

# *Internet Marketing Adoption by Iranian Distribution Industry: An Attempt to Understand the Reality*

**Sepideh Zahiri**

*Birmingham City Business School, Birmingham City University,  
Birmingham, UK.*

*E-mail: [Sepideh.zahiri@mail.bcu.ac.uk](mailto:Sepideh.zahiri@mail.bcu.ac.uk)*

**Professor Hatem El-Gohary**

*Birmingham City Business School, Birmingham City University, UK.  
Cairo University Business School, Cairo University, Egypt.*

*E-mail : [hatem.elgohary@bcu.ac.uk](mailto:hatem.elgohary@bcu.ac.uk)*

**Professor Javed Hussain**

*Birmingham City Business School, Birmingham City University,  
Birmingham, UK.*

*E-mail: [javed.hussain@bcu.ac.uk](mailto:javed.hussain@bcu.ac.uk)*

## **Abstract:**

Although the internet has become a significant platform for the advancement of marketing strategies and developments, there have been inadequate empirical research efforts concerning its adoption for conducting internet marketing in developing countries, specifically in the Middle East, and more particularly in Iran. Previous studies investigated internet marketing adoption and acceptance extensively, by employing different theories of new technology adoption in developed countries. However, there have been inadequate empirical research efforts concerning its adoption in developing countries. It is recognised widely that the adoption of internet marketing can offer substantial opportunities for Small and Medium Sized Enterprises (SMEs). In developing countries, internet marketing opportunities can be a meaningful approach for SMEs to be able to compete with large businesses and to access, with lowest possible costs, targeted customers.

This study aims to investigate the factors which influence SMEs' adoption of internet marketing and the relation between such adoption of Internet Marketing and Marketing Performance of SMEs. In order to accomplish this objective, the researchers investigated previous studies in order to identify the different research gaps within the literature regarding the adoption of internet marketing amongst SMEs. Additionally, the researchers integrated existing theories of new technology adoption in order to develop a conceptual framework for the determinants of the adoption of internet marketing in the SMEs sector in Iran. Within this regard, the researchers reviewed the Decomposed Theory of Planned Behaviour (DTPB), Diffusion of Innovation (DOI); Technology–Organisation–Environment (TOE) Model; Social Cognitive Theory (SCT), Institutional Theory, Motivational Model and Model of PC

utilisation(MPCU) to examine the major factors influencing the adoption of new technology in Small, Medium organisations.

The approach adopted for the research is a semi-structured interview with 26 owner/mangers of Iranian SMEs in distribution sector. These data are qualitative in nature and involve sample of 300-400 of mangers/owners, retailers and suppliers of Iranian SMEs in distribution sector. The study will provide great benefits for practitioners, researchers, and educators.

**Keywords:**The Internet, Internet Marketing, Internet Marketing Adoption, Conceptual Framework, Iranian Distribution Industry, Small-Medium Size Enterprises.

## **1.0 Introduction**

Small medium enterprises (SMEs) is recognised as one of the main contributors to economic, development and employment growth. Despite it play a major role in today's world economy, SMEs is well known having limitation and acceptance barriers in adopting a new technology although the revolution of internet and communication channel has changed the way people conduct business today. It is widely known that the industries and businesses of today's new economy evolve and change rapidly, mainly as a result of the wide diffusion of Information and Communication Technologies (ICT) within organisations. New technologies enable and facilitate a broad range of business activities related to the storage, processing, distribution, transmission and reproduction of information (Fabiani, Schivardi, and Trento, 2005; Ongori and Migiro, 2013). In addition, ICTs may induce dramatic changes in businesses' internal processes, radically altering firms' structure, organisation and operations (Spanos, Prastacos, and Poulymenakou, 2002), with organisational and output changes sometimes considered as spillover or indirect effects from investing in new technologies (Black and Lynch, 2004).

A significant volume of research highlights the fundamental role of internet for productivity and economic growth at the macroeconomic level (Bart Van Ark, O'Mahony, and Timmer, 2008), the industry level (Inklaar, O'Mahony, and Timmer, 2005) as well as the firm level (Arvanitis, 2005; Black and Lynch, 2004). At the firm level, there is empirical evidence of the substantial contribution of internet to firm performance in terms of labor productivity (Arvanitis, 2005) as well as multifactor productivity and output growth (Brynjolfsson and Hitt, 2003). Indeed, the gains of integrating and using internet are multiple and touch upon diverse aspects of intra- and inter-firm business operations and transactions, being in turn reflected in firm performance. Focusing on SMEs, relevant literature underlines the benefits of adopting internet in terms of cost savings, organisational effectiveness, improvement of services to customers and suppliers, access to new business opportunities and market information, competitiveness (Ghobakhloo, Sadegh Sabouri, Sai Hong, and Zulkifli, 2011; Ongori and Migiro, 2013) and, more generally, productivity and growth (Barba-Sánchez, Martínez Ruiz, and Jiménez-Zarco, 2007; Ongori and Migiro, 2013). In addition, internet marketing implementation usually entails additional costs (e.g., employee training, licensing, organisational restructuring and upgrading existing facilities), which also need to be taken into consideration, especially in the case of

SMEs (Ghobakhloo et al., 2011). From a policy perspective, promoting the acquisition of new technologies within SMEs has been given high priority to firms. However, due to various resource limitations and a lack of understanding of the internet related opportunities, SMEs face increased difficulty in adopting the new technologies (Nasco, Toledo, and Mykytyn, 2008) in many developing as well as developed countries. In the case of Iran, where the overall economic activity is traditionally dominated by SMEs, which, despite the progress they have made in recent years, still appear to lag behind the average in assimilating new technologies and engaging in e-business activities (European Commission, 2016). At a turning point on its way to rebalancing, growth in Iran must be inextricably linked to the new technological priorities established in light of the digital and ICT revolutions. To this end, the successful design and implementation of appropriate policy plans and schemes require adequate knowledge on the factors that affect business decisions with respect to the adoption and use of internet marketing within SMEs.

