

**Factors Affecting Healthcare Providers to Accept  
Digital Marketing: The Moderating Role of  
Subjective Norms**

العوامل المؤثرة على مقدمي الرعاية الصحية لقبول التسويق الرقمي: الدور  
المعدل للمعايير الذاتية

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for Master's Degree in Management**

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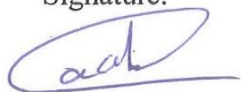
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## **Dedication**

First big thanks for God, for the strength, power of mind, protection, skills and guidance in completing this challenge.

This study is whole heartedly dedicated to my beloved family, which have been my source of inspiration and gave me strength when I supposed of giving up.

To our occupied Palestine, the patient Palestinian people and all Palestinian affairs martyrs.

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Finally, I would like to share my happiness and proudness on completing this study and bypassing all difficult circumstances, hoping that this research will add value to science and the business world.

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# **Factors Affecting Healthcare Providers to Accept Digital Marketing: The Moderating Role of Subjective Norms**

**Prepared by: Abdallah Ahmad Hammad**

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## **Abstract**

This study aimed at identifying the impact of (Perceived easy of use, Perceived usefulness, Perceived enjoyment and perceived trust), and examine the moderating role of subjective norms, on healthcare providers acceptance for digital marketing provided by the medical field companies. To achieve the goals of this study, the researcher relied on descriptive and analytical approach.

The study dealt with 400 healthcare providers, where population consisted of all healthcare providers working in Amman, a convenience sample was chosen from the healthcare providers. Moreover, the questionnaire was study's main tool for collecting data; (400) questionnaires were distributed, (388) answers were regained and the valid questionnaire for analysis was (375). Analyzing data was conducted using a set of statistical methods including Cronbach's alpha along with a normality test, standard deviation, exploratory factor analysis, confirmatory factor analysis, simple and multiple regression, interactive hierarchical regression and process procedures method using (SPSS-V20) and (AMOS-V23).

The research reached a set of results, the most important of which are:

- 1- There is statistically impact at significance level ( $\alpha \leq 0.05$ ) of (Perceived easy of use, Perceived usefulness, Perceived enjoyment and perceived trust) on healthcare providers acceptance for digital marketing provided by the medical field companies.
- 2- There is statistically impact at significance level ( $\alpha \leq 0.05$ ) for subjective norms in improving the impact (Perceived easy of use, Perceived usefulness, Perceived enjoyment and perceived trust) on healthcare providers acceptance for digital marketing provided by medical field companies

The research recommended the following:

- 1- The need to continue enhancement to the (Perceived easy of use, Perceived usefulness, Perceived enjoyment and perceived trust), through the medical field companies and understand the importance of the (Perceived easy of use, Perceived usefulness, Perceived enjoyment and perceived trust) to increase healthcare providers acceptance to digital marketing provided by the medical field companies.
- 2- The necessity of working to take proactive measures by medical field companies to create a technology acceptance model, and work to raise the level of healthcare providers acceptance for digital marketing.

**Keywords: Healthcare Providers, Digital Marketing, Perceived Easy of Use, Perceived Usefulness, Perceived Enjoyment, Perceived Trust, Subjective Norms, Medical Field Companies, Jordan.**

## العوامل المؤثرة على مقدمي الرعاية الصحية لقبول التسويق الرقمي: الدور المعدل

### للمعايير الذاتية

إعداد: عبدالله أحمد حماد

إشراف: الدكتور عبدالله قاسم بطاينة

### الملخص

هدفت هذه الدراسة إلى تحديد تأثير (سهولة الاستخدام المدركة، الفائدة المدركة، التمتع المدرك، والثقة المدركة)، على قبول مقدمي الرعاية الصحية للتسويق الرقمي المقدم من قبل شركات القطاع الطبي وذلك بوجود المعايير الذاتية كعامل معدل. ولتحقيق أهداف هذه الدراسة، اعتمد الباحث على المنهج الوصفي والتحليلي.

تناولت الدراسة (400) مقدم رعاية صحية، تشمل جميع العاملين في تقديم الرعاية الصحية في الأردن، وقد تم اختيار عينة سهلة الوصول من مقدمي الرعاية الصحية.

علاوة على ذلك، كان الاستبيان الأداة الرئيسية للدراسة لجمع البيانات؛ تم توزيع (400) استبانة، حيث تمت الإجابة عن (388) استبانة، وكان عدد الاستبيانات المستخدمة للتحليل (375) تم تحليل البيانات باستخدام مجموعة من الأساليب الإحصائية بما في ذلك ألفا كرونباخ جنباً إلى جنب مع اختبار الحالة الطبيعية، والانحراف المعياري، وتحليل العوامل الاستكشافية، وتحليل العوامل المؤكدة، والانحدار الخطي البسيط، والانحدار الهرمي التفاعلي باستخدام (SPSS-V20) و (AMOS -V23).

توصلت الدراسة إلى مجموعة من النتائج أهمها:

1- هناك أثر ذو دلالة إحصائية عند مستوى الدلالة ( $\alpha \leq 0.05$ ) للعوامل المستقلة (سهولة الاستخدام المدركة، الفائدة المدركة، التمتع المدرك، الثقة المدركة) على قبول مقدمي الرعاية الصحية للتسويق الرقمي المقدم من شركات القطاع الطبي في الأردن.

2- هناك أثر ذو دلالة إحصائية عند مستوى الدلالة ( $\alpha \leq 0.05$ ) للمعايير الذاتية في تحسين تأثير العوامل المستقلة (سهولة الاستخدام المدركة، الفائدة المدركة، التمتع المدرك، الثقة المدركة) على قبول مقدمي الرعاية الصحية للتسويق الرقمي المقدم من شركات القطاع الطبي في الأردن.

أوصت الدراسة بما يلي:

1- ضرورة الاستمرار بتعزيز دور (سهولة الاستخدام المدركة، الفائدة المدركة، التمتع المدرك، الثقة المدركة) على قبول مقدّمي الرعاية الصحية للتسويق الرقمي المقدم من شركات القطاع الطبي في الأردن.

2- ضرورة عمل شركات القطاع الطبي على اتخاذ التدابير الاستباقية لخلق نموذج تسويق رقمي، والعمل على رفع مستوى قبول مقدمي الرعاية الطبية للتسويق الرقمي في الأردن.

الكلمات المفتاحية: مقدمي الرعاية الصحية، التسويق الرقمي، سهولة الاستخدام المدركة، الفائدة المدركة، التمتع المدرك، الثقة المدركة، المعايير الذاتية، شركات القطاع الطبي، الأردن.

# CHAPTER ONE

## Background



# CHAPTER ONE

## Background

### 1-1 Introduction

In light with the strong role of digital marketing that our present world is facing, and the great revolution in the fields of knowledge and technology, the role of digital marketing become higher and more essential in our daily life, which led to a real need to keep up with the new technology and enrolling it to increase the efficiency and productivity of our organization (Nuseira & Aljumahb, 2020).

Digital Marketing is the newest and flexible component of marketing planning, which is exposed to many factors (such as perceived ease of use, perceived usefulness, perceived enjoyment and the perceived trust), all these factors affecting the acceptance of customers with the content of digital marketing (Alhashmi, Salloum, & Mhamdi, 2019). Since the digital marketing consider as essential tool of building strong marketing strategies, companies need to strengthen themselves in order to achieve their goals and survive in the very competitive business environment, and they must accept the new market dynamics and exploiting all the available tools to create a strong and unique content of their marketing messages (Yoga, Korry, & Yulianti, 2019).

Based on the above, and the fact about the medical filed marketing efforts field visits and face to face communication with the healthcare providers are no longer the only way of delivering the marketing strategies of medical field companies, the growing up role of digital marketing, and the high acceptance to deal with new technology from the healthcare providers side make the digital marketing a key element when we are looking to build a



medical field marketing strategy (Kaur, 2017). this study comes to realize the acceptance of digital marketing provided by medical field companies to the healthcare providers in Jordan and examine the role of subjective norms as moderating factor. As marketing departments focusing all its efforts not just in building strong brands but also to generate demand for its products, fully with enjoyment and innovation.

## **1-2 Problem statement**

Despite the important role of digital marketing, it was noticed through research in the theoretical literature and previous studies, the lack of such a study at the healthcare providers level which study the factors affecting the acceptance of digital marketing provided by medical field companies to the healthcare providers. at the digital marketing acceptance from the healthcare providers, further research is needed to provide greater understanding of the role of perceived ease of use, perceived usefulness, perceived enjoyment, and the perceived trust on the healthcare providers acceptance to the digital marketing.

With the developmental business dynamics in medical field, studying the effect of these factors on the healthcare providers acceptance to digital marketing will open the gate for further focusing of digital marketing in the medical field, which will have strong impact on medical companies marketing and field strategies.

According to the researcher best knowledge and the knowledge gaps, there is a noticeable lack in studies which focus on the acceptance of digital marking on the healthcare providers (Dhagarra, Goswami, & Kumar, 2020; Jahanmir, & Cavadas, 2018; Zhao, & Wang, 2020; Schnall, et al., 2015). Accordingly, this study aiming to investigate the impact of (perceived ease of use, perceived usefulness, perceived enjoyment and the perceived trust)

on the healthcare providers acceptance to the digital marketing taking on consideration the role of subjective norms as moderating factor.

### **1-3 Study Objectives**

This study seeks to know the impact of perceived ease of use, perceived usefulness, perceived enjoyment, and the perceived trust on healthcare providers acceptance to digital marketing in Jordanian medical field through the following:

- Determine the impact of (perceived ease of use, perceived usefulness, perceived enjoyment, and the perceived trust) on healthcare providers acceptance to digital marketing in the Jordanian medical field
- Examine the moderating role of subjective norms on the relationship between the (perceived ease of use, perceived usefulness, perceived enjoyment, and the perceived trust) on the digital marketing acceptance in Jordanian medical field.

### **1-4 Study Significance**

This study has additional significance and value represented by the following points:

#### **First: The scientific significance**

- Contribute to enrich the Arab library in general and the Jordanian in particular by increasing the number of studies in digital marketing acceptance factors and their impact on the healthcare providers, as Arab libraries lack these topics, as far as the researcher knows.

#### **Second: The practical significance**

- Digital marketing is a major tool today due to its important role in obtaining competitive advantage.

- The importance of this study lies in raising the awareness of medical field company about new ways and alternatives to reach their customers.
- The importance of this study in seeking to determine the impact of perceived ease of use, perceived usefulness, perceived enjoyment, and the perceived trust on healthcare providers acceptance to digital marketing in Jordanian medical field.
- The importance of this study in seeking to determine if subjective norms contribute as a moderating role in the digital marketing acceptance.
- Participate in improving the performance of medical field companies in Jordan.

## **1-5 Study Questions and Hypotheses**

This study will try to examine the following questions derived from problem statement.

### **The First Key Question:**

**Q1.** Is there an impact for (perceived ease of use, perceived usefulness, perceived enjoyment, and the perceived trust) on healthcare providers acceptance to digital marketing in Jordanian medical field?

The following questions can be derived from the key question above:

**Q1.1** Is there an impact of perceived ease of use on HCPs acceptance to digital marketing?

**Q1.2** Is there an impact of perceived usefulness use on HCPs acceptance to digital marketing?

**Q1.3** Is there an impact of perceived enjoyment on HCPs acceptance to digital marketing?

**Q1.4** Is there an impact of perceived trust on HCPs acceptance to digital marketing?

**The Second Key Question:**

**Q2.** Is the impact of (perceived ease of use, perceived usefulness, perceived enjoyment, and the perceived trust) on HCPs acceptance to digital marketing can be moderated by subjective norms?

**Study hypotheses:**

In order to examine the relationships between the study variables the following hypotheses can be proposed:

**Ho1:** There is no impact for (perceived easy of use, perceived usefulness, perceived enjoyment, and the perceived trust) on healthcare providers acceptance to digital marketing in Jordanian medical field at ( $\alpha \leq 0.05$ ).

The following sub-hypotheses are derived from the key hypothesis above:

**Ho 1.1:** There is no impact of perceived easy of use on HCPs acceptance to digital marketing ( $\alpha \leq 0.05$ ).

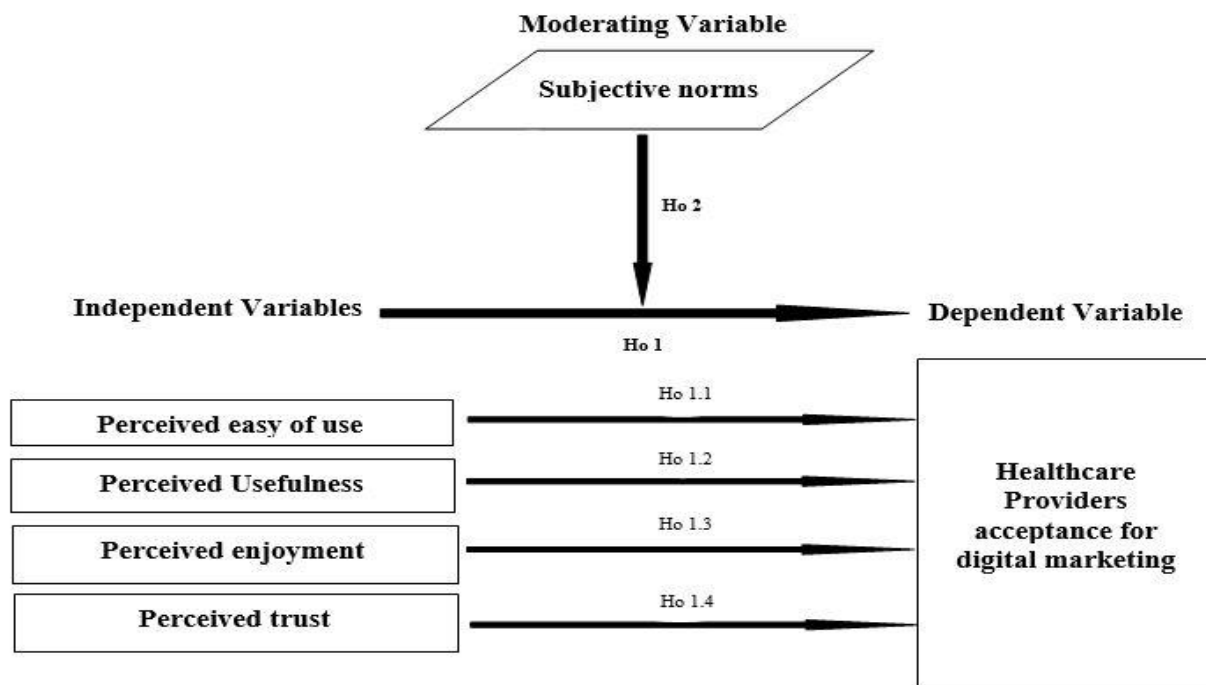
**Ho 1.2:** There is no impact of perceived usefulness use on HCPs acceptance to digital marketing at ( $\alpha \leq 0.05$ ).

**Ho 1.3:** There is no impact of perceived enjoyment on HCPs acceptance to digital marketing at ( $\alpha \leq 0.05$ ).

**Ho 1.4:** There is no impact of perceived trust on HCPs acceptance to digital marketing at ( $\alpha \leq 0.05$ ).

**Ho2:** There is no statistically impact at significance level ( $\alpha \leq 0.05$ ) for subjective norms in improving the impact of (perceived easy of use, perceived usefulness, perceived enjoyment, and the perceived trust) on healthcare providers acceptance for digital marketing in Jordanian medical field.

## 1-6 Study Model



**Figure (1-1): Study model**

Source: the model's structure is adapted from the following studies:  
(Kamal, Shafiq, & Kakria, 2020; Bedi, Kaur, & Lal, 2017; Zhao, & Wang, 2020; Schnall, et al., 2015)

## 1-7 Study Limits:

1. Place limits: The spatial limits for this are to study healthcare providers located in the Jordan.
2. Time limits: This study is expected to be completed by the end of 2021.
3. Topic limits: The study variables were (perceived easy of use, perceived usefulness, perceived enjoyment and the perceived trust) as an independent variable, and the HCPs acceptance for digital marketing as a dependent variable, with overlooking some variables that might have some influence on the HCPs acceptance to digital marketing.

### **1-8 Study Delimitations:**

1. This study will be applied to HCPs working in Jordanian medical field.
2. Arab libraries lack studies that dealt with the impact for (perceived easy of use, perceived usefulness, perceived enjoyment, and the perceived trust) on healthcare providers acceptance for digital marketing, to the knowledge of the researcher.
3. This study was conducted on HCPs in Jordan, which raises a question about the possibility to generalize the results of this study to HCPs in different countries.

### **1-9 Study Conceptual and Procedural Definitions**

**Perceived easy of use:** the level that person believes that using a particular system will be free of effort. (Davis, 1987). This variable can be measured through familiarity with technology and level of skills to use technology (Dhagarra, Goswami, & Kumar, 2020).

**perceived usefulness:** the level that person believes that using system will strengthen his/her job performance (Davis, 1987). This variable can be measured through evaluation what you pay and what you pay for it, and the behavioral intention (Dhagarra, Goswami, & Kumar, 2020).

**Perceived enjoyment:** the level that users feel coolness, having fun and playfulness while using technology or product (Sun, & Hsu, 2013). This variable measured through consumer perceived interactivity and consumption vision (Yim, & Yoo, 2020).

**Perceived trust:** is an important behavioral factor that motivate the acceptance of technology use (Rasmi, et al., 2018). This variable can be measured through the quality and integrity of information and by the level of data privacy (Rasmi, et al., 2018).

**HCPs Acceptance for digital marketing:** Refers to which extend the HCPs accepting the digital marketing as promotional tool and a way to receive the medical knowledge from the medical companies (Jahanmir, & Cavadas, 2018). This variable can be measured through interoperability and familiarity with the technology (Gagnon, et al., 2016). For example: webinars, online courses, webpage advertisement, email and social media are major part of medical field companies digital marketing tools.

**Subjective Norms:** Is a behavioral process in which an HCPs influenced by Macro & Micro dimensions of subjective norms (Minton, et al., 2018). This variable can be measured through sustainable attitude and normative & self-enhancing sustainable behaviors (Minton, et al., 2018).

## CHAPTER TWO

### Theoretical Framework and Previous Studies

This chapter will be divided into five main sections, as follows:

- 2-1 The first section: It will talk about the independent variables, what is Perceived easy of use, perceived usefulness, perceived enjoyment and the perceived trust, its importance, and its dimensions.
- 2-2 The second section: It will talk about the dependent variable (HCPs acceptance for digital marketing), what is digital marketing acceptance and its importance.
- 2-3 The third section: It will talk about the moderating variable (subjective norms), and its importance.
- 2-4 The fourth section: Previous studies (Arabic previous studies and English previous studies).
- 2-5 The fifth section: Discuss the differences between previous studies and current conducted study.





## **CHAPTER TWO**

### **Theoretical Framework and Previous Studies**

#### **2-1 Perceived Easy of Use, Perceived Usefulness, Perceived Enjoyment, and the Perceived Trust.**

##### **2-1-1 Preface**

Perceived easy of use (PEU) and perceived usefulness (PU) are main component of technology acceptance module (TAM) which have essential role of technology acceptance (Davis, 1989). Extended factor, perceived enjoyment (PE) has also strong impact on technology acceptance through its added value to technology use by fun, coolness, playfulness, and interactive content (Yim, & Yoo, 2020). last extension to factors affecting the technology acceptance is the perceived trust (PT), trust can be showed from the data privacy and integrity, which has important role to motivates the acceptance of technology (Rasmi, et al., 2018).

