 |
| RQ5 | Connectivity satisfaction | External entities (people level of digital trust) | Spearmen's Correlation Coefficient | Correlated r = .388 |
| RQ5 | Connectivity satisfaction | Data protection and privacy (process level of digital trust) | Spearmen's Correlation Coefficient | Not Correlated |
| RQ5 | Connectivity satisfaction | Organizational data protection and privacy (process level of digital trust) | Spearmen's Correlation Coefficient | Correlated r = .471 |
| RQ5 | Connectivity satisfaction | Internet and social media use (process level of digital trust) | Spearmen's Correlation Coefficient | Correlated r = .466 |