Internet Marketing has emerged as an interesting alternative way of doing business, which has emphasised its relevance to the growing of the firm and the strengthening of alternative ways of creating value Constantinides, E. (2010). Essentially, internet marketing is a type of marketing involving goods, services and information in which the parties involved do not always meet physically but interact electronically (Sainiee, S. (1998). The benefit of internet marketing is evident. For example, the potential of placing orders, transferring sales data and inventory information, and conducting the transactions online can significantly reduce business operations cost and increase the speed of business activities (Senn 2004, p.387). SMEs are enterprises which play a very important role in the economy of many countries, and are essential components of the economy of Iran, a developing country Storey (1994). Managers of SMEs must be creative and autonomous, and strive to adapt to the evolving world economy. In order to succeed, it is essential that Iranian SMEs be open to new techniques, in particular the Internet and internet marketing, all of which have become indispensable business management tools. The new technologies are the key to enabling enterprises to establish contacts with enterprises throughout the world, in turn enabling them to participate in the world economy (Rayport and Jaworski 2001).

Over the last few years, some Iranian enterprises have adopted internet marketing and are already benefiting from it. Many Iranian SMEs have been unable to resolve such problems by themselves, which is why government authorities, financial institutions and large enterprises have undertaken to support and encourage them with their policies and their assistance programs. With a few rare exceptions, Iranian enterprises, like most enterprises in developing countries, have not yet adopted much technological innovations, often because of a lack of resources, but also because of the work habits and culture of those who manage these SMEs. Many cannot, or will not, accept the risk inherent in changing the way they do business and their decision-making processes. Although the internet has become a significant platform for the advancement of marketing strategies and developments, there have been inadequate empirical research efforts concerning its adoption for conducting internet marketing in Small-Medium Enterprises in developing countries, specifically in the Middle East area, and more particularly in Iran. Previous studies investigated internet marketing adoption and acceptance extensively by SMEs, by employing different theories of new technology adoption in developed countries, while there have been inadequate

empirical research efforts concerning its adoption in Small-Medium Businesses in developing countries.

In developing countries, internet marketing opportunities can be a meaningful approach for SMEs to be able to compete with large businesses and to access, with lowest possible costs, targeted customers (Haghizadeh, P,2 011). However, the current situation shows that SMEs continue to lag behind in maximising their capabilities in taking such chances (Ravanbakhsh, Moqtdalanam, (2007). Universally, SMEs are reported to be slow adopters of new technologies as a result of limited financial resources and lack of expertise (Premkumar, G., and Roberts, M, 1999). The importance, of SMEs, emerged from their positions in the economy since they contributed more than 90% to many developed or developing countries' economies and they were considered to be the backbone of any economy (Rashid, M. A., and Al-Qirim, N. A. , 2001). Considering the rapid changes in the competitive era, SMEs should adapt themselves with the harmony of change, and while adoption of internet marketing assumed as the main resource of organisations' success. The main problem motivating this research is the need to identify and bring together in one framework the appropriate issues, variables, components and concepts that need to be addressed to encourage, motivate and enable SME's in Middle Eastern countries; in particular in Iran; to adopt internet marketing technology in the running of their businesses.

The current study explicitly focuses on the internet marketing adoption among Iranian SMEs literature. Although, various internet marketing studies found in the review process were based on various theories of technology adoption frameworks in the literature. To the best of the knowledge, very few studies investigated the state of art in this area specifically based on technology adoption frameworks in the last 5 years. Ngai reviewed internet marketing and its applications in his study and found 65 studies based on technology adoption theory. This study also focusses on the technology adoption theories widely used across the globe. The present study has employed a systematic approach to explicate the synthesis of internet marketing literature and its adoption toward a conceptual framework. This paper is structured as follows: Section 1: Introduction, Section 2: review of literature of internet marketing adoption among Iranian SMEs and influencing factors, Section 3: conceptual framework, Section 4: research methodology, Section 5: Discussion and Future Research Direction.

## ***2.0 Internet Marketing***

Internet Marketing and its application have become everyday discussions and various articles and literature have been written in this regard (Charlesworth Alan, 2009 in Chaffey, 2015, Chan and Swatman, 2012). Access to the domain of electronic world has become priorities of most of the big and small public and private organisations and as such, managers have encountered new challenges in this field (Chaffey et al., 2012). Since electronic world has outstanding differences compare to the physical world, planning for Internet presence and implementation of Internet Marketing are very crucial and important. One of the important steps in the planning is evaluating internet marketing adoption possibilities and prerequisites for the

implementation of internet marketing. According to Zulkifli (2001) and Wu (2004) the internet marketing adoption process begins with knowledge awareness; continues through attitude formation, decision and implementation. Based on Rao, Metts, and Monge (2003), internet marketing development and implementation takes place in four stages: 1-presence: in this stage most companies make their first steps in internet marketing by displaying their company brochure and product offer on a Web site; 2-portals: the portals stage is viewed as the introduction of two- way communication, customer or supplier order placing, the use of profiles and cookies;3- transactions integration: the transactions integration stage (TI) is differentiated from the portals stage mainly by the presence of financial transactions between partners; and 4-enterprises integration: enterprises integration (EI) refers to complete integration of business processes to the extent that old line business is indistinguishable from online business.

Internet marketing, which also has known as Online Marketing, involves applying the Internet and related digital technologies to achieve marketing purposes and to support the modern concept of marketing (Chaffey et al., 2012, p. 6). The Internet has a huge potential for transforming commerce and it gives the businesses many challenges and opportunities for trading and participating in the Gold Rush of the information age (Dutta, Kwan, and Segev, 1998, p. 541). A review of extant literature demonstrates that there are various definitions for Internet Marketing according to the authors` different views. According to Smith, 2007 in Wymbs, 2011, "Internet Marketing refers to the use of digital technologies to create an integrated, targeted and measurable communication which helps to acquire and retain customers while building deeper relationships with them".