##### **2-1-2 PEU, PU, PE, and PT Concepts:**

###### **Perceived easy of use (PEU):**

Defined as the level of technology used having the perception of the best use of the defined technology. PEU has a significant direct or indirect relationship with behavioral intention to use, which is a key critical success factors of successful technology implementation (Alhashmi, Salloum, & Mhamdi, 2019). And as per (Davis, 1989), perceived easy of use defined as the level that person believes that using a specific system would be out of efforts.

Nowadays accepting digital technologies is completely changed, and this change comes from the digital innovations as the incorporation of digital capabilities vs previously pure physical materials. The digital innovations offer companies new opportunities to initiate new special experiences, which rapidly lead the era of digital transformation which has strong effect on customers perceptions about product or service innovations. Therefore, creating products with high level of acceptance is essential to protect companies' growth and profit. (Jahanmir, & Cavadas, 2018).

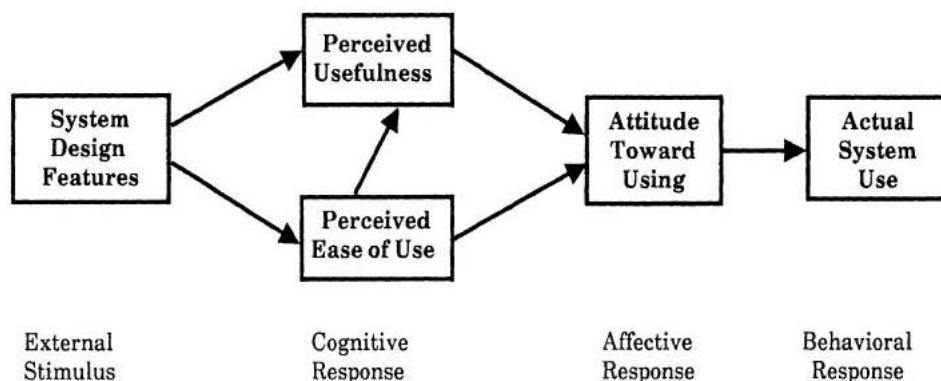
This research explores the determinant of late acceptance of digital innovations in the field of companies that work in the medical field products. Starting from the PEU as part of TAM model and moving through other factors from the new updates of TAM models as per the next parts of theoretical framework.

#### **Perceived usefulness (PU):**

Linked to the level in which users expect from the new technology to improve job performance, in the healthcare sector, it's the measure by which technology improves a HCPs acceptance. Moreover, the HCPs perceptions determine the extent to which it will be implemented (Alhashmi, Salloum, & Mhamdi, 2019). And as per (Davis, 1989), perceived usefulness defined as the level of which a person believes that using a specific system would strengthen his/her work performance and reflected positively on overall performance effectiveness.

To get the clear understanding of PU we need to study it as part of technology acceptance module TAM, which was innovated by (Davis 1987), mention and shows direct link of

perceived easy of use and perceived usefulness on the technology acceptance, and there is a cusial effect of perceived easy of use on the perceived usefulness as per the below model.

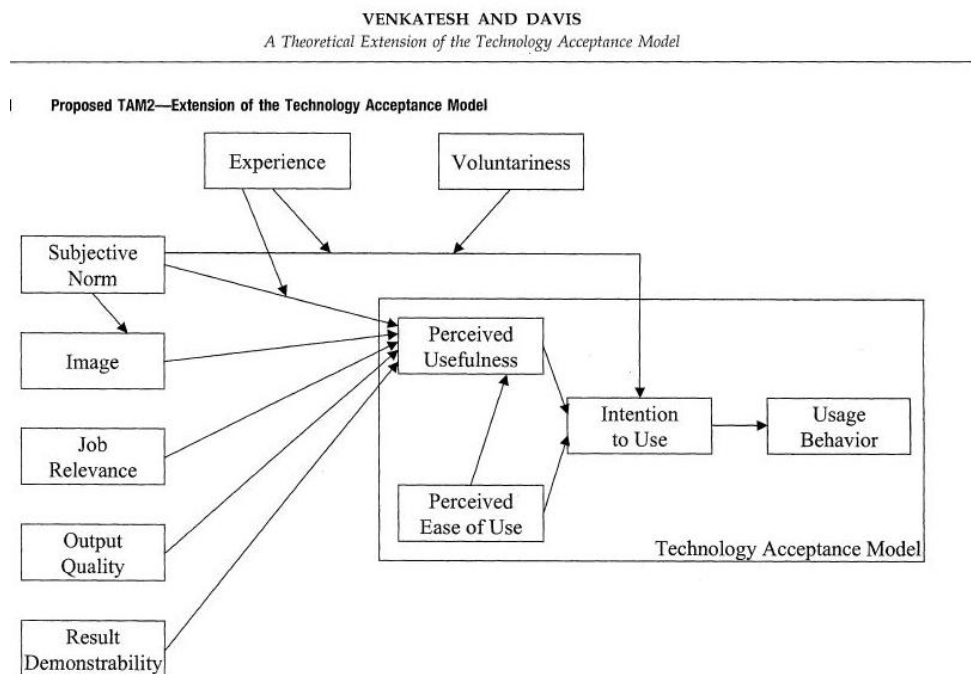


**Figure 2.1: TAM 1 (Davis, 1987)**

However, the technology acceptance model TAM by Davis so far represents the most established and strong foundation of technology acceptance, TAM which originated from the fields of sociology and psychology is the most frequently used model in different research studies. The major goal of TAM is to forecast the acceptance of new technology among users and to highlight the problems of the information system before its usage becomes prevalent among people. (Kamal, Shafiq, & Kakria, 2020)

In the process of understanding and development of technology acceptance model and the variables can affect it, and as per (Venkatesh & Davis, 2000) extended technology acceptance model TAM2 which include the effect of both social influence processes (subjective norm, voluntariness, and image) and cognitive instrumental processes (job relevance, output quality, result demonstrability, and perceived ease of use) these updates on TAM significantly accelerate the users acceptance for technology, and contributed to the

foundation for future research aimed to improve the understanding of user acceptance behaviors.



**Figure 2.2: TAM 2 (Venkatesh & Davis, 2000)**

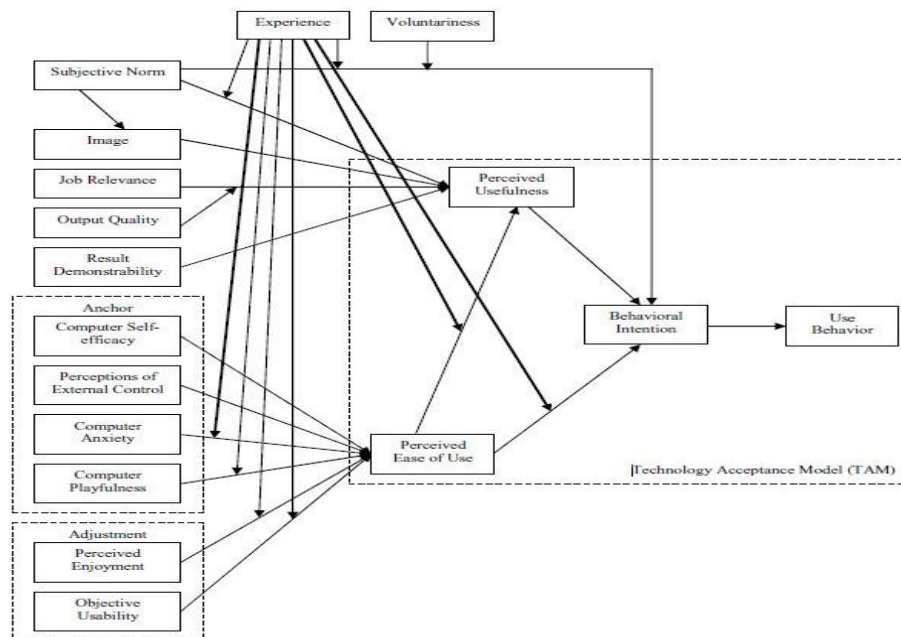
This research studying healthcare providers acceptance for digital marketing provided from the medical field companies represent improved alternative for medical field companies marketing activities in developing countries, hence it is linked to focus on inclusion of additional technology acceptance factors like perceived enjoyment, perceived trust, and the moderating role of subjective norms which we will discuss below.

### **Perceived Enjoyment (PE):**

Perceived enjoyment refers to the level of enjoyment an individual gets from technology usage. Basically, perceived enjoyment construct is linked to the level to which technology is entertaining and exciting to the consumers. It is related to enjoyment component that helps a consumer escape dullness, find entertainment and seek pleasure and enjoyment, A number of studies in various technological settings have analyzed the effect of perceived enjoyment

on acceptance and use of technology, most of these studies have found technology usage and perceived enjoyment to be positively correlated with each other as higher level of enjoyment motivates users to spend more time on the targeted technology which in turn increases users expectation about using technology. Therefore, perceived enjoyment has a strong impact on both attitude and consumers behavioral intention towards using a specific technology (Bedi, Kaur, & Lal, 2017).

To strengthen our understanding for the role and importance of perceived enjoyment we must look on last extension on technology acceptance model TAM 3 in 2008, which built based on the combination of TAM2 (Venkatesh & Davis, 2000) and the model of the determinants of perceived ease of use (Venkatesh, 2000), to develop an integrated model of Venkatesh and Bala TAM 3 (Venkatesh & Bala, 2008). The effect of perceived enjoyment on technology acceptance model that's showed on TAM3 was insightful to study the direct effect of perceived enjoyment on technology acceptance in this research.



<sup>a</sup>Thick lines indicate new relationships proposed in TAM3.

**Figure 2.3: TAM 3 (Venkatesh & Bala, 2008)**

This research aims to understand the effect of perceived enjoyment on the healthcare providers acceptance for medical field companies marketing activities. And to know the satisfaction level of the perceived enjoyment of current medical field companies' activities.

**Perceived Trust (PT):**

Perceived Trust is a behavioral belief that has been studied in digital marketing and shown to have a preferable effect on consumers intention to use a technology. Trust can be defined as the belief that the other party will behave responsibly and will not attempt to exploit user susceptibility. there are two kinds of trust: 1) party trust - trust in the benevolence and credibility of a particular party; and 2) control trust - trust in the integrity of the transaction medium. The importance of trust is heightened when there is a high level of uncertainty (Schnall, et al., 2015).

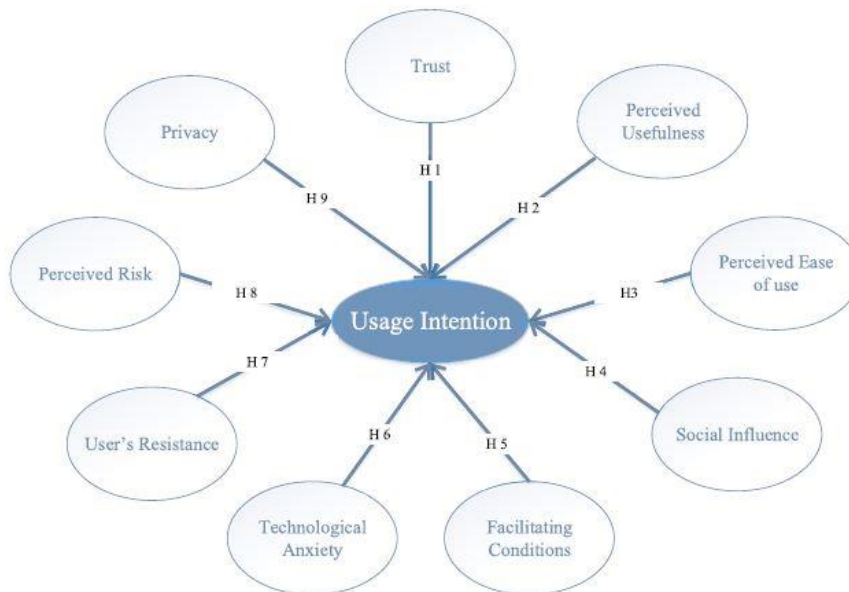
Users may not be confident that outcomes can be achieved unless they have faith in the entities, hence trust is linked to perceived usefulness. Trust is linked to perceived ease of use since it minimizes the time and effort required to monitor the system's correct functioning. A higher level of trust in an online entity lowers the impression of risk throughout the encounter. (Schnall, et al., 2015).

Online technology has become a buzzword in almost every part of our lives. Because of this, it is widely utilized in the service sector, particularly in knowledge transactions. manufactures immaterial commodities that do not require transportation be kept or transferred in a tangible form. On-line technology. In the industrial sector, it's also utilized as an intermediate tool. It makes knowledge transmission across departments, as well as between production lines and control procedures, much easier. Technology is now being used

by the younger generation to study and bridge gaps. As a result, technology is present in practically every aspect of human life. (Rasmi, et al., 2018).

Trust has been found to be an essential motivator for the use of technology. The information's quality and integrity are indicators of trustworthiness. Trust in the online system's security or in the quality of the system's offerings. Under different studies, the term of trust in technology acceptance has diverse connotations for different people. (Rasmi, et al., 2018).

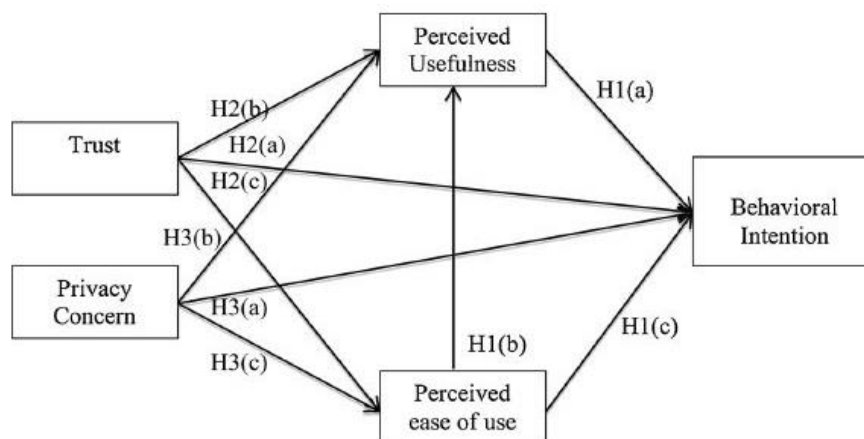
This study aims to understand the perceived trust effect on the healthcare providers acceptance for digital marketing provided by the medical field companies, the role of perceived trust on technology acceptance mentioned in many researches which we will share three of these researches models:



**Figure 2.4 (Kamal, Shafiq, & Kakria, 2020)**

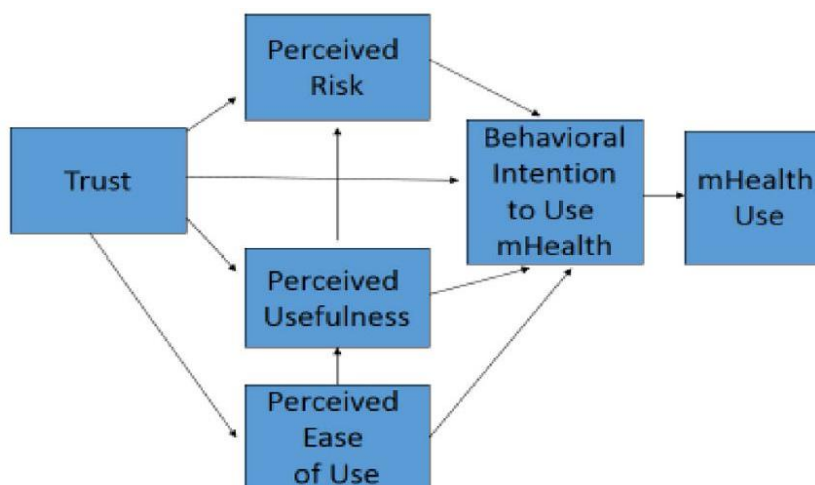
This research model investigating acceptance of telemedicine services through an extended technology acceptance model TAM. Which conclude that trust is one of the main

factors of telemedicine services acceptance. Therefore this research gives the researcher insight to consider trust as one of the independent variables in addition to emphasize the role of perceived ease of use and usefulness as independent variables as well.



**Figure 2.5 (Dhagarra, Goswami, & Kumar, 2020)**

This research model studying the impact of trust and privacy concerns on technology acceptance in healthcare. Which conclude that trust is direct predictor of patients' behavior to accept technology in availing health services. Therefore this research emphasizing way researcher consider the perceived easy of use, perceived usefulness and perceived trust as independent variables in our study.



**Figure 2.6 (Schnall, et al., 2015)**



This research model studying Trust, Perceived Risk, Perceived Ease of Use and Perceived Usefulness as Factors Related to mHealth technology use. Which conclude that technology creators must accompanied trust measure to PR, PEU and PU. Which has strong impact to adapt study model to include perceived easy of use, perceived usefulness and perceived trust as independent variables in this study.

## **2-2 HCPS Acceptance for Digital Marketing**

### **2-2-1 Preface**

There is no doubt about the importance and the role of digital marketing nowadays, new digital channel opened, higher level of customization on the digital tools, all these factors strengthen the role and importance of digital marketing. medical sector as one of the huge business sectors across the world still has many areas to implement the technology specially in digital marketing side, as all medical companies aiming to deliver their brands competitive advantages to the health care providers to achieve the company's objectives in market share and sales (Nuseira, & Aljumahb, 2020). Health care providers include all the worker in the medical filed (physicians, nurses, pharmacists, nutritionist.... etc.) as per the WHO definition for HCPs.

### **2-2-2 Digital Marketing Concept**

The integrated technological approaches with the traditional marketing activities identified as digital marketing, digital marketing has a specification that need to be understood to develop and execute an effective marketing plan. With the raising up acceptance to new technology for both people and companies increase the importance of digital marketing to interact and engage with customers. The quick growth for internet users

since 2010 was reported as more than 2 billion and it's expected to double every year, digital marketing has become an essential tool for executing the company's marketing plans. Digital marketing applications are mainly divided to 1- online advertising, 2- affiliate marketing, 3- email marketing, 4- social media marketing, 5- search engine optimization (SEO). (Nuseira, & Aljumahb, 2020).

The importance of digitalization as a part of business is highly elevated, as it's the base in upgrading traditional patterns of business activities execution to interact with customers. The new trend of exploitation of digital marketing in business activities has changed the competition basis and influence customer's attitude. Digitalization has strong effect on companies and influences brands through the implementation of online services that includes storing, searching, and playing entertainment, email, Facebook, and other applications that change the way of interaction (Kiili, et al., 2019). Because of its relevance in communicating with stakeholders, literature has addressed the necessity for a "market in the digital world." The online availability of goods and services allows businesses to browse, enquire, communicate, complain, purchase, and pay for goods and services from remote areas. For effective interaction among stakeholders, the majority of firms have implemented the most up-to-date technological equipment and methods. To efficiently disseminate information, most marketing techniques lean heavily on the use of online interactive technologies. Relevant experience and thorough knowledge of the consumer are required for effective and efficient connection between the company and its customers. For efficient digital marketing tactics, the nature of the devices used to connect with the organization, interaction patterns, and customer-demanded content must all be known. For effective communication to create

improved experiences that engage consumers, a deeper understanding of consumer behavior and interaction preferences is essential. (Nuseira, & Aljumahb, 2020).

Traditional marketing techniques and structures have been modernized, and technology focused operational activities, such as communication with customers and stakeholders, have been introduced. Because marketing communication via digital technology promotes engagement among participants, it allows businesses to develop long-term relationships between customers and marketers for mutual goals and progress (Yoga, Korry, & Yulianti, 2019). Employee engagement has improved, sales have increased, trust and loyalty have increased as a result of digital content marketing (Hollebeek & Macky, 2019)

### **2-2-3 Health Care Provider's Concept**

As per the WHO definition HCPs are all worker in the medical field and indirect contact with patients or their families including physicians, nurses, pharmacist's nutritionist paramedic,etc. in this study and as per the market dynamics in Jordan this research will focus on physicians, nurses, and pharmacists.

## **2-3 Subjective Norms**

### **2-3-1 Preface**

The success with any market needs deep understanding and adaptation for our plan with the specific behavior and culture of this market, that's highly linked to the subjective norms effect on our business plan. Subjective norms refer to consumer perception, perceived stress, power forced and influence by others, like peer's family fiend's media and authority figures, which have direct or indirect effect on consumer decisions. Sometimes consumer wants to buy something, but their family or friends have strong influence to avoid specific product, so

we can't ignore the behavioral structure in each market and its effect in decision making process (Bhatti, & Akram, 2020).

### **2-3-2 Subjective Norms Concept**

Subjective norms represent an individual perception regarding how the consumer should act and what others will think about the consumer when they engaged in specific behaviors. Using the basis of the theory of reasoned action (TRA), pragmatisms suggest a direct relationship with subjective norm that influences attitudes leading to sustainable behaviors.

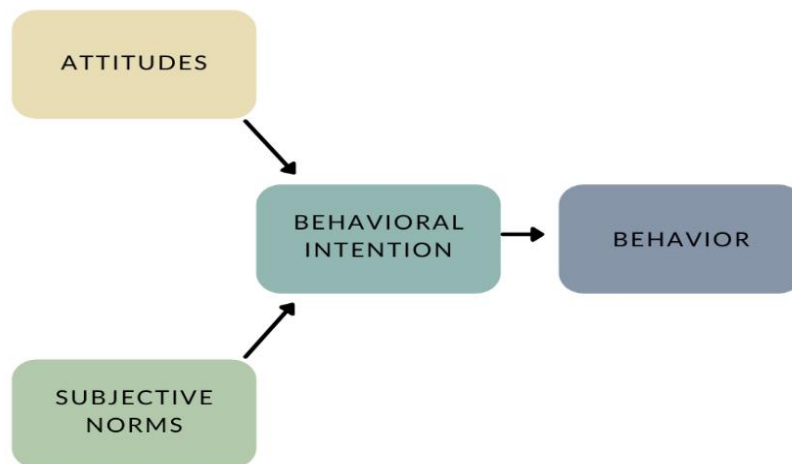
The culture origin of consumer is suggested as a former to attitudes, which precedes sustainable behaviors, and pragmatism in a national culture suggested as moderating sustainable behavior intention. Sustainable consumption can include both sustainable attitudes and sustainable behavior. (Minton, et al., 2018). research on sustainable consumption, specifically on consumption communities found two dimensions of subjective norms: 1- the specific expectations related to the consumption group (macro-level) and 2- the way in which the individual within the group adheres with these expectations comparing with other group member (micro-level). (Fishbein & Ajzen, 1975).

- 1- Macro level of subjective norm (Normative): Norms can operate as a binding agent, motivating members of a group to share, actively participate, and be individually accountable to the group for their behavior. This form of subjective norm refers to the us against them mentality and establishes the consumer community's limits. (Minton, et al., 2018)
- 2- Micro level of subjective norms (Self-enhancing): When consumers engage in specific patterns of consumption within a social group, they can perceive a subjective norm.

Some customers, for example, practice sustainable consumption by being passionate recyclers, while others identify as locavores, despite the fact that both types of consumers are part of the sustainable movement. (Minton, et al., 2018)

### **Theory of Reasoned Action**

Martin Fishbein first proposed the theory of reasoned action (general theory of behavior) in 1967, and it was later expanded by Fishbein and Icek Ajzen (e.g., Fishbein & Ajzen 1975; Ajzen & Fishbein 1980). (Fishbein, M. 2008). The theory of reasoned action (TRA) suggests that a person's behavior is determined by their intention to perform the behavior and that this intention is, in turn, a function of their attitude toward the behavior and subjective norms (Fishbein & Ajzen, 1975).



**Figure 2.7 Theory of reasoned action, adapted from (Fishbein & Ajzen, 1980)**

This study model aims to understand the effect of subjective norms on healthcare providers in Jordan to accept the digital marketing provided from medical field companies.

## 2-4 Previous Studies

- Rebecca Schnalla, Tracy Higginsa, William Brownb,c, Alex Carballo-Dieguezc, and Suzanne Bakkena,b (2015) entitled: **“Trust, Perceived Risk, Perceived Ease of Use and Perceived Usefulness as Factors Related to mHealth Technology Use”**

The wide use of mobile technology highlights the opportunity to use these technologies to develop health related behaviors. On the same time using mobile health technology raises the importance of privacy and security concerns of consumers. The aim of this study is to understand the perceived easy of use, usefulness, trust, and risk on the behavioral intention to use a mobile application to meet the HCPs need with HIV patient. To understand these factors this study work to prepare focus group sessions for 50 HIV patients and 30 HIV healthcare providers. This study finding was about that mobile health needs for perceived easy of use, usefulness, with little perceived risk accompanied by a measure of trust in the technology creators.

This research studying the technology acceptance from the patients’ side, otherwise current research studying the technology acceptance from the healthcare provider side.

- Gagnon, M. P., Ngangue, P., Payne-Gagnon, J., & Desmartis, M. (2016). entitled: **m-Health adoption by healthcare professionals: a systematic review**. *Journal of the American Medical Informatics Association*.

The goal of this systematic review was to bring together what is currently known about the factors that influence healthcare professionals' use of mobile health (m-health) applications. Methods we did a systematic literature search on four electronic databases (PubMed, EMBASE, CINAHL, and PsychInfo) from 2000 to 2014. We also looked up references from the studies that were included. Studies were included if they documented

healthcare professionals' perspectives of barriers and facilitators to m-health adoption, were published in English, Spanish, or French, and had an empirical study design (qualitative, quantitative, or mixed methods) Two authors independently assessed research quality and conducted content analysis using a validated extraction grid with pre-determined barriers and facilitators classification.

Results the search technique yielded 4223 potentially relevant papers, 33 of which matched the requirements for inclusion. Perceived usefulness and ease of use, design and technical concerns, cost, time, privacy and security issues, familiarity with the technology, risk-benefit assessment, and interaction with others (colleagues, patients, and management) were the main perceived adoption factors for m-health at the individual, organizational, and contextual levels. Conclusion This systematic review gives a collection of important elements that may be used to identify the obstacles and potential for healthcare practitioners to use mobile health.

This systematic review provides us with strong understanding of healthcare providers status when it comes to accept type of digital marketing tools (mobile health).

- Elizabeth A. Minton<sup>a,1</sup>, Nathalie Spielmann<sup>b</sup>, Lynn R. Kahlec, Chung-Hyun Kimd (2017) entitled: **“The subjective norms of sustainable consumption: A cross-cultural exploration”**

While many researches focuses on aspect of sustainable consumption, in term of sustainable behaviors and motivation, little researches test the importance of national culture and how pragmatism influence sustainable consumption. Sustainable consumption can reflect both sustainable behavior and sustainable attitude. In this research two types of social norms linked to sustainable consumption (normative and self-enhancing) are enrolled and

tested for three nations (Japan, France, and USA). The results propose that consumption differences justified by the country level of pragmatism and culture value. Based on the theory of reasoned action, research found that sustainable attitudes affect the relationship between the level of pragmatism of sample nation and sustainable behavior.

This research gives excellent insight about how subjective norms affect the sustainable consumption. In our research we use the subjective norms as moderating factor for digital marketing acceptance from the healthcare providers.

- Sarbjit Singh Bedi<sup>1</sup> Sukhwinder Kaur<sup>2</sup> Amit Kumar Lal<sup>3</sup> (2017) entitled: **“Understanding Web Experience and Perceived Web Enjoyment as Antecedents of Online Purchase Intention”**.

The aim of this research is to identify web experience and perceived web enjoyment as factors of online purchase intention. The results of this study show that web experience of an online shoppers is come from website visual design, website interactivity, website privacy, and website easy of navigation. This study also mentioned that perceived website enjoyment is partially mediating the engagement between website experience and attitude of an online shopper. This study adding value to marketers to know the strong effect of interactive website experience for online consumers.

This research clearly shows the impact of web enjoyment on technology acceptance, which highly insightful for current research.



- Sara F. Jahanmira, N, Joana Cavadasb (2018) entitled: **“Factors affecting late adoption of digital innovations”**

As a result of less attention on late adoption for the digitalized product, this study focuses on the reasons behind the late adoption with the digital innovation and selects five variables 1- attitude on technology, 2- negative word of mouth about technology, 3- global brand image, 4- consumer innovation, 5- lead user profile. The results show that with exception for negative word of mouth, all variables have a negative effect on the chances of moving on the adoption scale from weak to strongly adopter. On the other hand, the increased positive attitude of consumers towards technology can be strongly effective to increase the rate of adoption than projecting the global image of the company. Understand these factors effect will be very helpful for companies to accelerate the consumer adoption with their new technology.

This research shows an excellent understanding of acceptance and adoption for new technology which highly insightful with our research objective of studying digital marketing acceptance.

- Mohammad Rasmi, Malik B. Alazzam, Mutasem K. Alsmadi, Ibrahim A. Almarashdeh, Raed A. Alkhasawneh & Sanaa Alsmadi (2018) entitled: **“Healthcare professionals’ acceptance Electronic Health Records system: Critical literature review (Jordan case study)”**

This case study aims to understand the factors that affect the acceptance of electronic health records (EHRs) system in the Jordan e-health sector, increase the acceptance for e-health system will enhance the quality of services provided to patients, by reducing the medical error, reducing the treatment cost and for sure increase the medical procedure

documentation for the future, all these will increase the quality of medical services. Little research is available that addresses the healthcare providers' acceptance for the electronic health records. This study shows that trust factors linked with the unified theory of acceptance and use of technology (UTAUT) from the healthcare providers, and the theoretical model initiated to explain the exercise behavior of healthcare providers. To accept the electronic health record system.

This literature review shows the healthcare professionals' acceptance of electronic health records system, which shows the effect of trust and other factors on healthcare professional acceptance for new technology to increase the quality of services provided patients.

- Shaikha FS Alhashmi<sup>1</sup>, Said A. Salloum<sup>1, 2</sup>, and Chaker Mhamdi<sup>3, 4</sup> (2019) entitled: **“Implementing Artificial Intelligence in the United Arab Emirates Healthcare Sector: An Extended Technology Acceptance Model”**

As a result of governmental direction to implement the artificial intelligence in the healthcare system to improve the services for chronic patients and even for early diagnosis, this study aims to understand the factors that will help successful implementation for this project from both patients and healthcare providers. This paper creates and examines the modified technology acceptance model (TAM) to explore critical success factors (CSFs) for the acceptance of artificial intelligence in the healthcare sector. The study shows that managerial, organizational, operational and IT infrastructure factors have a positive effect on perceived usefulness, and perceived ease of use, and should be included as critical success factors to control the execution of artificial intelligence in the healthcare sector.

This research studying the acceptance of artificial intelligence in the United Arab Emirates healthcare sector, which has wide view of new technology acceptance from patients.

- Devendra Dhagarraa, Mohit Goswamib,\* , Gopal Kumarb (2020) entitled: **“Impact of Trust and Privacy Concerns on Technology Acceptance in Healthcare: An Indian Perspective”**

This paper reviews the technology acceptance model (TAM) by studying the influence of behavioral traits (privacy concerns and trust) and cognitive beliefs (perceived easy of use and usefulness) on patients’ behavioral intention to accept technology in medical services delivery. Although the developed healthcare systems, there are a limited study that focus on how the behavioral constructs impact the acceptance of new technology in healthcare system. The aim of this study is to understand the relation that predict patient’s acceptance for technology in healthcare service, study model tested through survey for 416 patients visiting health centers in New Delhi, India. Results indicate that perceived easy of use, perceived usefulness, trust, and privacy concern are direct affect patients’ behaviors to accept technology in healthcare services.

This research studying the technology acceptance from the patients’ side, otherwise current research studying the technology acceptance from the healthcare provider side.

- Jie Zhao 1,\* and JianfeiWang 1,2 (2020 ) entitled: **“Health Advertising on Short-Video Social Media: A Study on User Attitudes Based on the Extended Technology Acceptance Model”**

The quick development of short video in social media network as a kind of advertisement, lead the opportunity to do the same in the health-related filed advertisement

and preferences, and as a result of no empirical evidence till the date of this study that shows if users will accept short video on health-related field. This study will be first study that measure quantify the acceptance for short video in health-related field and building the module on two new design; 1- suggesting that social media, intrusiveness, informativeness, and relevance into the original TAM to show the feature of short video social network. 2- adding two mediator variables perceived usefulness and attitude so we can be more accurate to identify the effect of each factor on the user acceptance for health-related short video ads. The result shows that the four mentioned factors in addition to the perceived easy of use have significant influences on perceived usefulness, attitude, and purchase attention. Another result was about the valid mediating role for perceived usefulness on attitude and purchase intention. We also found that we can't predict the user's attitude on health-related short video by the perceived easy of use.

This research studying the acceptance of shot-video social media (health advertising content) from the users or consumers, gives high insight about the acceptance of health content in one of digital marketing tools (social media).

- Bhatti, A., & Akram, H. (2020). Entitled: **The moderating role of subjective norms between online shopping behavior and its determinants**. International Journal of Social Sciences and Economic Review, 1-09.

The study's goal is to find out why internet shopping is becoming so popular these days. A look at the exponent advancement of industry participants reveals that there is still a huge reservoir of e-commerce marketplace potential. The convenience of online shopping piqued the curiosity of both sellers and dealers. to this region the internet's sophisticated level has

altered the nature of trading. Purchasing on the internet is crucial. These days, it is intimately related with consumers. As a result, the current research establishes the Subjective standards moderate the link between risks and online shopping behavior.

**Methodology:** Data was gathered by students who purchased questionnaires online, with 550 sets of questionnaires being utilized for reliable coding and analysis. To test hypotheses, collected data was analyzed using SPSS and Smart PLS. Risks have a reducing effect, and subjective norms improve online shopping behavior, according to the findings.

**Main Takeaways:** Domestically and globally, the way information is shared has evolved. Ecommerce has altered our lives and is the most convenient, best solution for a hectic lifestyle—in addition, this study is contributing to information and comprehension of this topic. The research and deductive technique were both quantitative. Furthermore, the primary goal of this research is to look at how financial, convenience, and privacy risks influence online buying behavior, as well as the moderating role of subjective standards.

**Research limitations/implications:** Although the scholars worked hard to contribute to OSB, there were certain limitations in this study. Scholars focus on online users only, whereas non-users are ignored in the study. Consumers and non-users should be the focus of future assessments, as well as other factors. Use a moderator in this study; future studies can look into mediator.

**This study's novelty/originality:** The variables in the current study are convenience, financial, privacy threats, online shopping behavior, and subjective norms. The current study highlights the situation for upcoming researchers who are interested in studying and

researching this topic. Because of the consequences, it can be inferred. This study will assist the government in formulating policies and selling products.

- Nuseir, M. T., & Aljumah, A. (2020). Entitled: **The role of digital marketing in business performance with the moderating effect of environment factors among SMEs of UAE**. *International Journal of Innovation, Creativity and Change*, 11(3), 310-324.

The purpose of this study is to look into the impact of digital marketing on business performance in the UAE's small and medium business sector. Technological improvements, such as the use of digital applications, allow businesses to engage with customers while remaining competitive with limited resources. Customers' ability to obtain information on SMEs' products or services must be made simple, timely, and accurate using various digital technologies. The goal of this study is to see if there is an empirical link between digital marketing and business performance in UAE SMEs. To identify the proposed framework, a study was done on marketing managers and IT managers of SMEs. The data was analyzed using SMART-PLS using measurement and structural equation modeling, and it was based on the findings of a study on how digital marketing affects business performance. The environment is seen as a critical determinant in corporate success. The analysis found that hypothesis H1 was accepted, however hypothesis H2 and H3 were statistically rejected. The study found no evidence of moderation in the current research's proposed variables. The study is unique in that it establishes an empirical relationship between digital marketing activities and business performance while controlling for external influences.

- Yim, M. Y. C., & Yoo, C. Y. (2020). Entitled: **Are digital menus really better than traditional menus? The mediating role of consumption visions and menu enjoyment**. *Journal of Interactive Marketing*, 50, 65-80.

Consumer reactions to interactive media in a restaurant context were investigated in this study (i.e., digital menus). The first study put a conceptual model to the test, looking at how the underlying process influences customers' perceptions of a Web-based digital menu. The findings revealed that consumption. The impacts of perceived interaction on attitudes toward computerized menus were mediated by visions and menu satisfaction. Direct links were also discovered in the first study. As a key modulator of the connection, product experience is crucial. Study 2 conducted an offline lab experiment that examined the use of digital and traditional menus in ordering dishes that participants had tried vs those they had not. In general, tablet-based digital menus boosted participant enjoyment, increased adoption intentions, and encouraged them to order more in less time. However, they were only used for less-experienced dishes. Furthermore, in the digital menu condition, consumption visions were substantial mediators of interactive effects, but not in the traditional paper menu condition, but menu enjoyment was a mediating factor in both.

- Kamal, S. A., Shafiq, M., & Kakria, P. (2020). Entitled: **Investigating acceptance of telemedicine services through an extended technology acceptance model (TAM)**. *Technology in Society*, 60, 101212.

Background: Developing countries all around the world are working hard to ensure that health care is available to everybody. In underdeveloped countries, telemedicine services are becoming a more common means of providing basic health care.

The goal of this study was to learn more about the elements that influence the acceptability of telemedicine services among Pakistan's rural population. The Technology Acceptance Model (TAM) was used as a theoretical framework for this study, with several other antecedents thrown in for good measure.

The research data was collected from 275 participants via a face-to-face survey approach. The Partial Least Squares (PLS) method was used to evaluate the data.

The data imply that perceived ease of use, technological anxiety, social influence, perceived ease of usefulness, trust, facilitating conditions, perceived risk, and resistance to technology all influence telemedicine service utilization intention.

Conclusions: The applicability of TAM with the addition of extra factors to model the uptake of telemedicine services in developing countries is confirmed in this research work. The study provides useful information for policymakers and health-care professionals in determining the facilitators and inhibitors to large-scale telemedicine service deployment. The findings of the study on characteristics such as perceived risk, trust, conducive conditions, and reluctance to change can help create and provide adequate telemedicine services in underdeveloped nations.