The Institute of Direct Marketing also defined Internet Marketing in 2005 as "Applying internet technologies which form online channels to market to support marketing activities for achieving profitable acquisition and retention of customers within a multi-channel buying process and customer lifecycle through recognizing the strategic importance of digital technologies and developing a planned approach to reach and migrate customers to online services through e-communications and traditional communications." (The Institute of Direct Marketing, 2005 in Chaffey, 2015). According to the definitions, it is obvious that Internet marketing is a broad field that refers to various and different activities which are deployed to reach audiences via digital technologies. The Internet can be used in relation to traditional marketing to achieve and deliver products or services to customers (Charlesworth Alan, 2009). He concluded that, the application of the internet and related digital tools, integrated to traditional marketing tools for achieving marketing aims. Internet is a vital aspect for enhancing company`s market aims and operational effectiveness. (Dibb, 2001) stated that Internet marketing managed to execute some business objectives. Based on the previous researches, whilst sales in some firms were inferior to what was estimated, utilisation of internet, helped to decreased time consumption, developed networking and increased profit (Chaffey et al., 2012).

Internet marketing, E-marketing, E-commerce, E-business are all different names that have been used interchangeably in the literature to refer to marketing that occurs via the Internet. Some researchers viewed the internet as a new channel of distribution that affects the marketing function mainly in the area of transferring goods and services (Anderson, 2002, Doherty and Ellis- Chadwick, 2000, Pitt at el., 2003).

By reviewing the relevant literature, the researchers noticed that, definitions of electronic marketing (e-marketing) vary according to each author's point of view, background and specialisation. Although there are many researchers who examined internet marketing, E-Marketing, Viral Marketing, E-commerce etc. (such as: El-Gohary and El-Gohary, 2016; El-Gohary, 2011; Hamad et. al., (2015); Raghubansie et. al., (2015); El-Gohary and Eid (2013); Eid and El-Gohary (2013); El-Gohary et. al., (2013); El-Gohary (2012a); El-Gohary (2012b); El-Gohary (2012c); Millman and El-Gohary (2011); El-Gohary (2010); etc.), there is no unique definition for electronic marketing. El-Gohary (2012) asserted that because of the increase usage of the Internet and other Electronic Marketing tools (i.e.: E-mail, Intranets, Extranets and Mobile phones) in electronic transactions might create not only a lot of opportunists but also can eliminate a lot of its threats. On the other hand, most authors misinterpret the concept and definition of e-marketing, the majority of researchers are using the term e-marketing as Internet-marketing; E-commerce; or E-business as equivalents or a deferent wording for the same meaning, which is incorrect because they are deferent. Although many people use these interchangeably, they are quite different. Chaffey et al. (2012, p. 11) explained that e-business refers to "the transformation of key business processes through the use of Internet technologies."

Therefore, e-commerce is a subset of e-business. Additionally, Chaffey et al. (2012) clarified that Internet marketing is different from e-marketing. Internet marketing requires a firm to use the Internet and digital technologies to attain marketing objectives, whereas e-marketing is a broader concept requiring a firm to use the Internet, interactive digital TV and mobile marketing with internal technologies, such as customer relationship management or database marketing to achieve marketing objectives (Chan and Swatman, 2012). From the author's point of view implementing Internet Marketing by small, medium business enterprise can change both the shape and nature of SMEs business all over the world. Because the increase usage of the Internet marketing tools.

### ***2.1 Internet marketing in developing countries***

A common thread among researchers in developing countries is that internet marketing is a form of innovation in which parties interact electronically to perform one or more of the following functionalities depending on their contextual resources and constraints: (i) communication, such as delivering information, products/services, or payments via telephone lines, computer networks, or any other means; (ii) the application of technology towards the automation of business transactions and workflow; (iii) the meeting of the desire of firms, consumers, and management to cut service costs while improving the quality of goods and increasing the speed of service delivery; (iv) the provision of the capability of buying and selling products and information on the Internet and other online services (Boateng et al., 2008; Ngai and Wat, 2002). The benefits of that internet marketing have been well documented in literature (Ojukwu et al., 2007). However, there has been little reported on the success of SME adoption and institutionalisation of that internet marketing in developing countries (Ghobakhloo et al., 2015), and in SMEs in particular. This is partly due to the limited number of studies conducted in these regions that can provide insights about sociocultural contextual imperatives.

Although not comprehensive but the various studies that have been conducted

on that internet marketing in developing countries for the period 1990–2015. Studies that were conducted involved: the diffusion, adoption, behavioral influences, Electronic-Banking and e-Government Diffusion. It is evident that most of the studies have been in the more developing countries of Africa, Asian, and Latin America. For example, in developing countries there were a total 67 studies in comparison to 31 for SMEs. 75% of the studies in developing countries were on Internet marketing with 7 middle-eastern countries represented. The majority of these studies were positivistic in nature, following an objective approach. The typical theories used were the Technology Acceptance Model (TAM), Theory of Planned Behavior, Unified Theory of Acceptance and Use of Technology (UTAUT). Only a few studies used theories that address contextual issues, such as social relational and group theory (Mwangi, 2006), change agent theory (Duncombe and Molla, 2009), the Technology-Organisation-Environment Framework (Kurnia and Peng, 2008; Gibbs et al., 2002), an E-Commerce readiness framework (Molla and Licker, 2005), innovation diffusion theory (Alghamdi et al., 2011; Windrum and de Berranger, 2002), and culture theory (Vatanasakdakul et al., 2004).

Attention to sociocultural context is important as it shapes ICT usage processes and reveals the underlying causes of ICT related failures (Lamb and Kling, 2003; Sawe and Simbo, 2002). Iran is becoming the fastest internet growth market as the rise predicted by the marketers is nearly around three quarters of the world's population by 2020. Iran will add around 310 million new subscribers to embracing internet technology in the coming three years. The study explores the factors that motivate the adoption and the continuous usage of the internet marketing. The study proposes a conceptual model of internet marketing adoption and the influencing factors and continuous use in the Iranian context.

### ***3.0 Small, Medium Enterprises***

Small and medium-sized enterprises (SMEs) have always formed the backbone of national economies. Indeed, most governments regard the SME sector as a major driver of the economy and a source of employment opportunities (MacGregor and Vrazalic, 2007). Nevertheless, the development of most countries during the last two centuries has been based, mainly on large firms. But this situation changed during the 1970s, and was more apparent in the 1980s, particularly in the diffusion of information technology, when low cost hardware and operating systems were made available in the market for the first time (Ordanini, 2006). Generally, ICT promised to provide SMEs with the same potential opportunities for efficiency and cost savings that had already been offered to large organisations. However, in spite of these changes, the speed of internet adoption among SMEs was slower than that of larger organisations, thus creating a so-called 'digital divide' phenomenon (Ordanini, 2006).