## **2-5 What Distinguishes this Study from Previous Studies?**

1. This study distinguished from the previous researches by examining the independent variables of (Perceived easy of use, Perceived usefulness, Perceived enjoyment, and perceived trust) and including the effect of moderating variable (Subjective norms), on healthcare providers acceptance for digital marketing provided by the medical field companies, thus, it will expand the understanding of the study phenomenon and a more accurate interpretation of the results.
2. Previous research in general talk about the technology acceptance from the different types of customer point of view. In this study we focus on important sector (health care



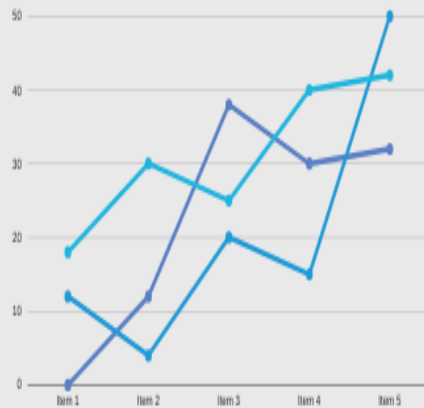
providers) and their acceptance to digital marketing provided by medical field companies, which doesn't cover before as per the best researcher knowledge.

3. Healthcare providers reflect an important ground to implement the study, since the medical field companies face a bulk pressure to reach efficiently the broadest healthcare providers with their products knowledge and specifications which make it the first study to knock this door, and that was based on the researcher best knowledge.
4. This study creates a theoretical and analytical framework about digital marketing acceptance from the healthcare providers in Jordan.

## CHAPTER THREE

### Methodology (Methods and Procedures)

# RESEARCH METHODOLOGY



## **CHAPTER THREE**

### **Research Methodology (Methods and Procedures)**

This chapter presents the research methodology in terms of study design, sample and population, reliability and validity, that collected from the population, after that we will show the procedure and statistical processes which the researcher used in this study.

#### **3.1 Study Design**

This research adopted descriptive and analytical approach, in order to test the impact of (Perceived easy of use, Perceived usefulness, Perceived enjoyment and perceived trust), with presence of Subjective norms as moderating variable, on healthcare providers acceptance for digital marketing provided by the medical field companies in Amman City.

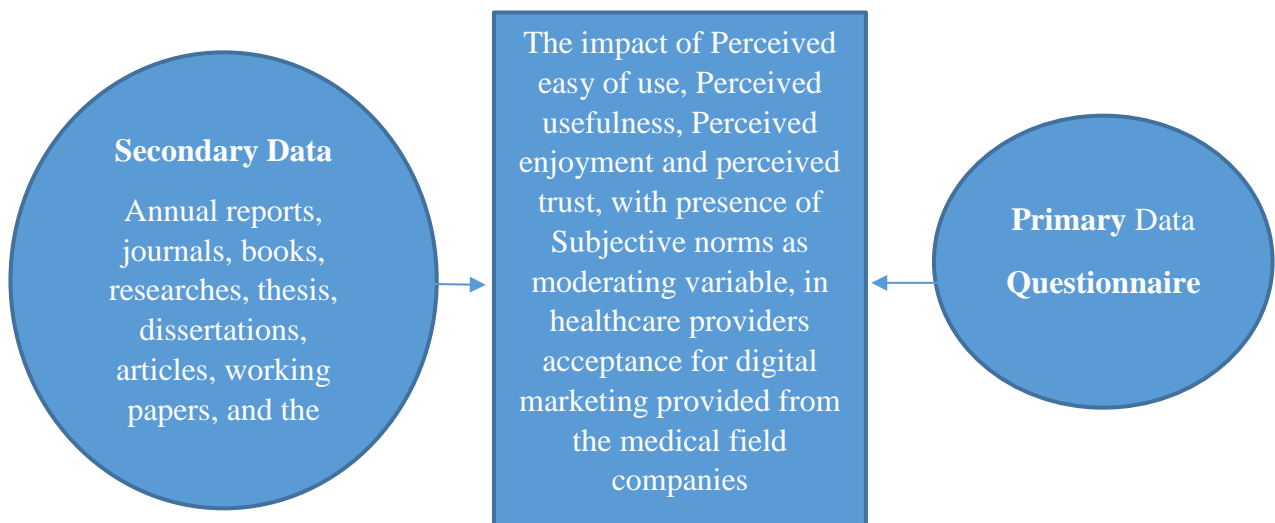
#### **3.2 Study Population and Sample**

The study population consisted of all healthcare providers working in medical field sector in Amman city.

A convenience sampling technique has been chosen to collect data from respondents. and the determined sample size planned to be (400) respondents; in order to achieve stable statistical analysis. However, the researcher used both (fieldwork and social media) to reach healthcare providers. Thus, after around three months of hard work of questionnaires distribution we reached more than (400) healthcare providers. Unfortunately (388) answers were retrieved and the valid questionnaire for analysis was (375) due to the healthcare providers work pressure difficulty, while the response rate was (97%).

### 3.3 Data Collection Methods

The researcher gathered the data that help to find the result for the objective of this study from two main sources 1- primary data, 2- secondary data and will be discussed below. The below figure prepared by the researcher illustrates the source of data that we used in this study, the primary data collected from the questionnaire distributed to the population, while the secondary data from Journals, books, researches and thesis used to understand the study variables.



**Figure 3.1: Data collection sources**

Source: Prepared by the Researcher

Here are the steps in developing the questionnaire as a tool in collecting data from the sample:

- The researcher depends on previous researches to build the variables measurement in questionnaire, which was as per the below table.

**Table (3.1) Variable's measurements references.**

<b>Variables</b>	<b>Measurements Reference</b>
Perceived easy of use	(Kamal, Shafiq, & Kakria, 2020), (Dhagarra, Goswami, & Kumar, 2020)
Perceived usefulness	(Kamal, Shafiq, & Kakria, 2020), (Dhagarra, Goswami, & Kumar, 2020)
Perceived enjoyment	(Yim, & Yoo, 2020).
Perceived trust	(Kamal, Shafiq, & Kakria, 2020), ((Dhagarra, Goswami, & Kumar, 2020)
Healthcare providers acceptance for digital marketing	(Shoter, Bataineh, & Salhab, 2016)
Subjective norms	(Al-Swidi, et al., 2014).

- The researcher interviewed a panel of reviewers from academic institutions and from the medical field, mentioned in Appendix (1) Some of the interviews were held in offices and some were by phone calls and discussed the topic of the study.

### **3.4 Research Instrument**

The questionnaire consisted the following parts:

- Part one: Demographics and sample characteristics questions. It is represented by (job type, visit frequency from medical field companies, prescription habit, years of experience, workplace, gender, age).
- Part two: Independent variables questions (Perceived easy of use, Perceived usefulness, Perceived enjoyment and perceived trust).
- Part three: Dependent variable questions (Healthcare providers acceptance for digital marketing).
- Part four: Moderating variable questions (Subjective norms).

### 3.5 Statistical Methods

The researcher coded all gathered data and processed by using the Statistical Package for Social Sciences (SPSS-V20) and (AMOS-V23). Consequently, (0.05) significance level has been used in examining hypotheses. but, to achieve the research goals, the following descriptive statistical and analytical methods have been considered:

- Frequencies and percentages to describe sample characteristics.
- Mean and standard deviation to determine how much respondent's answers are deviated from its mean.
- Exploratory factor analysis (EFA) in order to test the nature of relationship between independent and dependent variables.
- Confirmatory factor analysis (CFA) by using path analysis to test hypotheses based on related and supported measurements in previous studies for independent and dependent variables.
- Simple regression has been used to examine the impact of the research independent variable dimensions on the dependent variable.
- Multiple regression technique has been used to determine which dimension elements has a greater impact on the dependent variable.
- Interactive hierarchical regression to test the impact of the moderating variable on the relationship among the independent and dependent variable.
- Variance inflation factor (VIF) and tolerance to make sure that the independent variable has no multi-collinearity problem.

The following table shows sample characteristics, for the healthcare providers in Amman city:

**Table (3.2) Describing the Sample's Characteristics**

<b>Variable</b>	<b>Category</b>	<b>Frequencies</b>	<b>Percentage</b>
<b>Your Job</b>	Nurse	64	17.1
	Physicians	44	11.7
	Specialist Physicians	199	53.1
	Pharmacists	68	18.1
	Total	375	100.0
<b>Are you in contact with regular visits of medical field companies' representatives?</b>	Yes, high contact (more than 10 visits per day)	84	22.4
	Yes, (5 to 10 visits per day)	67	17.9
	Yes, (less than 5 visits per day)	115	30.7
	No (no regular visits)	109	29.1
	Total	375	100.0
<b>Are you prescriber for any medical field products?</b>	Yes	278	74.1
	No	50	13.3
	No but having Influence on prescriber	47	12.5
	Total	375	100.0
<b>Years of Experience</b>	Less than 5	45	12.0
	5 - less than 10	111	29.6
	10 - less than 15	91	24.3
	15 and above	128	34.1
	Total	375	100.0
<b>Workplace</b>	Public sector	176	46.9
	Private hospital	90	24.0
	Private clinic	70	18.7
	Private pharmacy	28	7.5
	Chain pharmacy	11	2.9
	Total	375	100.0
<b>Gender</b>	Female	183	48.8
	Male	192	51.2
	Total	375	100.0
<b>Age (years)</b>	22 – less than 30	50	13.3
	30 - less than 38	132	35.2
	38 -Less than 46	105	28.0
	46 and above	88	23.5
	Total	375	100.0

Table (3.1) reflects the sample's personal and demographic characteristics which included (job type, visit frequency from medical field companies, prescription habit, years of experience, workplace, gender, age).

As results showed, more than half of the sample respondent (53.1%) were specialist physicians, and they count (199), while (68) respondents are pharmacists with percentage of (18.1), whereas (64) are nurses with percentage of (17.1), and finally (44) are physicians with percentage of (11.7). And this shows the high role of specialist physicians in medical filed products prescribing, in addition to take in our consideration that (53.1%) of this research results comes from physician's specialist point of view.

Are you in Contact with regular visits of medical field companies' representative? This question asked to show how the respondents healthcare providers are important for medical field companies as the potential and important healthcare providers faced high frequency of visits from the medical filed companies. This study results shows that the number of healthcare providers who had direct and regular visits from the medical filed companies in different visit frequency are (266) with percentage of (70.9), divided to (84) healthcare providers with percentage of (22.4) visited more than ten times per day, and (67) healthcare providers with percentage of (17.9) visited from 5 to 10 times per day, and (115) healthcare providers with percentage of (30.7) visited less than 5 times per day, and only (109) healthcare providers hadn't visited from medical field companies with percentage (29.1). which shows the huge number of targeted healthcare providers who are important for medical field companies to be visited, and also shows the high level of competition between medical field companies to get their share from healthcare providers.

Are you prescriber for any medical field products? This question asked to identify the respondents healthcare providers potentiality and also to evaluate their level of important for medical field companies, results shows that, there is (278) healthcare providers are



prescribers for medical field products with percentage of (74.1), and (50) healthcare providers hadn't been prescribe a medical field product with percentage of (13.3), while (47) healthcare providers hadn't been prescribe but had influence effect on prescriber with percentage of (12.5). which shows the majority of healthcare providers (325) with percentage of (86.6) are prescriber and influencer for a medical filed product, and that elevate the importance of digital marketing to reach the huge number of potential healthcare providers.

Regarding years of experience healthcare providers with work experience less than 5 years count (45) with percentage (12) whereas healthcare providers with work experience from 5 – less than 10 years count (111) with percentage of (29.6), while healthcare providers with work experience from 10 – less than 15 years count (91) with percentage of (24.3), finally healthcare providers with work experience of 15 years and above count (128) with percentage (34.1), from this sample we can conclude that healthcare providers are in work and active in all years of experience categories, and there is positive relation between years of experience and number of respondents healthcare providers.

Regarding the workplace the above table also shows the healthcare providers workplace among Jordan sectors, as (176) healthcare providers work in public sector with percentage of (46.9), and (90) healthcare providers work in private hospitals with percentage of (24), whereas (70) healthcare providers work in private clinics with percentage of (18.7), while (28) healthcare providers work in private pharmacy with percentage of (7.5), finally (11) healthcare providers work in chain pharmacy with percentage of (2.9). these data emphasize that public sector had the highest percentage of healthcare providers and indicate their business important for medical filed companies, if we gathered the private hospital and private clinic to reflect the private sector the numbers will be (160) healthcare providers with

percentage of (42.7), which very close to public sector, and finally the pharma channel will come in the third position by (39) respondents with percentage of (10.4). the fact that private sector is more important than the public sector in Jordan market should be mentioned, and this due to the public sector weak financial status which limiting their purchasing power and options.

The study shows almost equal numbers of male and female respondents healthcare providers of the sample which count (192) and constitute (51.2%) of the sample, while female healthcare providers count (183) and constitute (48.8%) of the sample. This emphasize that medical sector in Jordan affected by religion and traditions which consider the presence of female healthcare providers crucial to provide the female patients with the best medical services.

Finally, study also shows age group of healthcare providers, where number of healthcare providers who are 22 – less than 30 years count (50) with percentage of (13.3) whereas healthcare providers from age 30 – less than 38 years count (132) with percentage of (35.2), while healthcare providers from age 38 – less than 46 years count (105) with percentage of (28), finally healthcare providers with age above 46 years (88) with percentage of (23.5), and this means all ages has good participation and the majority of respondents from healthcare providers is between 30-38 year old (millennials generation).

### **3.6 Validity and Reliability**

Based on Laher (2010); Churchil and brown (2014) the researcher used face validity and construct validity. The researcher conducted (pilot study) with professional academic staff from reputable universities in Jordan, and they delivered scientific recommendations that

supported the research instrument. For construct validity, the researcher used comprehensive methods in revising related previous work and literatures to set the cornerstone for the research model, measurements and hypotheses. Furthermore, EFA + CFA have been applied as follow:

### **3.6.1 Exploratory factor analysis (EFA)**

(EFA) was performed using the principal component method to evaluate the validity of the independent variable (Perceived easy of use, Perceived usefulness, Perceived enjoyment and perceived trust), the dependent variable (healthcare providers acceptance for digital marketing) and the moderating variable (subjective norms). The factor loads (which represent the degree of variation an item contributes to the factor's total variation) should not be less than 40 %, (Laher, 2010). The preferred case is that all questionnaire items load on one factor, but in some cases the items load on more than one factor. In this case the researcher chooses the factor that has the higher loading rather than the other factor. If a factor being extracted with less than three items loaded on it should be deleted. Kaiser suggests the Eigen value as criteria to generate the factors that represent the sum of loadings squares of that factor. If an Eigen value of less than one for a given factor, that factor should be deleted and the process of extracting more factors terminates. (Laher, 2010). The explained variance of a factor represents the average amount of the total factor's variance per an item, as the value increases the explained variance is positively recognized.

KMO is a test suggested by (Kaiser, Meyer and Olkin) to identify the adequacy of data being used to be analyzed by factor analysis. The test value should be between (0 -1). Practically a value of 0.50 or more is representing sufficient and adequate data (Hair, Black, Babin & Anderson, 2010). The Barlett's test is a test used to explore that the correlation

matrix for the variables is an identity matrix (zero matrix) practically the test is provided with a value representing type 1 error ( $\alpha \leq 0.05$ ). If the sig value was  $\leq 0.05$  the test is positive meaning that the data is convenient to be analyzed by factor analysis as it represents different sampling for the study population.

All the mentioned concepts will be used to interpret the results of the upcoming tables considering that the mentioned concepts and criteria were met.

**Table (3.3) EFA analysis for the items representing each factors of the Independent Variables**

Dimensions	Code	Factor Loading	Sig	Bartlett's Test of Sphericity – Chi-Square	Explained Variance	KMO
PEU	1	0.77	0.000	151.704	39.165	0.654
	2	0.51				
	3	0.77				
	4	0.79				
	5	0.65				
	6	0.77				
PU	7	0.82	0.000	204.902	55.195	0.754
	8	0.89				
	9	0.94				
	10	0.86				
	11	0.75				
	12	0.74				
PE	13	0.84	0.000	188.856	30.649	0.703
	14	0.51				
	15	0.83				
	16	0.56				
	17	0.79				
	18	0.86				
	19	0.75				
	20	0.81				
PT	21	0.76	0.000	36.504	29.143	0.825
	22	0.67				
	23	0.78				
	24	0.89				
	25	0.87				
<b>Total</b>	<b>Independent</b>		0.000	25.452	70.464	0.884

The above table shows that for the perceived easy of use the KMO test value is 0.654 So the value of KMO suggests an acceptable data adequacy for the purpose of factor analysis, and the Sphericity test (Barlett's) is 151.704 with sig 0.000.

From the above table also we noticed that for the perceived usefulness the KMO test value is 0.754 So the value of KMO suggests an acceptable data adequacy for the purpose of factor analysis, and the Sphericity test (Barlett's) is 204.902 with sig 0.000

From the above table we noticed that for the perceived enjoyment the KMO test value is 0.703 So the value of KMO suggests an acceptable data adequacy for the purpose of factor analysis, and the Sphericity test (Barlett's) is 188.856 with sig 0.000

From the above table we noticed that for the perceived trust the KMO test value is 0.825 So the value of KMO suggests an acceptable data adequacy for the purpose of factor analysis, and the Sphericity test (Barlett's) is 36.504 with sig 0.000

The test of sphericity suggests significant probabilities among the used factors in the correlation matrix. As could be figured out from the results of probability, all the probabilities were significant at  $p < 0.05$  level, meaning significant relationships between the factors included in the analysis.

The table shows that the items loadings represent the concept of convergent validity. Typically, a variable is mentioned to be convergent if a loading value was 0.40 or greater was achieved. testing the provided results, we can see that all loading values being are higher than (0.40) assuming reasonable convergent validity.

Study results indicated that the relative importance of the independent variables (Perceived easy of use, Perceived usefulness, Perceived enjoyment and perceived trust) came high in general, where the variable (perceived trust) came first with the highest arithmetic average (3.94), and high relative importance, followed by (perceived usefulness), with mean reached to (3.81), with high relative importance, followed by (perceived enjoyment), with mean reached to (3.80), and high relative importance, followed by (perceived easy of use), with mean reached to (3.73), and high relative importance.

The researcher explains this result by the healthcare providers awareness about the importance of (Perceived easy of use, Perceived usefulness, Perceived enjoyment and perceived trust) that helps in facing continuous and rapid changes in the medical field companies digital marketing, as these factors can positively affect their acceptance to the new reality of digital marketing.

The result of having (perceived trust) the highest relative importance, in digital marketing acceptance from the healthcare providers, is explained by the fact that perceived trust represents the keys of medical knowledge, data privacy, commitment from the medical field companies, and includes the feeling of safety and security while dealing with such critical, updated and important medical knowledge which may affect patients treatment process and quality of life.

The researcher traits the presence of a high impact of (Perceived easy of use, Perceived usefulness, Perceived enjoyment and perceived trust) on healthcare providers acceptance for digital marketing provided from the medical field companies, to the healthcare providers high interest and exposure for the new technologies in the medical field, so that they will be able

to accept the new way of medical filed company digital marketing specially if these companies aligned with the factors that will improve the acceptance of digital marketing and saving the healthcare providers time and efforts.

This result agreed with the result of (Dhagarra, Goswami, & Kumar, 2020), which results indicate that perceived easy of use, perceived usefulness, trust, and privacy concern are direct affect patients' behaviors to accept technology in healthcare services. And as per (Gagnon, et al., 2016) the perceived usefulness and ease of use, privacy and security issues, were the main perceived adoption factors for m-health at the level of healthcare providers. As well as the result of (Kamal, Shafiq, & Kakria, 2020) which found that in addition to TAM, other factors such as perceived risk, trust, conducive conditions, and reluctance to change can help create and provide adequate telemedicine services in underdeveloped nations.

**Table (3.4) EFA analysis for the items representing the Dependent Variable  
(healthcare providers acceptance for digital marketing) HPADM**

Dimension	Code	Factor Loading	Sig	Bartlett's Test of Sphericity – Chi-Square	Explained Variance	KMO
HPADM	26	0.91	0.000	361.421	32.080	0.499
	27	0.86				
	28	0.92				
	29	0.92				
	30	0.82				
	31	0.83				
	32	0.80				
	33	0.84				

The Kaiser-Meyer-Olkin tests the adequacy and suitability of data used for factor analysis. A critical value 0.50 is considered to be the smallest satisfactory value. From the above table we observed that for the healthcare providers acceptance for digital marketing the KMO test value is 0.499 So the value of KMO suggests an acceptable data adequacy for the purpose of factor analysis, and the Sphericity test (Barlett's) is 361.421 with sig 0.000.

The test of sphericity assumes significant probabilities among the factors used in the correlation matrix. As could be find out from the results of probability, all the probabilities were significant at  $p < 0.05$  level, meaning significant relationships between the factors included in the analysis.

The items loadings reflect the concept of convergent validity. Typically, an item is said to be convergent if a loading value was 0.40 or greater was achieved. testing the provided results, we can see that all loading value were above the minimum required (0.40 or greater) suggesting reasonable convergent validity.

The results showed that the relative importance of healthcare providers acceptance for digital marketing from the medical field companies, came to a high degree, where the means ranged between (4.23 - 3.44), this result is due to the awareness healthcare providers about the importance of digital marketing acceptance, aiming at achieving both medical knowledge and efficient engagement with medical field companies, by anticipation and facing challenges that can be experienced by it, and superiority over existing and new marketing strategies.

The researcher explains this result with the interest of the healthcare providers in the acceptance of digital marketing provided from the medical field companies, through the enhancement of the main factors (Perceived easy of use, Perceived usefulness, Perceived enjoyment and perceived trust) that affect the acceptance of digital marketing from the medical field companies.

This result agreed with the result of the study (Nuseira & Aljumahb, 2020), which The establishes an empirical relationship between digital marketing activities and business



performance while controlling for external influences, as well as the result of the study (Rasmi, et al., 2018), which shows the healthcare professionals acceptance of electronic health records system, which shows the effect of trust and other factors on healthcare professional acceptance for new technology to increase the quality of services provided to patients.

**Table (3.5) EFA analysis for the items representing the Moderator Variable  
(Subjective Norms)**

Dimensions	Code	Factor Loading	Sig	Bartlett's Test of Sphericity – Chi-Square	Explained Variance	KMO
SN	34	0.75	0.000	118.866	57.085	0.699
	35	0.84				
	36	0.66				
	37	0.90				
	38	0.58				

The Kaiser-Meyer-Olkin tests the adequacy and suitability of the data used for factor analysis. A critical value 0.50 is considered to be the smallest satisfactory value. For the subjective norms the KMO test value is 0.699. So the value of KMO suggests an acceptable data adequacy for the purpose of factor analysis, and the Sphericity test (Barlett's) is 118.866 with sig 0.000.

The test of sphericity assumes significant probabilities across the factors used in the correlation matrix. As could be find out from the results of probability, all the probabilities were significant at  $p < 0.05$  level, meaning significant relationships between the factors included in the analysis.

The items loadings reflect the concept of convergent validity. Typically, an item is said to be convergent if a loading value was 0.40 or greater was achieved. Inspecting the provided

results, we can see that all loading values were above the minimum required (0.40 or greater) suggesting reasonable convergent validity.

The results of the study indicate that the relative importance of the (subjective norms) items came high in general, as the arithmetic mean of the items of this variable ranged between (4.07 - 3.31), this result attributed to the interest of healthcare providers to set high role of subjective norms while accepting the medical field companies digital marketing, as well as for the medical field companies as they have to respond to the factors that can strengthen the acceptance of medical field companies digital marketing and taking in consideration the important role of subjective norms.

The researcher explains this result that subjective norms is one of the most prominent parts of human behavior, and one of the most important pivotal aspects that go directly into decision making process and affects the acceptance of digital marketing for the better achieving all the main and secondary goals to be done in both the short and the long terms, which makes subjective norms one of the most important tool that ensure the continuity and success of the digital marketing acceptance.

This result agreed with the result of the study (Bhatti, & Akram, 2020), which establishes that the Subjective norms standards moderate the link between risks and online shopping behavior.

### **3.6.2 Confirmatory Factor Analysis (CFA)**

This analysis was made by software which delivers both the standardized and unstandardized loading for each item (question) on its proposed variable. The software

provides an advantage that it gives a hints for the goodness of fit for the overall data variables used in the model. These indicators are numerous. The researcher uses the most common indicators (six) that most studies rely on to decide the goodness of model fit, the comparative fit index CFI, chi square test ( $\chi^2$ ), the normed fit index NFI, the goodness of fit index GFI, the Tucker-Lewis index TLI and the root mean square error of approximate RMESA. Each of these indicators has a reference value below which reflects good model fitting.

In general, the chi square test is the inferential test that uses probability to accept or reject the goodness of fit; the desire situation is that the probability of chi square test is  $> 0.05$  suggesting no statistical differences between the real (actual measured model) and the theoretical one. One major negative aspect of chi square test is that it is sensitive to the sample size (i.e. its affected depending on the sample size), accordingly it's rarely that a researcher gets a suitable desired chi square value (i.e.  $p > 0.05$ ). In the same context the RMSEA indicator refers to the average of squared errors of approximation, so the less the result, the desired situation is, typically a value less than 0.08 is considered to be fair, other suggest that this value should be less than 0.05 to expresses a good indicator (the ideal situation is to equal 0.00). Both the CFI and GFI indicators ranges between (0 -1) so a value around 0.90 or higher propose a good fitting.

The results pertaining the independent variable (Perceived easy of use, Perceived usefulness, Perceived enjoyment and perceived trust), the dependent variable (healthcare providers acceptance for digital marketing) and the moderator variable subjective norms are provided in the upcoming tables.

Table (3.6) Matrix of correlation between dimensions

		Correlations						
Dimensions		PEU	PU	PE	PT	independent	Dependent	Moderating
PEU	Pearson Correlation	1	.741**	.659**	.654**	.856**	.727**	.562**
	Sig. (2-tailed)		.000	.000	.000	.000	.000	.000
	N	375	375	375	375	375	375	375
PU	Pearson Correlation	.741**	1	.711**	.746**	.901**	.782**	.655**
	Sig. (2-tailed)	.000		.000	.000	.000	.000	.000
	N	375	375	375	375	375	375	375
PE	Pearson Correlation	.659**	.711**	1	.738**	.901**	.697**	.625**
	Sig. (2-tailed)	.000	.000		.000	.000	.000	.000
	N	375	375	375	375	375	375	375
PT	Pearson Correlation	.654**	.746**	.738**	1	.870**	.843**	.723**
	Sig. (2-tailed)	.000	.000	.000		.000	.000	.000
	N	375	375	375	375	375	375	375
Independent	Pearson Correlation	.856**	.901**	.901**	.870**	1	.851**	.719**
	Sig. (2-tailed)	.000	.000	.000	.000		.000	.000
	N	375	375	375	375	375	375	375
Dependent	Pearson Correlation	.727**	.782**	.697**	.843**	.851**	1	.740**
	Sig. (2-tailed)	.000	.000	.000	.000	.000		.000
	N	375	375	375	375	375	375	375
Moderating	Pearson Correlation	.562**	.655**	.625**	.723**	.719**	.740**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	
	N	375	375	375	375	375	375	375

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

The AMOS V.23 software was also used to calculate the relevant indicators related to the study model, and Table (3.6) shows the results of the analysis:

**Table (3.7): Indicators of complete alignment of the study tool with its dimensions**

Indicator	Value
RMSEA	0.071
RMR	0.045
$\chi^2$	3163.919
DF	654
Minimum Variation $\chi^2/DF$	4.838
GFI	0.910
AGFI	0.930
TLI	0.641
CFI	0.908
NFI	0.889

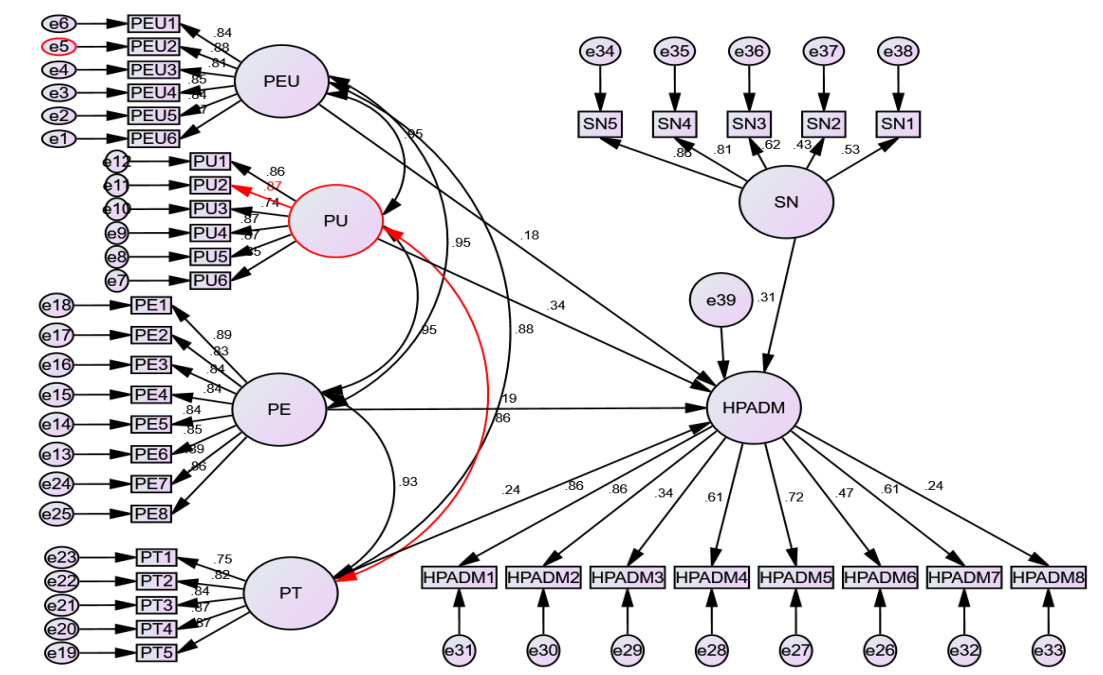
As it is shown in the above table, the value of  $\chi^2$  of the independent variables is (3163.919) in their dimensions is significant at the level of ( $\alpha \leq 0.05$ ), with degrees of freedom reached (654), where it was found that the value of the minimum variance (Quotient of  $\chi^2$  values divided by degrees of freedom DF) was (4.838), which reflects that the independent variables in their dimensions has a good level of fit. Whereas, Arbuckle (2008) suggested that the value of the minimum variance should not exceed the value of (5). In light of the standard regression weights, which are known as validity or saturation coefficients, whose regression weights are supposed to be no less than (0.50) (Mezo & Short, 2012).

The table also shows the indicators of the overall compatibility of the scale of independent variables, as the value of each of the GFI and AGFI, (0.910) (0.930) respectively and are close to the value of one.

The values of the fit indicators were as follows: (0.889) for the indicator NFI, (0.641) for the indicator TLI and the value of (0.908) for the indicator CFI, which are close to the value of one. In the same context, the value of the Root Mean Square Error of Approximation (RMSEA) was (0.071) and it is very close to the value of zero. This indicates

the quality of conformity and the validity of the paragraphs of the independent variables with their dimensions.

**Figure (3-2): Regression model for variable dimensions and its coefficients**



### 3.6.3 Reliability

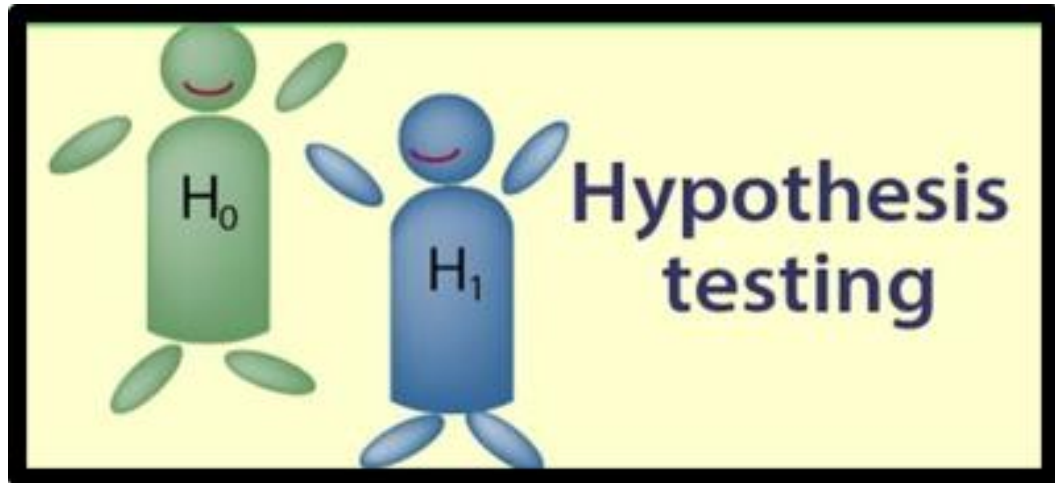
Cronbach alpha reliability analysis was used to verify the internal consistency among the (questions) representing each element, dimension of the study variables. As obtaining Alpha > 0.70 is considered appropriate in administrative sciences (Hair et al., 2010). The results are included in table (3.8) below:

**Table (3.8) Reliability analysis (Cronbach's Alpha) results for all study variables**

	Variables	No. of items	Reliability
IV	PEU	6	0.938
	PU	6	0.937
	PE	8	0.955
	PT	5	0.918
	Independent variable	25	0.981
DV MD	HPADN	8	0.862
	SN	5	0.788

Table (3.8) shows the results of Cronbach alpha reliability analysis. The minimum value obtained was (0.788) for subjective norm item, while the maximum value which obtained was (0.955) for the perceived enjoyment item, the reliability mentioned values reflect a satisfactory reliability values (considering that the maximum value that could be reached is 1.00) so a conclusion of a high reliability could be driven (Hair et al., 2010).

**CHAPTER FOUR**  
**(Study Results and Hypotheses test)**





## CHAPTER FOUR

### Study Results and Hypotheses test

The objective of this study is to identify the impact of (Perceived easy of use, Perceived usefulness, Perceived enjoyment and perceived trust) on healthcare providers acceptance for digital marketing in presence of the subjective norm as a moderating variable, the study targeted healthcare providers working in Amman city. To achieve the goal of this study questions and hypotheses have been developed.

First part of this chapter will discuss the answers of the questions (descriptive statistics) and then to test the formulated hypotheses in the second part of the study.

At what level do the healthcare providers rate the study variables?

To answer the above questions means and standard deviations were calculated, and the results are appeared in the below tables :

#### 4.1 Analyzing the independent variables (Perceived easy of use, Perceived usefulness, Perceived enjoyment and perceived trust)

**Table (4.1) Means for the dimensions of independent variables**

No.	Dimensions	Mean	Standard deviation	Level	Rank
1	PEU	3.7284	.95663	High	4
2	PU	3.8089	.91250	High	2
3	PE	3.8033	.95892	High	3
4	PT	3.9365	.87136	High	1
5	<b>Independent variable</b>	3.8133	.88337	High	

Means description (1 – 2.33 low, 2.34 – 3.67 moderate, 3.68 – 5 high).

Table 4.1 represented the values of mean for the dimensions of the independent variables (Perceived easy of use, Perceived usefulness, Perceived enjoyment and perceived

trust), we noticed that perceived trust has the highest dimension being rated in independent variables with the rank 1 and the mean is 3.9365, while perceived easy of use is the least one with rate 4 and mean 3.7284.

#### 4.1.1 Analysis the items of perceived easy of use

**Table (4.2) Means, standard deviations, t-value and sig for the items of perceived easy of use**

No.	Items	Mean	Std.Dev	Level	t-value	Rank	Sig
1	Its will be easy for me to learn how to deal with the digital marketing from the medical field companies	3.8427	1.00761	High	16.195	2	.000
2	It will be easy for me to get digital marketing messages from the medical field companies.	3.7813	1.06232	High	14.243	3	.000
3	It will be easy for me to remember how to get required information from the medical field companies digital marketing tools.	3.8880	1.05630	High	16.280	1	.000
4	My interaction with digital marketing providers is clear.	3.4507	1.20031	Moderate	7.271	6	.000
5	I find [that it will not] take a lot of effort in accepting digital marketing.	3.6907	1.09949	High	12.165	5	.000
6	Overall, I find the digital marketing from the medical field companies will be easy to use.	3.7173	1.12820	High	12.313	4	.000
<b>Average means (PEU)</b>		<b>3.7284</b>	<b>.95663</b>	<b>High</b>	<b>14.746</b>	<b>.000</b>	

Means description (1 – 2.33 low, 2.34 – 3.67 moderate, 3.68 – 5 high), tabulated t value = 1.96

Table 4.2 shows the values of mean, standard deviation, t-value and sig in percentage for perceived easy of use items. The perceived easy of use dimension was mostly addressed by Item code 3, the rank is 1 and with the highest mean with value of 3.8880. While the item 4 expressed the lowest rate 6, with the lowest mean with value of 3.4507.

Form average means which reach to (3.7284) it is evident that there is a high level of perceived easy of use.

#### 4.1.2 Analysis the items Perceived usefulness

**Table (4.3) Means, standard deviations, t-value and sig for the items of Perceived usefulness**

No.	Items	Mean	Std.Dev	Level	t-value	Rank	Sig
7	Digital marketing from the medical field companies will enable me to get quick service	3.7013	1.13353	High	11.981	5	.000
8	Using digital marketing from the medical field companies will increase its productivity.	3.8293	1.03039	High	15.586	3	.000
9	Digital marketing from the medical field companies will improv its performance.	4.0133	.93496	High	20.988	1	.000
10	Using digital marketing from the medical field companies will enhance its effectiveness.	3.8453	1.02773	High	15.928	2	.000
11	Using digital marketing from the medical field companies will make it easier to get scientific and marketing information	3.7707	1.05501	High	14.146	4	.000
12	Overall, I find digital marketing tools from the medical field companies useful for me.	3.6933	1.08432	High	12.382	6	.000
<b>Average means (PU)</b>		3.8089	.91250	High	17.166		.000

Means description (1 – 2.33 low, 2.34 – 3.67 moderate, 3.68 – 5 high), tabulated t value = 1.96

Table 4.3 shows the values of mean, standard deviation, t-value and sig in percentage for perceived usefulness items. The perceived usefulness dimension was mostly addressed by Item code 9; the rank is 1 with the highest mean with value of 4.0133. While the item 12 expressed the lowest rate 6 with the lowest mean with value of 3.6933.

Form average means which reach to (3.8089) it is evident that there is a high level of perceived usefulness.