Each country has its own definition of SMEs and there is no formal categorisation of what constitutes an SME (Ghobadian and Gallear, 1996; Mohd Asri, 1999; Curran and Blackburn, 2001). Even within countries, definitions of SMEs vary (Beaver, 2002) rendering definitions that vary even amongst those government agencies as each seems to have its own criterion. This is further complicated by

definitions varying over time (Hashim and Wafa, 2002). However, these varying definitions do suggest that any definition of SMEs must include a quantitative component that takes into account staff levels, turnover, and assets, together with financial and non-financial measurements, and that the description must also include a qualitative component that reflects how the business is organised and how it operates (Meredith, 1994). In general, though, many researchers define SMEs using its quantitative criteria, such as number of employees, amount of capital, amount of assets and sales turnover (Yap *et al.*, 1992; Hashim and Wafa, 2002).

Nevertheless, there are two common ways of defining SMEs found in the literature. One is the definitions based on financial turnover and the other is the definitions based on number of employ (Curran and Blackburn, 2001). Definitions based on financial turnover however, have been found to be problematic (Curran and Blackburn, 2001) as this is difficult to measure, and varies by sector (Storey, 1994). Critics argue that financial turnover changes over time with inflation (Bridge *et al.*, 1998). Thus, definitions based on number of employees are more acceptable, and most commonly used by policymakers (Curran and Blackburn, 2001) and researchers (e.g., DeLone, 1988; Raymond, 1992; Cragg and King, 1993; Cragg, 2002). Employment size is considered more objective and transparent compared to turnover (Curran and Blackburn, 2001), and also more practical as "information about employment is readily available and ... considered by managers to be less confidential" (Pratten, 1991, p.93; Mohd Osman, 2001).

SMEs indicate small and medium size businesses. The term Small and Medium Sized Business or SMB became, also, more accepted in some countries. One of the main problems which arose when trying to compare studies concerning the small firms, from a number of countries, was that there was no global agreement regarding its definition. Every country had its own definition of an SME and, in a country; every sector had its own definition. The number of employees and income determined whether or not a firm was a small or medium size enterprise. Storey (1994) remarked that around 95% of all firms, in the European Union, were believed to be small and medium, offering more than half of all jobs. He remarked some firms were so small that they did not require official government registration. Therefore, within some countries, it was quite difficult to guess the population of small firms and to make significant comparisons with other countries. Bolton (1971) described small firms as firms likely to be controlled, in a highly personalised way, by the owner/manager and, commonly, the business was self-determining of other organisations. The most commonly used measure was the level of employment, due to its easy availability and reliability in data collection. However, assets and turnover could be determined, also, but both were uncertain due to the firms' sensitivities about financial issues.

Small and medium sized enterprises are the most prolific and, arguably, the most important element for the survival and stability in any economy and possibly it's most important engine for growth. The International Monetary Fund (2016) reported that 99.7% of all enterprises in the world are SMEs; by comparison only 0.30% are classified as large. Growing recognition of the economic contribution of SMEs has given rise to a large number of activities in many international organisations, both governmental and non-governmental. In June 2015, the framework of the preparation of the 1st OECD Ministerial Conference on SMEs was held in Bologna. This collected and classified information on the activities of international bodies and institutions, as



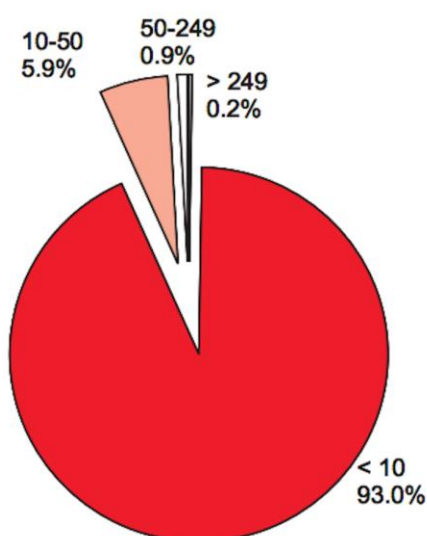
well as NGOs, targeted at SMEs. (OECD 2000) By 2004, there had been a considerable increase in the amount of information available at the international level, reflecting new topics, new challenges, new actors and new policies relating to SMEs, although the situation was recognised to be likely continue to further evolve. The European Union, 2009 defined an SME based on the firm's number of employees and this definition was similar to the UK definition. It defined the micro-firms as employing less than 10 workers; the small enterprise had between 10 and 50 employees; and the medium-sized businesses had 51-250 employees (European Commission, 2011).

The US definition was quite different to the EU one since small sized businesses had less than 250 employees and medium sized enterprises had less than 500 employees (USAID, 2007). In the Asia-pacific area, the definition of SMEs varied from country to country. The most common measure, used within Asia Pacific Economic Cooperation (APEC), was the number of employees within the firm. Hence, APEC defined SMEs as businesses with less than 100 people; whereas, a micro firm employed less than 5 employees; a small firm employed between 5 and 19 and medium sized enterprise employed between 20 and 99 people (Kotelnikov, 2007). Therefore, every country had its own definition for SMEs; even, in the same country, this definition might differ due to many impacts like the nature of the industry or the volume of their annual sales. The commission of European community define the small- medium size enterprise in 2017 based on the below table 1.