#### 4.1.3 Analysis the items of Perceived enjoyment

**Table (4.4) Means, standard deviations, t-value and sig for the items of perceived enjoyment**

No.	Items	Mean	Std.Dev	Level	t-value	Rank	Sig
13	I was able to navigate through the digital marking tools of medical field companies.	3.8933	1.06943	High	16.176	2	.000
14	The medical field companies digital marketing had the ability to find my specific requests quickly	3.8667	1.00178	High	16.753	3	.000
15	Digital marketing from the medical field companies was entertaining.	3.5840	1.20283	Moderate	9.402	8	.000
16	Digital marketing from the medical field companies was enjoyable.	3.5973	1.13782	Moderate	10.166	7	.000
17	Digital marketing from the medical field companies was pleasing.	3.8560	1.06000	High	15.638	6	.000
18	Digital marketing from the medical field companies was fun to use.	3.9040	1.10969	High	15.776	1	.000
19	When thinking about digital marketing from the medical field companies, clear detailed images came to mind.	3.8613	1.10998	High	15.027	5	.000
20	When thinking about digital marketing from the medical field companies, it was easy to see myself using it.	3.8640	1.09210	High	15.320	4	.000
<b>Average means (PE)</b>		<b>3.8033</b>	<b>.95892</b>	<b>High</b>	<b>16.223</b>	<b>.000</b>	

Means description (1 – 2.33 low, 2.34 – 3.67 moderate, 3.68 – 5 high), tabulated t value = 1.96

Table 4.4 shows the values of mean, standard deviation, t-value and sig in percentage for perceived enjoyment items. The perceived enjoyment dimension was mostly addressed

by Item code 18, it's rank is 1 and the highest mean 3.9040. While the item 15 expressed the lowest rate 8, with the lowest mean with value of 3.5840.

Form average means which reach to (3.8033) it is evident that there is a high level of perceived enjoyment.

#### 4.1.4 Analysis the items of perceived trust

**Table (4.5) Means, standard deviations, t-value and sig for the items of perceived trust**

No.	Items	Mean	Std.Dev	Level	t-value	Rank	Sig
21	Medical field companies digital marketing tools are trustworthy.	3.9120	1.08230	High	16.318	4	.000
22	Digital marketing from the medical field companies is one that keeps promises.	4.0400	.93420	High	21.558	1	.000
23	I trust medical field companies digital marketing tools because they keep my best interests in mind.	3.9467	.97692	High	18.765	2	.000
24	Digital marketing tools provided from medical field companies will required me to be cautious with these tools.	3.8693	1.00613	High	16.732	5	.000
25	I feel satisfied that I will be able to rely on the benefits of medical field companies digital marketing.	3.9147	1.01759	High	17.406	3	.000
<b>Average means (PT)</b>		3.9365	.87136	High	20.813		.000

Means description (1 – 2.33 low, 2.34 – 3.67 moderate, 3.68 – 5 high), tabulated t value = 1.96

Table 4.5 shows the values of mean, standard deviation, t-value and sig in percentage for perceived trust. The perceived trust dimension was mostly addressed by Item code 22, it's rank 1 and the highest mean with value of 4.0400. While the item 24 expressed the lowest rate 5, with the lowest mean with value of 3.8693.

Form average means which reach to (3.9365) it is evident that there is a high level of perceived trust.

## 4.2 Analyzing the Healthcare providers acceptance for digital marketing

**Table (4.6) Means, standard deviations, t-value and sig for the (HPADM)**

No.	Items	Mean	Std.Dev	Level	t-value	Rank	Sig
26	I intend to accept the medical field companies digital marketing in future.	3.8133	1.06592	High	14.776	3	.000
27	I plan to accept the medical field companies digital marketing.	3.7813	1.09211	High	13.854	4	.000
28	I expect to accept the medical field companies digital marketing in future.	4.2347	.74817	High	31.957	1	.000
29	I would like to register for a digital marketing tools provided from the medical filed companies.(Examples: webinars, online courses, webpage advertisement, email, social media)	3.4880	1.04919	Moderate	9.007	7	.000
30	I look positively to receiving medical field companies' messages through digital marketing	3.4427	1.14055	Moderate	7.516	8	.000
31	I will strongly recommend my colleagues to use the digital marketing tools of medical field companies.	3.7413	1.04179	High	13.780	5	.000
32	I will partially replace the traditional way of medical filed companies marketing with digital marketing tools. (Hybrid)	3.7120	.99584	High	13.845	6	.000
33	I will completely replace the traditional way of medical filed companies marketing with digital marketing tools.	4.0240	.94329	High	21.022	2	.000
<b>Average means (HPADM)</b>		<b>3.7797</b>	<b>.72438</b>	<b>High</b>	<b>20.843</b>		<b>.000</b>

Means description (1 – 2.33 low, 2.34 – 3.67 moderate, 3.68 – 5 high), tabulated t value = 1.96

Table 4.6 shows the values of mean, standard deviation, t-value and sig in percentage for the dependent variable (healthcare providers acceptance for digital marketing). The

dependent variable was mostly addressed by Item code 28, it's rank is 1 and the highest mean with value of 4.2347. While the item 30 expressed the lowest rate 8, with the lowest mean with value of 3.4427.

Form average means which reach to (3.7797) it is evident that there is a high level of healthcare providers acceptance for digital marketing.

### 4.3 Analyzing the Subjective Norms

**Table (4.7) Means, standard deviations, t-value and sig for the subjective norms**

No.	Items	Mean	Std.Dev	Level	t-value	Rank	Sig
34	My principal thinks I should accept digital marketing from the medical field companies.	3.9440	.96159	High	19.011	2	.000
35	The trend of healthcare providers accepting to digital marketing from the medical field companies around me is increasing.	4.0773	.78208	High	26.676	1	.000
36	Healthcare providers around me generally believe that it is better for communication with medical field companies to use digital marketing.	3.3093	1.15869	Moderate	5.170	5	.000
37	My colleagues would appreciate if I accept the digital marketing from the medical field companies.	3.7200	.99947	High	13.950	3	.000
38	I would get all the required support (time, information related) from my colleagues to use the digital marketing from the medical field companies.	3.5520	1.08556	Moderate	9.847	4	.000
<b>Average means (Leadership behavior)</b>		3.7205	.73940	High	18.871		.000

Means description (1 – 2.33 low, 2.34 – 3.67 moderate, 3.68 – 5 high), tabulated t value = 1.96

Table 4.7 shows the values of mean, standard deviation, t-value and sig in percentage for the moderating variable (subjective norms). The moderating variable was mostly

addressed by Item code 35, it's rank is 1 and the highest mean 4.0773. While the item 36 expressed the lowest rate 5, with the lowest mean with value of 3.3093.

Form average means which reach to (3.7205) it is evident that there is a high level of Subjective norms.

#### 4.4 Testing the Study Hypotheses

In this section we will test the study hypotheses and we have two main hypotheses and four sub hypotheses from the first main one.

Linear regression was applied to test our hypotheses, but we must first verify the normality of the independent variables distribution. The table below includes the results:

**Table (4.8) The suitability of study data to test hypotheses analysis using VIF test**

	Variables	Skewness	VIF	Tolerance
Independent variable	PEU	-0.74	1.149	0.712
	PU	-0.96	1.151	0.601
	PE	-0.94	1.111	0.612
	PT	-0.80	1.259	0.775
Dependent Variable	HPADM	-0.53	1.302	0.556
Moderating variable	SN	-0.47	2.713	0.524

Table (4.8) has shown the results of the Skewness that will be an indication that the study data is close to the normal distribution. As we can see in the above table, all the results ranged between (-0.96) for the perceived usefulness dimension and (-0.47) for the subjective norms dimension. All of the mentioned results are within the acceptable range (in most of studies is between -1 and 1).



**Table (4.9) Normal distribution of study variables**

Variable	Kolmogorov-Smirnov <sup>a</sup>				
	Statistic	DF	Sig.	Skewness	Kurtosis
PEU	0.11	375	0.874	-0.74	0.415
PU	0.15	375	0.564	-0.96	4.059
PE	0.15	375	0.356	-0.94	3.993
PT	0.14	375	0.754	-0.80	0.482
HPADM	0.09	375	0.958	-0.53	0.971
SN	0.12	375	0.856	-0.47	3.962

It is noted that the distribution of the study variables and their dimensions are all normal, as the ratios of the answers were (0.05), which is an accepted and approved level in the statistics.

#### 4.4.1 The First Hypothesis Test

**Ho1: There is no impact of (perceived easy of use, perceived usefulness, perceived enjoyment, and the perceived trust) on healthcare providers acceptance for digital marketing in Jordanian medical field at ( $\alpha \leq 0.05$ ).**

study used multiple regression Analysis to test this hypothesis and its sub dimensions to verify the direct impact of (perceived easy of use, perceived usefulness, perceived enjoyment, and the perceived trust) on healthcare providers acceptance for digital marketing in Jordanian medical field.

**Table (4.10) Multiple Linear Regressions Analysis for testing the impact of (PEU, PU, PE,PT) on HPADM**

Dependent Variable	Model summary		ANOVA			Coefficient				
	R	r <sup>2</sup>	F	DF	Sig F*	Independent variable	$\beta$	Std. Error	T	Sig F
HPADM	.862 <sup>a</sup>	.743	1077.504	.862 <sup>a</sup>	.000 <sup>b</sup>		.862	.022	32.825	.000

Table (4.10) indicates that the value of ( $r = 0.862$ ), which means that there is a positive correlation value of (86.2%) which is considered to be high between (PEU, PU, PE,PT) and (HPADM) in Amman city. The coefficient of determination value ( $r^2 = 0.743$ ), which means

that the variation in (PEU, PU, PE, PT) has explained (74.3%) of the variance in (HPADM), as the analysis of variance shows that the value of (f) has reached (1077.504) when Confidence level (sig = 0.000) this confirms the significance of regression at ( $\alpha \leq 0.05$ ) level, and at one degree of freedom.

From the coefficient table, the value of ( $\beta=0.862$ ), meaning that the increase in one unit in the (PEU, PU, PE, PT) variables leads to an increase by (86.2%) in (HPADM), and the value of ( $t = 32.825$ ) at a confidence level (sig = 0.000) this confirms the coefficient significance at ( $\alpha \leq 0.05$ ) level.

Based on the above analysis, we reject the first main null hypothesis and accept the alternative hypothesis that: There is a statistically impact at significance level ( $\alpha \leq 0.05$ ) for (PEU, PU, PE, PT) on HPADM in Amman city.

From this first main hypothesis emerged the following sub-hypotheses:

#### First sub-hypothesis

**Ho 1.1: There is no impact of perceived easy of use on HCPs acceptance for digital marketing ( $\alpha \leq 0.05$ ).**

**Table (4.11) Simple Linear Regressions Analysis for testing the impact of PEU on HPADM**

Dependent Variable	Model summary		ANOVA			Coefficient				
	r	r <sup>2</sup>	F	DF	Sig F*	PEU	$\beta$	Std. Error	t	Sig F*
HPADM	.819 <sup>a</sup>	.670	758.361	374	.000 <sup>b</sup>		.819	.023	27.538	.000

Table (4.11) indicates that the value of ( $r = 0.819$ ), which means that there is a positive correlation value of (81.9%) which is considered to be high between (PEU) and (HPADM). The coefficient of determination value ( $r^2 = 0.67$ ), which means that the variation in (PEU) has explained (67 %) of the variance in (HPADM), as the analysis of variance shows that the

value of (f) has reached (758.361) when Confidence level (sig = 0.000) this confirms the significance of regression at ( $\alpha \leq 0.05$ ) level, and at one degree of freedom.

From the coefficient table, the value of ( $\beta = .819$ ), meaning that the increase in one unit in the (PEU) variable leads to an increase by (81.9%) in HPADM, and the value of ( $t = 27.538$ ) at a confidence level (sig = 0.000) this confirms the coefficient significance at ( $\alpha \leq 0.05$ ) level.

Based on the above analysis, we reject the first sub null hypothesis and accept the alternative hypothesis that: There is a statistically impact at significance level ( $\alpha \leq 0.05$ ) for PEU on HPADM in Amman city.

### Second sub-hypothesis

**Ho 1.2: There is no impact of perceived usefulness use on HCPs acceptance for digital marketing at ( $\alpha \leq 0.05$ ).**

**Table (4.12) Simple Linear Regressions Analysis for testing the impact of PU on HPADM**

Dependent Variable	Model summary		ANOVA			Coefficient				
	r	r <sup>2</sup>	F	DF	Sig F*	PU	$\beta$	Std. Error	t	Sig F*
HPADM	.835 <sup>a</sup>	.697	858.213	374	.000 <sup>b</sup>		.835	.023	29.295	.000

Table (4.12) indicates that the value of ( $r = 0.835$ ), which means that there is a positive correlation value of (83.5%) which is considered to be high between (PU) and (HPADM). The coefficient of determination value ( $r^2 = 0.697$ ), which means that the variation in (PU) has explained (69.7%) of the variance in (HPADM), as the analysis of variance shows that the value of (f) has reached (858.213) when Confidence level (sig = 0.000) this confirms the significance of regression at ( $\alpha \leq 0.05$ ) level, and at one degree of freedom.

From the coefficient table, the value of ( $\beta=0.835$ ), meaning that the increase in one unit in the (PU) variable leads to an increase by (83.5%) in (HPADM), and the value of ( $t = 29.295$ ) at a confidence level ( $\text{sig} = 0.000$ ) this confirms the coefficient significance at ( $\alpha \leq 0.05$ ) level.

Based on the above analysis, we reject the second sub null hypothesis and accept the alternative hypothesis that: There is a statistically impact at significance level ( $\alpha \leq 0.05$ ) for PU on HPADM in Amman city.

### Third sub-hypothesis

**Ho 1.3: There is no impact of perceived enjoyment on HCPs acceptance for digital marketing at ( $\alpha \leq 0.05$ ).**

**Table (4.13) Simple Linear Regressions Analysis for testing the impact of PE on HPADM**

Dependent Variable	Model summery		ANOVA			Coefficient				
	r	r <sup>2</sup>	F	DF	Sig F*	PE	$\beta$	Std. Error	t	Sig F*
HPADM	.833 <sup>a</sup>	.694	847.581	374	.000 <sup>b</sup>		.833	.022	29.113	.000

Table (4.13) indicates that the value of ( $r = 0.833$ ), which means that there is a positive correlation value of (83.3%) which is considered to be high between (PE) and (HPADM). The coefficient of determination value ( $r^2 = 0.694$ ), which means that the variation in (PE) has explained (69.4%) of the variance in (HPADM), as the analysis of variance shows that the value of (f) has reached (847.581) when Confidence level ( $\text{sig} = 0.000$ ) this confirms the significance of regression at ( $\alpha \leq 0.05$ ) level, and at one degree of freedom.

From the coefficient table, the value of ( $\beta=0.833$ ), meaning that the increase in one unit in the (PE) variable leads to an increase by (83.3%) in (HPADM), and the value of

( $t = 29.113$ ) at a confidence level ( $\text{sig} = 0.000$ ) This confirms the coefficient significance at ( $\alpha \leq 0.05$ ) level.

Based on the above analysis, we reject the third sub null hypothesis and accept the alternative hypothesis that: There is a statistically impact at significance level ( $\alpha \leq 0.05$ ) for PE on HPADM in Amman city.

#### Fourth sub-hypothesis

**Ho 1.4: There is no impact of perceived trust on HCPs acceptance for digital marketing at ( $\alpha \leq 0.05$ ).**

**Table (4.14) Simple Linear Regressions Analysis for testing the impact of PT on HPADM**

Dependent Variable	Model summary		ANOVA			Coefficient				
	r	r <sup>2</sup>	F	DF	Sig F*	PT	$\beta$	Std. Error	t	Sig F*
HPADM	.774 <sup>a</sup>	.599	556.421	374	.000 <sup>b</sup>		.774	0.027	23.589	.000

Table (4.14) indicates that the value of ( $r = 0.774$ ), which means that there is a positive correlation value of (77.4%) which is considered to be high between (PT) and (HPADM). The coefficient of determination value ( $r^2 = 0.599$ ), which means that the variation in (PT) has explained (59.9%) of the variance in (HPADM), as the analysis of variance shows that the value of (f) has reached (556.421) when Confidence level ( $\text{sig} = 0.000$ ) this confirms the significance of regression at ( $\alpha \leq 0.05$ ) level, and at one degree of freedom.

From the coefficient table, the value of ( $\beta = 0.774$ ), meaning that the increase in one unit in the (PT) variable leads to an increase by (77.4%) in (HPADM), and the value of

( $t = 23.589$ ) at a confidence level ( $\text{sig} = 0.000$ ) This confirms the coefficient significance at ( $\alpha \leq 0.05$ ) level.

Based on the above analysis, we reject the fourth sub null hypothesis and accept the alternative hypothesis that: There is a statistically impact at significance level ( $\alpha \leq 0.05$ ) for PT on team HPADM in Amman city.

#### 4.4.2 The second hypothesis test

**Ho2: There is no statistically impact at significance level ( $\alpha \leq 0.05$ ) for subjective norms in improving the impact of (perceived easy of use, perceived usefulness, perceived enjoyment, and the perceived trust) on healthcare providers acceptance for digital marketing in Jordanian medical field.**

To test this hypothesis a hierarchical multiple regression analysis was used to measure (perceived easy of use, perceived usefulness, perceived enjoyment, and the perceived trust) impact on HCPs acceptance to digital marketing moderated by subjective norms.

**Table (4.15) Results of hierarchical multiple regression analysis to show the impact of (PEU, PU, PE, PT) on HPADM in existence of subjective norms**

Dependent variable	Independent variables	First Model			Second Model			Third Model		
		P	T	Sig	P	T	Sig	P	T	Sig
HPADM	Independent dimensions (PEU, PU, PE, PT)	0.851	31.31	0.000						
	SN				0.264	7.185	0.000			
	Independent dimensions with the presence of SN							0.342	6.709	0.000
	R	0.851			0.871			0.885		
	R <sup>2</sup>	0.724			0.758			0.784		
	Delta R <sup>2</sup>	0.724			0.034			0.026		
	Delta F	979.993			51.630			45.004		
	Delta sig.	0.00			0.00			0.00		

The distribution is normal when the significance level ( $< 0.05$ )

The hierarchical multiple regression analysis are based on three models shows that, as the outcome of the first model based on the correlation coefficient value was ( $R = 0.851$ ) and this value indicates a positive correlation between (PEU, PU, PE, PT) and HPADM.

The results also showed that there was a statistically significant effect of the variables (PEU, PU, PE, PT) on HPADM which is presented by the  $\Delta F$  value (979.993) at significant level (0.00) was ( $<0.050$ ). In addition to the value of the coefficient of determination which indicate the variability observed in the dependent variable when using the independent variable to expect it,  $R^2$  was (0.724) which means that a value of (0.724) of changes in HPADM is a result of the change in the presence of (PEU, PU, PE, PT). in addition to the  $B$  result was (0.851) which means the increase in (PEU, PU, PE, PT) lead to an increase in HPADM with a value of (0.851), this indicates that the (PEU, PU, PE, PT) justified the variance in HPADM with a percentage of 85.1%.

In the second model the moderating variable (subjective norms) was used for the regression model, and the value of the correlation coefficient increased to ( $R = 0.871$ ).

In addition to the value of the coefficient determination  $R^2$  became (0.758), this percentage is statistically significant, as the change was in value ( $\Delta F = 51.630$ ) at a level of significance ( $\alpha \leq 0.05$ ). The  $B$  value changed to (0.264) at the moderating variable (subjective norms),  $t$  value (7.185) at Significance level (0.00). And this shows the role of subjective norms as moderating variable in improving the impact of (PEU, PU, PE, PT) on HPADM, as the variance percentage of explanation in HPADM has increase by (0.034) (from (0.724) to (0.758)).