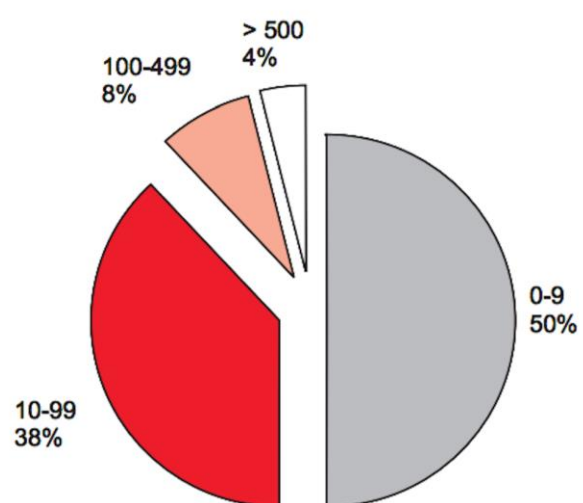
**Table 1. Definition of SMEs European Commission, (2016).**

<b>Enterprise category</b>	<b>Staff Headcount</b>	<b>Turnover</b>	<b>Balance sheet Total</b>
medium-sized	< 250	≤ € 50 million	≤ € 43 million
Small	< 50	≤ € 10 million	≤ € 10 million
Micro	< 10	≤ € 2 million	≤ € 2 million

**A. European Union: percentage share of enterprises by size class**



**B. United States: percentage share of enterprises by firm size (total economy)**



**Figure 1.** Definition of SMEs European Commission, (2017).

### **3.1 Internet Marketing Adoption within SMEs:**

There has been greater growth than before in adoption of the Internet due to the huge added value to the firm especially when adopting internet marketing (Ratnasingam, 2000). The Internet, and especially internet marketing, is a significant technological innovation for SMEs (Riemenschneider and McKinney, 1999). SMEs adopt internet marketing essentially for information and communication functions (Kula and Tatoglu, 2003; Lai et al., 2002; Mehrtens et al., 2001). Though, the fast growth of internet marketing, is driving SMEs to venture into the Internet (Drew, 2003). Hamilton (2003) stated that, in the UK, more than 99% of businesses, with over 50 employees, had access to the Internet but, due to the high costs, many SMEs could not upgrade their ICT infrastructure to move from being an adopter of simple internet marketing adopter to e-marketing, e-commerce and etc.

Although SMEs were launching internet marketing, there were indications that they were not adopting internet marketing to its full potential (O'Connor and O'Keefe, 1997; Peet et al., 2002). Moreover, SMEs, which had developed the adoption competences, had not done so strategically and, as yet, had to benefit from savings in both time and significant costs (Quayle, 2002). The digital gap, between large firms and small businesses is increasing and small businesses' online trading is very slow and this gap widened because of shortages in investment and poor strategies (Zheng, et al., 2004). Moreover, the SMEs owners/managers' orientations and motivations were found to influence the adoption of internet marketing (Fillis and Wagner, 2005). Generally, as a result of insufficient resources and limited education about IT (Cragg and King, 1993, Ein-Dor and Segev, 1998) small businesses faced significantly greater risks in IT application than large businesses. There were some surveys, conducted across the world, that internet marketing, between SMEs, was accepted as being slow (Taylor et al., 2004). Therefore, due to the low level of information and communication technology (ICT) diffusion, particularly in a developing economy, there is a lack of IT awareness (Molla and Licker, 2005). Many factors, influencing the adoption of new technologies, were broad in nature (Windrum and De Berranger, 2003). Studies, conducted on the SMEs' adoption of internet marketing, were likely to focus on the types of adoption and factors which influenced their adoption (Poon and Swatman, 1997). Findings from these studies, connected with observed findings in the area of the SMEs adoption of IT, focused on promoting the potential benefits and difficulties to the adoption of internet marketing (Fink, 1999).

SMEs have traditionally restricted their activities to local economies and face-to-face interaction. However, over the last decade, there has been an increasing participation of SMEs in adopting internet marketing; particularly with the commercial use of the Internet. A number of businesses have taken advantage of the potential benefits that the Internet offers. There are suggestions that SMEs can gain considerably from using the Internet (Poon and Jevons, 1997; Daniel and Wilson, 2002; Daniel, 2003; Martin and Maday, 2003). There are also suggestions that SMEs can compete with large organisations by adopting internet marketing, because the Internet can provide equal access to both. The Internet enables SMEs to make as

great an impact on their customers as it does on large organisations (Riquelme, 2002). Some SMEs have started to market their products and services online and some have started to move into the international market using the Internet's capabilities. Despite these enthusiasms, a significant number of SMEs have yet to adopt internet marketing; particularly involving websites with online transactions. Indeed, some studies show that the number of SMEs that trade online is decreasing (Brown and Lockett, 2004; Pool *et al.*, 2006).

### **3.2 Potential Benefits of Internet Marketing to SMEs**

The benefits of e-commerce for SMEs have been a concern for governments and researchers alike due to the significance of this sector to their national economies (OECD, 2004; Van Akkeren and Cavaye, 1999). (Senn 2004, p.387) outlines some of the benefits for engaging in internet marketing for organisations as well as individuals, as follows:

1. Geographical reach; there is no barrier for participants as they are able to reach any geographical location on the globe through communication networks.
2. Speed; the interaction between the participants of e-commerce happens within a short span of time.
3. Productivity; due to the fast speed of Internet transactions, participants of e-commerce can gain a lot of time that they can devote to other activities. This means being able to do more work than they actually anticipated, resulting in higher output.
4. Information sharing; any form of information; that is text, audio, video, graphics, or animation can be transferred to all users that are connected to the network.
5. New features; the ability to add new features to the products and services, is another benefit for e-commerce users.
6. Lower costs; the cost of business transaction is cheaper than in traditional methods due to the nature of the Internet. Costs are lower also because producers can communicate directly with buyers, removing any middle men.
7. Competitive Advantage; It is argued that those companies that develop and implement an effective e-commerce strategy have business advantages over others in their industry that cannot offer similar products, services, or operating capabilities.

The actual uptake and realisation of benefits in internet marketing adoption has been in large corporations especially in developed nations (Eriksson *et al.*, 2008; Martinsons, 2008). Research studies have noted that whilst some large firms have benefited greatly in internet marketing adoption due to the wide resources at their disposal (Kartiwi and MacGregor, 2007; Thatcher, Foster and Zhu, 2006), SMEs in developing countries lack a number of resources and competencies and the political and business environment in their countries provides little assistance to boost internet marketing adoption (OECD, 2004).

### **3.3 SMEs and technology adoption barriers**

SMEs has a significant contribution to many countries. Literature regarding the contribution of SMEs to economy covered vast and wide facet. Kuan and Chau (2001) iterated that the new job creation, contribution to gross national production (GDP) and

production of innovation in technology are some of major SME contribution in US. Same evidence in Europe, where 99.8 percent of the firms' establishment are SMEs and created two-thirds of the turnover and business employment (Carayannis, et al., 2006). SMEs raise the standards of living for their families and also play a crucial task in contributing towards a stable and sustainable social and economic community environment (Samujh, 2011). Over the past few decades, numerous studies have been conducted by policy makers, academicians, and business consultants to investigate the types of business problems encountered by SMEs. Many of the studies able to identify not only the types of problems small business face, but also the relative significance of these problems. In Iran, the problems faced by SMEs are the lack of sales and marketing to the use out-of-date technology in their operation (Hashim, 2007). SMEs has uniqueness with limited resources, capital, human and technology (Davis and Vladica, 2006). There also has been a research on the factors inducing SMEs to introduce information technology (Morgan et al., 2006; Riemenschneider et al., 2003). Compared to larger corporation, most SMEs perceived the barriers of implementing IT into their business operations as expensive initiative, risk, complex procedure, technical expatriate, and customer services (Chong et al., 2012; Pires and Aisbett, 2001).

#### **4.0 Definition of SMEs in Iran**

Iran has a population of 77 million (Nejad, 2017). Most of these people are young people (Nejad, 2017). Iranian economy is largely dependent on oil revenue (ILO, 2015). In fact, the dependence on oil exports placed the Iran's economy in a weak position (UNIDO, 2015). For example, "With about 19 percent of the population living below the poverty line, the GDP of \$599.2 billion, the real growth rate of 4.3 percent, unemployment rate of about 22 percent and inflation rate above 18.5 percent, the country has a very challenging and unstable economic situation" (Zohari, 2013, p.18). Hence, one of the most challenging problems in Iranian economy is to facilitate and produce new jobs for those who are ready to enter the labor market for unemployment position in Iran (Nejad, 2017). Accordingly, recognising the importance of SMEs in generating employment, Iran's national development plans (Third Economic Plan (1999-2004) and The Fourth National Development Plan (2010-2015) continue to place a great deal of importance on their growth (Feizpour and Jamali, 2009; ILO, 2015).

There is a little agreement regarding the definition of SMEs in Iran, but the Iranian Statistical Yearbook categorises enterprises into four classes, e.g. businesses with 1-9 employees, 10 to 49 employees, 50 to 99 employees, and more than 100 workers (Zohari, 2013). However, most studies in Iran define SMEs in terms of number of employees in the range of less than 250 employees (UNIDO, 2015; Zohari, 2013). However, "more than 63 percent of total Iranian manpower in the industrial sector are employed by SMEs, and the share of SMEs in value amounts to approximately 30 percent, and, in total, represents 99.9 percent of all businesses in Iran" (Zohari, 2013, p.7).

Iran as a developing country is eligible for economic development and industrialisation, and compared with many countries, have considerable advantages to access infrastructure and noteworthy extensive facilities for private sector development (MID,2012). Some advantages of small and medium industries due to

transport effects, the effect of market size, adjusting effect, effectiveness of selection and control effect, has made these industries to the first choice for production of many goods (Maleki Nejad,2006) in Iran's economy 94% of industrial units which are being exploited consist of small industries. According to Managing Director of Small and medium Industries and Industrial Parks Organization of Iran, small industries due to the potential of employment increase in a short term, low investment absorption, fair distribution of wealth and income, are backed by the government (Naser Bakht, (2009). review of articles about the role of small and medium enterprises in the country's economic development shows that study and research on economic development in small and medium enterprises must basically form in one of the fields of Ministry of Industry, Small and Medium Industries and Industrial Parks Organisation of Iran, by planners and strategists and academic scholars.

Ahmadi Moghaddam Ermeki (2009) introduced the intelligent and integrated role and applications of computer systems, and finally offers the stepwise justification methodology for applying the productive systems to meet demand, and maintain and promote competitive market conditions, lack of enjoyment of small and medium industries from these integrated production computer systems for small and medium enterprises (Ahmadi Moghaddam Ermeki (2009). Deh Moled (2009) studies the barriers and areas of innovation in small and medium enterprises. He argues that most of the countries in the world by focusing on innovation seek to increase productivity and improvement of their economic status. Data analysis in this paper indicates that 45% of enterprises in the studied sample were innovative. On the other hand, the organisational structure of these enterprises is not ready for the application of IT adoption and thus cannot take action to institutionalise them for small and medium enterprises Deh Mole, (2009) Small and medium enterprises in different countries have many similarities, but despite this, a unit and same definition cannot be obtained; each country according to its own requirements has provided a definition of these kinds of businesses. Most of these definitions are discussed based on quantitative criteria such as number of employees and turnover rate. According to the definition of Ministry of Industries and Mines and Ministry of Agriculture, small and medium enterprises are industrial and service sectors (urban and rural) that have less than 50 employees (UNIDO, 2004, 121).

Statistical Center of Iran has classified the businesses into four groups: Businesses with 9-1 employees, 10-49 employees, 50-99 employees, and more than 100 employees (2009). Although this classification is apparently similar to definitions of Europe Union, but the Statistical Center of Iran only considers the businesses with less than 10 employees as the small and medium enterprises, and considers other businesses as "large industrial firms". Central Bank of Iran also considers businesses with less than 100 employees as small and medium enterprises. According to various definitions, usually small and medium businesses have three qualitative characteristics that these features gave them a nature different from large industries. These features according to Johari, (2012) include: the unity of ownership and management, individual and family ownership, independence from other businesses.