In the model number three the independent variable (PEU, PU, PE, PT) and its dimensions was used with the presence of subjective norms as moderating variable for the regression model, as the value of the correlation coefficient increased to ( $R = 0.885$ ).

In addition to the value of the coefficient determination  $R^2$  became (0.784), this percentage is statistically significant, as the change was in value ( $\Delta F = 45.004$ ) at a level of significance ( $\alpha \leq 0.05$ ). The P value changed to (0.342), t value (6.709) at Significance level (0.00). And this confirms the role of (PEU, PU, PE, PT) with the presence of subjective norms (moderating variable) in improving the impact of (PEU, PU, PE, PT) on HPADM, as the variance percentage of explanation in HPADM has increase to (0.784).

Based on the sig value (0.000) of the moderation effect, the null hypothesis is rejected and the alternative hypothesis is accepted at that state: There is a statistically impact at significance level ( $\alpha \leq 0.05$ ) for subjective norms in improving the impact of (PEU, PU, PE, PT) on HPADM in Amman city.



# Chapter Five

## Results' Discussion, Conclusion and Recommendations



## **CHAPTER FIVE**

### **Results' Discussion, Conclusion and Recommendations**

In this chapter, the results were discussed in the light of the statistical analysis results for the sample members' responses on the items of the study variables, with the aim of identifying the impact of (Perceived easy of use, Perceived usefulness, Perceived enjoyment and perceived trust) on healthcare providers acceptance for digital marketing: The moderating role of subjective norms in Amman City.

#### **5.1 Discussion of the result of the Study hypotheses**

The examination of the study hypotheses is the basic roots for scientific research in reaching conclusions and recommendations that would establish the rational scientific thought. The results of the analysis and testing of study hypotheses can be potted as follows:

##### **Discussion of the first main hypothesis:**

Results related to the first main hypothesis showed that there is a statistically significant effect of (Perceived easy of use, Perceived usefulness, Perceived enjoyment and perceived trust) on healthcare providers acceptance for digital marketing provided by the medical field companies, where the coefficient of determination (0.743), and the level of statistical significance ( $\alpha \leq 0.05$ ), which means that the medical field companies have to follow strategies enables it to enhance the (Perceived easy of use, Perceived usefulness, Perceived enjoyment and perceived trust), which statistically affects the (healthcare providers acceptance to the medical field companies digital marketing).

The researcher traits this result to the fact that medical field companies seek to pay attention to (Perceived easy of use, Perceived usefulness, Perceived enjoyment and perceived trust) from their awareness that encouraging and motivating healthcare providers towards accepting the digital marketing provided by the medical field companies, on the other hand, healthcare providers acceptance to digital marketing leads to many positive results, the most important of which is achieving the medical field companies marketing objectives with full suitable and efficient technique for healthcare providers, increasing the medical field companies competitions and environmental sustainability.

This result is in line with the result of (Schnall, et al., 2015) study, whose results was about that mobile health needs for perceived easy of use, usefulness, with little perceived risk accompanied by a measure of trust in the technology creators. The results of the current study also agreed with the results of (Dhagarra, Goswami, & Kumar, 2020), which indicate that perceived easy of use, perceived usefulness, trust, and privacy concern are direct affect patients' behaviors to accept technology in healthcare services.

This result also agreed with the result of a study (Alhashmi, Salloum, & Mhamdi, 2019), whose results in addition to managerial, organizational, operational and IT infrastructure factors also perceived usefulness, and perceived easy of use, should be included as critical success factors to control the execution of artificial intelligence in the healthcare sector. As well as agreed with a study (Bedi, Kaur, & Lal, 2017), as this study adding value to marketers to know the strong effect of interactive website experience (perceived enjoyment) for online consumers.

The results of the sub-hypothesis of the first main hypothesis were as follows:

- 1- There is a statistically impact of perceived easy of use on HCPs acceptance for digital marketing at significant level ( $\alpha \leq 0.05$ ) in Amman city, as the determination value of the model was ( $R^2 = 0.67$ ), and it explains (67%) of the variance in the dependent variable (HPADM).
- 2- There is a statistically impact of perceived usefulness on HCPs acceptance for digital marketing at significant level ( $\alpha \leq 0.05$ ) in Amman city, as the determination value of the model was ( $R^2 = 0.697$ ), and it explains (69.7%) of the variance in the dependent variable (HPADM).
- 3- There is a statistically impact of perceived enjoyment on HCPs acceptance for digital marketing at significance level ( $\alpha \leq 0.05$ ) in Amman city, where the determination value of the model was ( $R^2 = 0.694$ ), and it explains (69.4%) of the variance in the dependent variable (HPADM).
- 4- There is a statistically impact of perceived trust on HCPs acceptance for digital marketing at significance level ( $\alpha \leq 0.05$ ) in Amman city, determination value of the model was ( $R^2 = 0.599$ ), and it explains (59.9%) of the variance in the dependent variable (HPADM).

#### **Discussion of the second main hypothesis:**

The results of the study showed that there is statistically impact at significance level ( $\alpha \leq 0.05$ ) for subjective norms in improving the impact (Perceived easy of use, Perceived usefulness, Perceived enjoyment and perceived trust) on healthcare providers acceptance for digital marketing provided by medical field companies, where the moderating variable

(subjective norms) change the determination value of the model from ( $R^2 = 0.724$ ) in the first model, to ( $R^2 = 0.758$ ) in the second model, and ( $R^2 = 0.784$ ) in the third model.

This indicates that (subjective norms) as a moderating variable has a positive impact on the direct impact between (Perceived easy of use, Perceived usefulness, Perceived enjoyment and perceived trust) and healthcare providers acceptance for digital marketing provided by medical field companies, as this moderating variable raised the impact values clearly, and this effect was statistically significant.

The researcher explains this relation of improving and increasing the impact of (Perceived easy of use, Perceived usefulness, Perceived enjoyment and perceived trust) on healthcare providers acceptance for digital marketing provided by the medical field companies, by having (subjective norms), to what it achieves (subjective norms) from increasing healthcare providers acceptance for digital marketing provided by the medical field companies, to reach the desired strategic success, and achieving goals, in addition to improving the ability of medical field companies to avoid threats that they may encounter in the work environment, thereby achieving higher efficiency, and the ability to continue and compete.

This result agreed with the result of the study (Minton, et al., 2018), which propose that acceptance and consumption differences justified by the country level of pragmatism and culture value, and based on the theory of reasoned action, research found that subjective norms affect the relationship between the level of pragmatism of sample nation and acceptance behavior. Also this result agreed with the result of the study (Bhatti, & Akram,

2020), which establishes that the subjective norms standards moderate the link between risks and online shopping behavior.

## **5.2 Conclusion**

1. Healthcare providers working in Amman are representing healthcare providers in they rely on the use of modern technology, including attention to (Perceived easy of use, Perceived usefulness, Perceived enjoyment and perceived trust) in their acceptance to digital marketing provided by the medical field companies.
2. Healthcare providers are agreed with (Perceived easy of use, Perceived usefulness, Perceived enjoyment and perceived trust) focus their attention on (perceived trust), as they are believing in the importance of medical knowledge, data privacy, and commitment from the medical field companies, and includes the feeling of safety and security while dealing with such critical, updated and important medical knowledge which may affect patient's treatment process and quality of life.
3. The relative importance of (Perceived easy of use, Perceived usefulness, Perceived enjoyment and perceived trust) on healthcare providers acceptance to digital marketing provided by the medical field companies was high, and this means that these healthcare providers realize the importance of independent variables which represent high level of (Perceived easy of use, Perceived usefulness, Perceived enjoyment and perceived trust), that enables healthcare providers to accept the medical field companies digital marketing.
4. The relative importance of healthcare providers acceptance for medical field companies digital marketing in Amman came at a high level, and this indicates the high level of healthcare providers acceptance to digital marketing provided by the medical field

companies, through many practices, the most important of which are: their strong believe in accepting digital marketing in the near future and accepting the hybrid module of engagement with medical field companies.

5. The relative importance of the subjective norm's variable is generally high, and this explains that the healthcare providers in Amman city realize the importance of subjective norms in raising the effect level of (Perceived easy of use, Perceived usefulness, Perceived enjoyment and perceived trust) on their acceptance to digital marketing provided by the medical field companies.
6. There is a statistically significant effect of (Perceived easy of use, Perceived usefulness, Perceived enjoyment and perceived trust) on healthcare providers acceptance to digital marketing provided by the medical field companies, and this is what requires medical field companies to continue to pay attention to the (Perceived easy of use, Perceived usefulness, Perceived enjoyment and perceived trust) in order to maintain a high level of healthcare providers acceptance to digital marketing provided by them and to ensure its continuity and survival in a competitive environment.
7. The variable (subjective norms) as a moderating variable led to an increase in the value of the impact between (Perceived easy of use, Perceived usefulness, Perceived enjoyment and perceived trust) and healthcare providers acceptance to digital marketing provided by the medical field companies, this indicates that subjective norms has a positive impact on the direct impact between (Perceived easy of use, Perceived usefulness, Perceived enjoyment and perceived trust) and healthcare providers acceptance to digital marketing provided by the medical field companies, and therefore attention must be paid to the issue of subjective norms by medical field companies.

### **5.3 Recommendations and Future Research**

Based on the results reached, the researcher presented a set of recommendations and future research, which are the following:

1. The need to continue enhancement to the (Perceived easy of use, Perceived usefulness, Perceived enjoyment and perceived trust), through the medical field companies and understand the importance of the (Perceived easy of use, Perceived usefulness, Perceived enjoyment and perceived trust) to increase healthcare providers acceptance to digital marketing provided by the medical field companies.
2. Healthcare providers should continue developing their self in the field of technology acceptance in order to preserve their reputation, and keep engaged with medical field companies, due to its important in efficiency and keeping up to date with the recent medical knowledge.
3. The need to adopt a clear vision in digital marketing acceptance from medical field companies, to enhance healthcare providers' affiliation with by giving them special privileges to maintain permanent contact with them, in addition to the need to adopt patterns of subjective norms which may help them achieve goals and succeed in providing their services.
4. The necessity of working to take proactive measures by medical field companies to create a technology acceptance model, and work to raise the level of healthcare providers acceptance for digital marketing.

However, the researcher might encourage other researchers to consider in future examining the relevance and applicability of (Perceived easy of use, Perceived usefulness,



Perceived enjoyment and perceived trust) on healthcare providers acceptance to digital marketing provided by the medical field companies in Amman city in Jordan on larger samples, this will help in supporting the results gotten in this study. In addition to the possibility in investigating the influence of other moderating variables.

Other researchers might also test the generalizability of the results of this study and evaluate whether similar effects can be repeated between (Perceived easy of use, Perceived usefulness, Perceived enjoyment and perceived trust), healthcare providers acceptance for digital marketing provided by medical field companies, and subjective norms. Researchers might also investigate the effect of various moderating variables such as personal benefits, social class and emotional intelligence or use the study model in a comparative study in different business context.

## References:

- Alhashmi, S. F., Salloum, S. A., & Mhamdi, C. (2019). Implementing artificial intelligence in the United Arab Emirates healthcare sector: an extended technology acceptance model. *Int. J. Inf. Technol. Lang. Stud*, 3(3), 27-42.
- Al-Maani, A. I, and Jaradat, N. M .S., and Al-Mashhadani, A . A .H (2012). *Methods of Scientific Research and Statistics, How to Write a Scientific Research ?*, First Edition, 2012, Ithraa House for Publishing and Distribution. Oman. Jordan.
- Al-Swidi, A., Huque, S. M. R., Hafeez, M. H., & Shariff, M. N. M. (2014). The role of subjective norms in theory of planned behavior in the context of organic food consumption. *British Food Journal*. Anderson, J. and Poole, M. (2001). *Assignment and thesis Writing*. (4th ed) Brisbane: John Wiley and Sons.
- Arbuckle, J. L. (2014). *IBM SPSS Amos 23 user's guide*. IBM, Amos Development Corporation. Retrieved from:  
[ftp://public.dhe.ibm.com/software/analytics/spss/documentation/amos/23.0/en/Manuals/IBM\\_SPSS\\_Amos\\_User\\_Guide.pdf](ftp://public.dhe.ibm.com/software/analytics/spss/documentation/amos/23.0/en/Manuals/IBM_SPSS_Amos_User_Guide.pdf)
- Bedi, S. S., Kaur, S., & Lal, A. K. (2017). Understanding web experience and perceived web enjoyment as antecedents of online purchase intention. *Global Business Review*, 18(2), 465-477.
- Bhatti, A., & Akram, H. (2020). The moderating role of subjective norms between online shopping behaviour and its determinants. *International Journal of Social Sciences and Economic Review*, 1-09.
- Churchil, GA & Brown TJ. (2014). *Basic Marketing Research* (8th Ed.). Cengage Learning.
- Davis, F. D. (1987). User acceptance of information systems: the technology acceptance model (TAM).

- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS quarterly*, 319-340.
- Dhagarra, D., Goswami, M., & Kumar, G. (2020). Impact of trust and privacy concerns on technology acceptance in healthcare: an Indian perspective. *International journal of medical informatics*, 141, 104164.
- Fishbein, M. (2008). Reasoned action, theory of. *The International Encyclopedia of Communication*.
- Fishbein, M., & Ajzen, I. (1975). *Belief, attitude, intention and behavior: An introduction to theory and research*. Reading, MA: Addison-Wesley.
- Fishbein, M. & Ajzen, I. (1980). Predicting and understanding consumer behavior: Attitude-behavior correspondence. In Ajzen, I. & Fishbein, M. (eds.). *Understanding Attitudes and Predicting Social Behavior* (pp. 148-172). Englewood Cliffs, NJ: Prentice Hall
- Gagnon, M. P., Ngangue, P., Payne-Gagnon, J., & Desmartis, M. (2016). m-Health adoption by healthcare professionals: a systematic review. *Journal of the American Medical Informatics Association*, 23(1), 212-220.
- Hair, J.F., Jr., Black, W.C., Babin, B.J. & Anderson, R.E. (2010). *Multivariate Data Analysis*. 7th ed., Prentice Hall, Upper Saddle River, N.J.
- Hollebeek, L. D., & Macky, K. (2019). Digital content marketing's role in fostering consumer engagement, trust, and value: Framework, fundamental propositions, and implications. *Journal of Interactive Marketing*, 45, 27-41.
- Jahanmir, S. F., & Cavadas, J. (2018). Factors affecting late adoption of digital innovations. *Journal of business research*, 88, 337-343.
- Kamal, S. A., Shafiq, M., & Kakria, P. (2020). Investigating acceptance of telemedicine services through an extended technology acceptance model (TAM). *Technology in Society*, 60, 101212.

- Kaur, G. (2017). The importance of digital marketing in the tourism industry. *International Journal of Research-Granthaalayah*, 5(6), 72-77.
- Kiili, C., Leu, D. J., Marttunen, M., Hautala, J., & Leppänen, P. H. (2019). This is an electronic reprint of the original article. This reprint may differ from the original in pagination and typographic detail.
- Laher, S. (2010). Using Exploratory Factor Analysis in Personality Research: Best-Practice Recommendations. *SA J Ind. Psychol.* 36 (1), 1–7. doi:10.4102/sajip.v36i1.873
- Linn, Robert. L. & Gronlund, Norman. E.(2000). *Measurement and Assessment in Teaching*, (8th ed) Prentice Hall.
- Mezo, P. G., & Short, M. M. (2012). Construct validity and confirmatory factor analysis of the self-control and self-management scale. *Canadian Journal of Behavioural Science*, 44(1), 1–8.
- Minton, E. A., Spielmann, N., Kahle, L. R., & Kim, C. H. (2018). The subjective norms of sustainable consumption: A cross-cultural exploration. *Journal of Business Research*, 82, 400-408.
- Nuseira, M. T., & Aljumahb, A. (2020). The Role of Digital Marketing in Business Performance with the Moderating Effect of Environment Factors among SMEs of UAE. *International Journal of Innovation, Creativity and Change*. www.ijicc.net Volume 11, Issue 3, 2020
- Rasmi, M., Alazzam, M. B., Alsmadi, M. K., Almarashdeh, I. A., Alkhasawneh, R. A., & Alsmadi, S. (2018). Healthcare professionals' acceptance Electronic Health Records system: Critical literature review (Jordan case study). *International Journal of Healthcare Management*. DOI: 10.1080/20479700.2017.1420609
- Schnall, R., Higgins, T., Brown, W., Carballo-Diequez, A., & Bakken, S. (2015). Trust, perceived risk, perceived ease of use and perceived usefulness as factors related to mHealth technology use. *Studies in health technology and informatics*, 216, 467.

- Sekaran, U., & Bougie, R. (2010). *Research Methods for Business: A Skill Building Approach*, 5 Edition, NY: John Wiley & Sons Inc., New York.
- SHOTER, A. M., BATAINEH, A. Q., & SALHAB, H. A. (2016). Building a Model for Determining the Factors Affecting Mobile Marketing Acceptance and Adoption. *IRMBR-International Review of Management and Business Research*, 5, 22.
- Sun, J. N., & Hsu, Y. C. (2013). Effect of interactivity on learner perceptions in Web-based instruction. *Computers in Human Behavior*, 29(1), 171-184.
- Yim, M. Y. C., & Yoo, C. Y. (2020). Are digital menus really better than traditional menus? The mediating role of consumption visions and menu enjoyment. *Journal of Interactive Marketing*, 50, 65-80.
- Yoga, I. M. S., Korry, N. P. D. P., & Yulianti, N. M. D. R. (2019). Information technology adoption on digital marketing communication channel. *International journal of social sciences and humanities*, 3(2), 95-104.
- Venkatesh, V., & Davis, F. D. (2000). A theoretical extension of the technology acceptance model: Four longitudinal field studies. *Management science*, 46(2), 186-204.
- Venkatesh, V. (2000). Determinants of perceived ease of use: Integrating control, intrinsic motivation, and emotion into the technology acceptance model. *Information systems research*, 11(4), 342-365.
- Venkatesh, V., & Bala, H. (2008). Technology acceptance model 3 and a research agenda on interventions. *Decision sciences*, 39(2), 273-315.
- Zhao, J., & Wang, J. (2020). Health advertising on short-video social media: a study on user Attitudes based on the extended technology acceptance model. *International journal of environmental research and public health*, 17(5), 1501.

## Appendices

### Appendix (1)

#### List of arbitrators

<b>Name</b>	<b>Major</b>	<b>Academic rank</b>	<b>workplace</b>
Ahmad Ali Saleh	Business Administration	Professor	Middle East University
Hasan Al Zoabi	Business Administration	Professor	Amman Arabia University
Ahmad Al Ghadeer	Marketing	Professor	Applied science University
Mahmoud Al Smedaee	Marketing	Professor	Al-Zaytoonah University
Tamador Shatnawi	Marketing	Associate Professor	Petra University
Sameer Al Jabali	Marketing	Associate Professor	Middle East University
Tasnim Al Rabeea	Business Administration	Assistant Professor	German Jordanian University
Faten Awaishah	Neonatologist	Head of Pediatric Department	Al Hussain Medical Center
Mahmoud Al Kharaz	Pharmacist	General Manager	Owner of Al Badi Drug Store

## Appendix (2)



Middle East University

Business faculty

Business Department

Dear Prof,

In light with the strong role of digital marketing that our present world is facing, and the great revolution in the fields of knowledge and technology, the role of digital marketing become higher and more essential in our daily life, which led to a real need to keep up with the new technology and enrolling it to increase the efficiency and productivity of our organization.