**Table 2. Formal definitions of small, medium and large industries in 2017**

<b>Row</b>	<b>Country</b>	<b>Definition of industrial and nonindustrial small and medium enterprises</b>
------------	----------------	--

1	<b>Japan</b>	Small and medium manufacturing units: are those small and medium industrial enterprises that have employees fewer than 300 people or recorded total assets less than 100 million yen. Businesses units: are small and medium enterprises with employees fewer than 50 people or their recorded maximum ceiling of assets is 30 million yen. Service units: are companies with the maximum work power of 50 people or their maximum registered total assets are 10 million yen.
2	<b>South Korea</b>	Small and medium industrial units: are companies with maximum 300 employees. Business units and services: are companies with the maximum 20 employed.
3	<b>Malaysia</b>	Small industries: are industrial units with at least 5 and maximum 50 employees or their maximum value does not exceed 500.000 Ryngyt or 200.000 \$. Medium industries: are those industrial units with 50 to 75 employees, or with least limit of stock value 500.000 Ryngyt (200.000 \$) and a maximum ceiling of 2.5 million Ryngyt (1 million in American \$).
4	<b>Singapore</b>	Small and medium industrial units: are those industrial units with fixed assets less than 12 million Singapore dollars, equivalent to 8.5 million American dollars. Service - commercial units: are those companies with maximum 100 employees.
5	<b>Taiwan</b>	Small enterprises: those companies with annual maximize revenue from sales does not exceed 20 million. Medium-sized enterprises: are companies active in

		manufacturing, mining and commerce and their maximum annual sales does not exceed 40 million Taiwan dollars and the maximum full-time workers in these companies is not more than 200 people.
<b>6</b>	<b><i>Thailand</i></b>	Small to medium enterprises are run with entrepreneurship system and their maximum employed man power is 200 people. Small and medium enterprises are run based on capital-intensive system and the maximum employed man power is 100 people.
<b>7</b>	<b><i>Australia</i></b>	Small industries: are those industries with less than 20 employed persons. Medium industries: are those industries with more than 20 and less than 100 employed people.
<b>8</b>	<b><i>China</i></b>	In general, regardless of the type of production and productive capacity of units, those industrial companies with more than 200 employees are called small and medium companies.
<b>9</b>	<b><i>France</i></b>	Small and medium companies: companies with minimum 10 and maximum 199 employees.
<b>10</b>	<b><i>Indonesia</i></b>	Small and medium industries: those industries with less than 100 employees are called small and medium industries.
<b>11</b>	<b><i>India</i></b>	Very small industry: with 2.5 million rupees maximum ceiling of fixed capital including machinery of initial working capital. Small Industries: with 10 million rupees maximum ceiling of fixed capital including machinery of initial working capital. (220 thousand people) The average industry: with 100 million rupees maximum ceiling of fixed capital including machinery of initial working

		capital. (2 million and two hundred thousand dollars).
12	<b>America</b>	Very small enterprises: companies with maximum 20 people man power. Small enterprises: companies with at least 20 and maximum 99 employed man power. Medium-sized enterprises: companies with at least 100 and maximum 499 employed man power
13	<b>Vietnam</b>	Small and medium enterprises: those companies with maximum 200 employees.
14	<b>Iran</b>	small enterprises: companies with less than 10 employees Small companies and medium enterprises: companies with 10-49 employees Medium and small enterprises: 100-50 employees Large enterprises: more than 100 employees

**Source: Asian Productivity Organisation, meeting of small and medium industries, April 2017 (written report)**

#### **4.1 ICT development in Iran**

ICT development in Iran could have revolutionised communication capabilities among its people by facilitating news reporting, supporting cultural events, broadening the expression of political views and the dissemination of research articles, and engaging thousands of bloggers. Iran's initial ICT development dramatically increased the capacity and speed of its telecommunication networks but the government's control over and monopoly on ICT infrastructure impeded future development of the ICT industry. Many Middle Eastern countries took a liberal approach towards ICT development. Bahrain, Jordan, Kuwait, Qatar, and United Arab Emirates (UAE) privatised their government-owned telecom sector, reduced internet censorship, and successfully increased the volume of operations and services to meet the demand of their markets. In contrast, Iran implemented strict controls on ICT development, particularly by deterring expansion of high-speed internet connections. The government banned high-speed internet accessibility (Tait, 2006) thus slowing the country's development and modernisation.

Most developed nations either have established, or are moving toward high-speed access to enable internet-based applications such as internet marketing, e-banking, e-government, and other information-based services that require a higher speed and more reliable internet connections. Rahimi (2003) states that the internet in Iran first promoted by the government to provide an alternative option to scientific and technological innovation during the troubled economic period followed the Iran-



Iraq war (1980-1988). The growth of ICT from 1995 to 2005 was fold due to the government's investment in an ICT infrastructure. According to the World Bank (2005a, b), Middle Eastern countries had the highest internet growth in the world (370 percent) during the period of 2000-2005. The Iranian internet usage had a growth of more than 2,900 percent for the same period. Iran has not only seen an increase in the number of internet users, but also a significant increase in the number of Persian "weblogs," especially among the younger generation. Alterman (2005) argues that while the internet is not yet a mass medium in most countries, in the Middle East and North Africa (MENA) region, it is growing in popularity among young elites. The use of the internet to mobilise citizens for democratic changes in Iran challenged the conservative rulers in Iran. Despite these restrictions millions of internet users found the net to be a forum to express their opinions, thoughts and ideas on personal, and social levels; expressions that could not otherwise be published through conventional media due to the degree of control by the Iranian Government.

#### ***4.2 Internet Marketing in Iran***

The growth of companies that do business by means of internet in Iran, moving at a much faster pace in comparing to middle-east countries. (MVF Global Customer Acquisition, 2016; The National Report on e-commerce, 2015) reported that, the value of internet marketing in Iran was \$12.8 billion in 2009 and has risen to 34 billion by 2016. The poor IT infrastructure which is controlled by the Ministry of Communications and Information Technology, causes limited choices, high fees and historically poor services online. High internet costs and poor IT infrastructure lead the small and medium-sized enterprises to avoid adding internet to their business models (Laosethakul, 2011). (Abbasi, 2007; Nicholuson , 2003) stated that, successful internet marketing models from developed countries might not work effectively in developing countries due to differences in business environments, information technology infrastructure and cultural factors. According to Manecksha, (2008), firms should develop business models that are compatible with region's environment. Iran's strict Governmental rules regarding the cyberspace is playing the main role that leaves Iran behind on this context However Absence of technical knowledge among traders and marketers is one of the main reasons for the unsuccessfulness of Iran in doing internet marketing (The National Report on E-commerce in Iran, 2009; Khazai, S. 2010; IRM, 2012 And 2014;). For this reason, it is essential that the advantages of electronic trading to be taught. According to UNCTAD, (2006), most of policy makers believe that internet marketing will not have an increasing progression without the businesses and consumers to be trained in this context. Iran's Information Communication Technology (ICT) expenditure per capita is not very good in comparison with some selected countries of the region and the world; it is about 10 percent of the world average and is lower than some countries such as Turkey, Saudi Arabia, Kuwait, Jordan and Malaysia. In other words, less attention has been invested in this sector (Paryab and et al., 2007). Table 3 shows the internet penetration rates and the percent of households which have a computer. The internet penetration coefficient is the percentage of the people who have used the internet at least once in the 12 months preceding the census, to the total population in the same age group in 2017.