Since the digital marketing consider as essential tool of building strong marketing strategies, companies need to strengthen themselves to achieve their goals and survive in the very competitive business environment, and they must adapt with the new market dynamics and exploiting all the available tools to create a strong and unique content of their marketing messages.

In the field of medical companies digital marketing is the newest and flexible component of marketing planning, which is exposed to many **factors (perceived ease of use, perceived usefulness, perceived enjoyment and the perceived trust), all these factors affecting the acceptance of health care providers with the content of digital marketing in Jordan.**

In order to complete the master's degree in Business Administration Department, Middle East University, Amman-Jordan.

In acknowledgment of your esteemed, well known academic extensive experience and scientific experts the researcher turns to you in respect of evaluating the attached questionnaire, which was developed based on previous studies relevant to the study variables, taking into account the formulation, adaptation and modification of the paragraphs in line with current trends. Your notes and input will highly value in bolstering the questionnaire's paragraphs making them more valid for the purpose they were composed for.

Please note that basis of the questionnaire measurement would be a five-point Likert scale, employed accordingly:

Strongly agree	Agree	Somewhat agree	Disagree	Strongly disagree
5	4	3	2	1

Researcher: Abdallah Hammad

Supervisor: Dr. Abdallah Bataineh

## Study Hypothesis:

**Ho<sub>1</sub>:** There is no impact for (perceived easy of use, perceived usefulness, perceived enjoyment, and the perceived trust) on healthcare providers acceptance for digital marketing in Jordanian medical field at ( $\alpha \leq 0.05$ ).

The following sub-hypotheses are derived from the key hypothesis above:

Ho<sub>1.1</sub>: There is no impact of perceived easy of use on HCPs acceptance for digital marketing ( $\alpha \leq 0.05$ ).

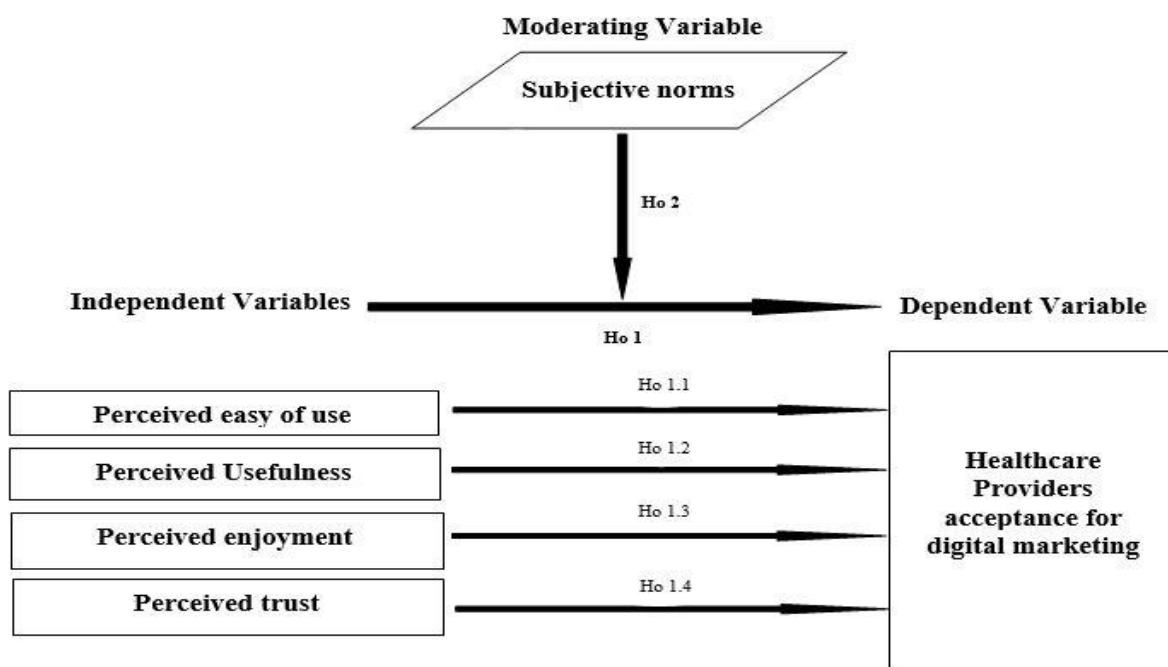
Ho<sub>1.2</sub>: There is no impact of perceived usefulness use on HCPs acceptance for digital marketing at ( $\alpha \leq 0.05$ ).

Ho<sub>1.3</sub>: There is no impact of perceived enjoyment on HCPs acceptance for digital marketing at ( $\alpha \leq 0.05$ ).

Ho<sub>1.4</sub>: There is no impact of perceived trust on HCPs acceptance for digital marketing at ( $\alpha \leq 0.05$ ).

Ho<sub>2</sub>: There is no statistically impact at significance level ( $\alpha \leq 0.05$ ) for subjective norms in improving the impact of (perceived easy of use, perceived usefulness, perceived enjoyment, and the perceived trust) on healthcare providers acceptance for digital marketing in Jordanian medical field.

## Study Model:





## Demographic data

Please tick the appropriate response box:

### Your Job:

- Nurse    Physicians    Specialist Physicians    Pharmacists    Others

### Are you in contact with regular visits of medical field companies' representatives?

- Yes, high contact (more than 10 visits per day)    Yes, (5 to 10 visits per day)
- Yes, (less than 5 visits per day)    No (no regular visits)

### Are you prescriber for any medical field products?

- Yes    No    No but having Influence on prescriber

### Years of Experience:

- Less than 5    5 - less than 10    10 - less than 15    15 and above

### Workplace:

- Public sector    Private hospital    Private clinic    Private pharmacy
- Chain pharmacy

### Gender:

- Female    Male

### Age (years):

- 22 – less than 30    30 - less than 38    38 -Less than 46
- 46 and above

NO.	Item	Item Clarity		Item Appropriate to measure		Item Relationship		Appropriate Adjustment
		Clear	Unclear	Appropriate	Not Appropriate	Related	Unrelated	
<p><b>Independent Variable: (Factors affecting healthcare providers to accept digital marketing):</b> factors affecting the acceptance of digital marketing from the <b>healthcare providers side</b>. the role of perceived ease of use, perceived usefulness, perceived enjoyment, and the perceived trust on the healthcare providers acceptance to the digital marketing.</p> <p>المتغير المستقل: (العوامل المؤثرة على مقدمي الرعاية الصحية لقبول التسويق الرقمي): مجموعة العوامل التي تؤثر على مقدمي الرعاية الصحية لقبول أدوات التسويق الرقمي من قبل شركات القطاع الطبية وهذه العوامل هي سهولة الاستخدام المدركة، الفائدة المدركة، التمتع المدرك، والثقة المدركة.</p>								
<p><b>Perceived easy of use:</b> the level that person believes that using a particular system will be free of effort, this variable can be measured through familiarity with technology and level of skills to use technology.</p> <p>سهولة الاستخدام المدركة: هي مقدرة الشخص على استخدام نظام معين بدون مجهود ويمكن قياس هذا المتغير من خلال اندماج الشخص مع التكنولوجيا ومستوى مهارته في استخدام التكنولوجيا.</p>								
1	<p>Its will be easy for me to learn how to deal with the digital marketing from the medical field companies.</p> <p>سوف يكون من السهل علي تعلم كيفية التعامل مع التسويق الرقمي المقدم من شركات القطاع الطبي.</p>							
2	<p>It will be easy for me to get digital marketing messages from the medical field companies.</p> <p>سوف يكون من السهل الحصول على رسائل التسويق الرقمي من قبل شركات القطاع الطبي.</p>							
3	<p>It will be easy for me to remember how to get required information from the medical field companies digital marketing tools.</p> <p>سوف يكون من السهل تذكر كيفية الحصول على المعلومات من خلال نظام التسويق الرقمي لشركات القطاع الطبي.</p>							

NO.	Item	Item Clarity		Item Appropriate to measure		Item Relationship		Appropriate Adjustment
		Clear	Unclear	Appropriate	Not Appropriate	Related	Unrelated	
4	My interaction with digital marketing providers is clear. تفاعلي مع مقدمي التسويق الرقمي واضح.							
5	I find [that it will not] take a lot of effort in accepting digital marketing. انا أجد انه سوف لن يأخذ الكثير من الجهد لاستخدام التسويق الرقمي							
6	Overall, I find the digital marketing from the medical field companies will be easy to use. على العموم، سوف يكون، التسويق الرقمي من قبل شركات القطاع الطبي سهل الاستخدام.							
<p><b>Perceived usefulness:</b> the level that person believes that using system will strengthen his/her job performance, this variable can be measured through evaluation what you pay and what you pay for it, and the behavioral intention.</p> <p><b>الفائدة المدركة:</b> هي قناعة الشخص ان استخدام نظام معين سوف يرفع ادائه الوظيفي، ويمكن قياس هذا المتغير عن طريق تقييم النية السلوكية وتقييم ما يمكن الحصول عليه مقابل ما يتم بذله.</p>								
7	Digital marketing from the medical field companies will enable me to get quick service. سوف يوفر لي التسويق الرقمي من قبل شركات القطاع الطبي خدمة سريعة.							
8	Using digital marketing from the medical field companies will increase its productivity. سوف يزيد استخدام التسويق الرقمي من انتاجية شركات القطاع الطبي.							
9	Digital marketing from the medical field companies will improv its performance. سوف يدعم التسويق الرقمي اداء شركات القطاع الطبي.							

NO.	Item	Item Clarity		Item Appropriate to measure		Item Relationship		Appropriate Adjustment
		Clear	Unclear	Appropriate	Not Appropriate	Related	Unrelated	
10	Using digital marketing from the medical field companies will enhance its effectiveness. سوف يعزز استخدام التسويق الرقمي فاعلية شركات القطاع الطبي.							
11	Using digital marketing from the medical field companies will make it easier to get scientific and marketing information. سوف يسهل استخدام التسويق الرقمي من قبل شركات القطاع الطبي الحصول على المعلومات العلمية والتسويقيه المتعلقة بمنتجاتها.							
12	Overall, I find digital marketing tools from the medical field companies useful for me. بالعموم اجد ادوات التسويق الرقمي من قبل شركات القطاع الطبي مفيدة بالنسبة لي.							
<p><b>Perceived enjoyment:</b> the level that users feel coolness, having fun and playfulness while using technology or product, this variable measured through consumer perceived interactivity, media enjoyment and consumption vision.</p> <p>التمتع المدرك: هو مستوى شعور المستخدم بالروعه, المرح و اللذه عند استخدام تكنولوجيا معينه ويمكن قياس هذا المتغير عن طريق تفاعل المستهلك مع التكنولوجيا والتمتع باستخدامها.</p>								
13	I was able to navigate through the digital marking tools of medical field companies. اكون قادر على التنقل خلال ادوات التسويق الرقمي المقدم من قبل شركات القطاع الطبي.							

NO.	Item	Item Clarity		Item Appropriate to measure		Item Relationship		Appropriate Adjustment
		Clear	Unclear	Appropriate	Not Appropriate	Related	Unrelated	
14	The medical field companies digital marketing had the ability to find my specific requests quickly. التسويق الرقمي لشركات القطاع الطبي يقدر على ايجاد طلباتي المخصصة بسرعة.							
15	Digital marketing from the medical field companies was entertaining. التسويق الرقمي لشركات القطاع الطبي كان مسلي.							
16	Digital marketing from the medical field companies was enjoyable. التسويق الرقمي لشركات القطاع الطبي كان ممتع.							
17	Digital marketing from the medical field companies was pleasing. التسويق الرقمي لشركات القطاع الطبي كان مرضي.							
18	Digital marketing from the medical field companies was fun to use. التسويق الرقمي لشركات القطاع الطبي كان استخدامه ممتع.							
19	When thinking about digital marketing from the medical field companies, clear detailed images came to mind. عندما افكر بالتسويق الرقمي لشركات القطاع الطبي يبدر الى ذهني صورته واضحه و مفصله.							

NO.	Item	Item Clarity		Item Appropriate to measure		Item Relationship		Appropriate Adjustment
		Clear	Unclear	Appropriate	Not Appropriate	Related	Unrelated	
20	When thinking about digital marketing from the medical field companies, it was easy to see myself using it. عندما افكر بالتسويق الرقمي لشركات القطاع الطبي من السهل ان ارى نفسي استخدمها.							
<p><b>Perceived trust:</b> is an important behavioral factor that motivate the acceptance of technology use which make consumer feel safe and secure. This variable can be measured through the quality and integrity of information and by the level of data privacy.</p> <p><b>الثقة المدركة:</b> هي عامل سلوكي مهم يحفز تقبل تكنولوجيا معينه ويوفر الاحساس بالامان و الحماية, و يمكن قياس هذا المتغير عن طريق جودة و نزاهة المعلومات بالاضافه الى مستوى خصوصيه المعلومات.</p>								
21	Medical field companies digital marketing tools are trustworthy. ادوات التسويق الرقمي لشركات القطاع الطبي جديره بالثقه							
22	Digital marketing from the medical field companies is one that keeps promises. التسويق الرقمي لشركات القطاع الطبي يحافظ على وعوده.							
23	I trust medical field companies digital marketing tools because they keep my best interests in mind. اثق في ادوات التسويق الرقمي لشركات القطاع الطبي لانها تحافظ على اعتبار افضل مصالحتي.							
24	Digital marketing tools provided from medical field companies will required me to be cautious with these tools. ادوات التسويق الرقمي المقدمه من شركات القطاع الطبي تتطلب مني الحذر بالتعامل معها.							

NO.	Item	Item Clarity		Item Appropriate to measure		Item Relationship		Appropriate Adjustment
		Clear	Unclear	Appropriate	Not Appropriate	Related	Unrelated	
25	I feel satisfied that I will be able to rely on the benefits of medical field companies digital marketing. اشعر بالرضى لانه يمكنني الاعتماد على فوائد التسويق الرقمي المقدم من شركات القطاع الطبي							
<p><b>Dependent Variable: (Healthcare Provider acceptance for digital marketing):</b> Refers to which extend the HCPs accepting the digital marketing as promotional tool and a way to receive the medical knowledge from the medical companies. This variable can be measured through interoperability, familiarity with the technology and behavioral intentions.</p> <p>المتغير التابع (قبول مقدمي الرعاية الصحية للتسويق الرقمي): يعكس هذا المتغير مدى تقبل مقدمي الرعاية الصحية للتسويق الرقمي كوسيلة إعلانية و طريقه لاستقبال المعرفة الطبية والعلمية لمنتجات الشركات الطبية، و يمكن قياس هذا المتغير من خلال التوافقية و الألفة مع التكنولوجيا المقدمة والنوايه السلوكية.</p>								
26	I intend to accept the medical field companies digital marketing in future. انا انوي قبول التسويق الرقمي لشركات القطاع الطبي في المستقبل							
27	I plan to accept the medical field companies digital marketing. انا اخطط لقبول التسويق الرقمي لشركات القطاع الطبي.							
28	I expect to accept the medical field companies digital marketing in future. انا اتوقع ان اتقبل التسويق الرقمي لشركات القطاع الطبي.							
29	I would like to register for a digital marketing tools provided from the medical filed companies.(Examples: webinars, online courses, webpage advertisement, email, social media) أحب ان أسجل في ادوات التسويق الرقمي لشركات القطاع الطبي.							

NO.	Item	Item Clarity		Item Appropriate to measure		Item Relationship		Appropriate Adjustment
		Clear	Unclear	Appropriate	Not Appropriate	Related	Unrelated	
30	I look positively to receiving medical field companies' messages through digital marketing انظر بشكل ايجابي لاستقبال رسائل شركات القطاع الطبي عبر التسويق الرقمي							
31	I will strongly recommend my colleagues to use the digital marketing tools of medical field companies. سوف اوصي زملائي بشده باستخدام التسويق الرقمي لشركات القطاع الطبي							
32	I will partially replace the traditional way of medical filed companies marketing with digital marketing tools. (Hybrid) سوف استبدل بشكل جزئي التسويق التقليدي لشركات القطاع الطبي بالتسويق الرقمي.							
33	I will completely replace the traditional way of medical filed companies marketing with digital marketing tools. سوف استبدل بشكل كامل التسويق التقليدي لشركات القطاع الطبي بالتسويق الرقمي.							
<p><b>Moderating Variable: (Subjective Norms):</b> Is a behavioral process in which an healthcare providers influenced by Macro &amp; Micro dimensions of subjective norms. This variable can be measured through sustainable attitude and normative &amp; self-enhancing sustainable behaviors.</p> <p><b>المتغير المعدل: (المعايير الذاتية):</b> هي العملية السلوكية التي تؤثر على اتخاذ القرار من قبل مقدمي الرعاية الصحية والتي تتأثر بالمعايير الذاتية الكبيرة والمخصصة، ويمكن قياس هذا المتغير عن طريق ثبات السلوك وعن طريق ثبات المعتقدات المعيارية والشخصية.</p>								
34	My principal thinks I should accept digital marketing from the medical field companies. بشكل اساسي اعتقد انه يجب على قبول التسويق الرقمي لشركات القطاع الطبي.							



NO.	Item	Item Clarity		Item Appropriate to measure		Item Relationship		Appropriate Adjustment
		Clear	Unclear	Appropriate	Not Appropriate	Related	Unrelated	
35	The trend of healthcare providers accepting to digital marketing from the medical field companies around me is increasing. شروع قبول مقدمي الرعاية الصحية للتسويق الرقمي لشركات القطاع الطبي من حولي بزيادة.							
36	Healthcare providers around me generally believe that it is better for communication with medical field companies to use digital marketing. مقدمي الرعاية الصحية من حولي يعتقدون بشكل عام ان استخدام التسويق الرقمي هو أفضل للتواصل مع شركات القطاع الطبي.							
37	My colleagues would appreciate if I accept the digital marketing from the medical field companies. قبول التسويق الرقمي لشركات القطاع الطبي سوف يكون محل تقدير زملائي.							
38	I would get all the required support (time, information related) from my colleagues to use the digital marketing from the medical field companies. سوف احصل على جميع الدعم اللازم من (وقت ومعلومات مرتبطة) من زملائي حتى استخدم التسويق الرقمي لشركات القطاع الطبي.							

## Appendix (3)

**MEU** جامعة الشرق الأوسط  
MIDDLE EAST UNIVERSITY  
Amman - Jordan



مكتب رئيس الجامعة  
President's Office

الرقم: در/د/707  
التاريخ: 2021/12/19

### إلى من يهمه الأمر

لغايات توفير وربط أسس التعاون مع خدمة المجتمع المحلي؛ نرجو التكرم بالموافقة على تقديم التسهيلات الممكنة لطالب الماجستير عبدالله احمد حماد، ورقمه الجامعي (402010175)، المسجل في تخصص ادارة الاعمال/ كلية الأعمال في جامعة الشرق الأوسط، والذي يتولى القيام بإعداد دراسة بحثية أكاديمية في رسالته المعنونه بـ ' العوامل المؤثرة على مقدمي الرعاية ال صحية لقبول الذ سوق الرقمي: الدور المعدل للمعايير الذاتية'، علماً بأن المعلومات سيتم استخدامها لأغراض البحث العلمي وبصورة سرية.

وبناءً على طلبه أعطيت له هذه الشهادة...

ق.أ. رئيس الجامعة

أ.د. سلام خالد المحادين