**Table 3. Internet access in the Iran in 2017 (Statistics Center of Iran).**

<b>Scale</b>	<b>Population (2017 Est.)</b>	<b>Users, in Dec/2000</b>	<b>Internet Usage 30-June-2017</b>	<b>% Population (Penetration)</b>	<b>Internet Users %</b>
<b>Iran (Whole Country)</b>	<b>80,945,718</b>	<b>250,000</b>	<b>56,700,000</b>	<b>70.0%</b>	<b>38.8%</b>

### **4.3 Internet Marketing Adoption by Iranian SMEs**

Several studies of internet marketing adoption by SMEs in Iran have been found in literature. Of these, most focus on examining the awareness and readiness of Iranian firms in general. For example, Sulaiman (2012) investigated the status of internet marketing applications in Iranian firms. Though many Iranian firms have Internet access, most limited its usage to e-mail (Sulaiman, 2000). Other studies investigated the internet marketing of successful firms (e.g., Albert *et al.*, 2013), drivers of, and barriers to, internet marketing in Iran (Paynter and Lim, 2011), internet marketing in specific industries, such as shipping (Aug *et al.*, 2003), and internet marketing in manufacturing firms (Bolongkikit *et al.*, 2014). These studies concluded that internet marketing usage by SMEs is still in its infancy. Indeed, many firms, especially SMEs, are reluctant to go online (Karkoviata, 2011). A study by Le and Koh (2012) found that out of 240 small and large firms with websites, only 171 could be contacted from their website via e-mail. Of these 171 firms, only 42 responded and only 12 considered internet marketing significant for their businesses. In contrast, a study by an Iranian ICT consultancy firm (IDC, 2014), reported that 86% of firms in Iran have websites and 17% of SMEs are active in an e-marketplace (IDC, 2005).

In addition, Adham and Ahmad (2015) investigated the adoption rates of website and internet marketing technologies by all 562 Iranian public firms. Their study only examined the firm's website for operability and whether they incorporated internet marketing systems for online transactions. They looked at how firms used websites to sell online to their customers. Only 62% of the websites were operable, with 96% only providing firm and product information, and only 4% were equipped for internet marketing transactions (Adham and Ahmad, 2015). Their findings revealed that even well-known firms in Iran, with excellent track records, had yet to use online transactions to sell their goods and services to their customers. Even so, the authors concluded that these firms must adopt internet marketing and trade online, in order to be competitive in the market. The above discussion shows that there are very limited studies on internet marketing adoption among SMEs in Iran. As such, related studies of internet marketing adoption among SMEs in developed nations, such as the United Kingdom and the United States of America, will be used as a basis for this study.

## **5. Distribution Industry in Iran**

Distribution industry has been established since 1950 in Iran. In order to fast growing trend of the distribution industry, to date 170 requests for founding distributors companies were approved by the deputy of the internal commerce of trade, Industry and Mine Ministry of Iran. Distribution companies do their business in three levels of countrywide, state, and regional. In the viewpoint of activity context, some companies work in specific product lines but others work in various products lines. It's worthy to

say that distribution companies in Iran make their businesses in two different frameworks, some are dependent upon producer and others are independent. Dependent distributors are companies established under the dominance of a parent manufacturing company. Examples of Iranian big food and beverage companies are: Zam Zam, Koleh, and Minoos that are well-known and own proprietary distribution companies. In contrast, independent distribution companies are absolute and could act in different branches of business; it means they could distribute a huge variety of product basket to retailers.

Hejrat, Alborz, and Ferdows are famous independent distribution companies that distribute a wide range of products to different spots of the country. Distribution is a growing industry that has a really important impact on selling for producer and buying for retailers. This fast-growing trend of distribution in Iran is because of different reasons, but what is clear is that, the results of this growth finally have strictly increased the distribution costs and have generated an unstructured network for distribution in the country in a way that final consumer has to pay a price several times more than finished price in order to own the product. Even though, the government through legislation and bylaws structuring the businesses tried to determine a peak for the profit of these business units. Traditional and interwoven construct beside bureaucracy of supervising systems do not allow the bylaws to be implemented. The other point that should be highlighted is greater profitability of distribution sector in Iran despite their little volume of their investment; although different businesses have different amount of profitability. Beside this situation, there are some problems with distribution in Iran that have created special challenges that are being accompanied with opportunities and threats. Therefore, establishing a distribution unit is simple and easy access, different governments in recent decades have supported these units by granting required permissions, and this is the reason that nowadays could be seen in different distribution stores in either special or public branch of business in both urban and rural areas.

#### ***5.4. Problems in distribution industry in Iran:***

The current management system and distribution sections of Iran encountered many tiny and basic problems that websites of Center of distribution Industry Associations of Iran (2015) lists some of them as mentioned below:

1. Lack of enough information and statistics in order to distribution processes.
2. Uncertainty and informality of huge amount of transportation and distribution of products in the distribution network.
3. Superabundance of retailers.
4. Lack of governmental representative in different branches of retailing in the country.
5. Lack of effective interactions among different businesses of other countries and Iranian businesses with the purpose of using the capabilities and potentials of the businesses.
6. High level of distribution costs in Iran.
7. Heterogeneity in coding system among customs and internal distribution networks

### ***6.0 Related Theories on Technology Adoption***

In order to describe the process of Internet Marketing adoption, it is essential to scrutinise the adoption concept. To answer questions of how and why Internet marketing adoption occurs, it is necessary to turn to the available technology adoption theory. Different definition of technology adoption in organisations has been provided by prior literature such as decision to accept and use the innovation, implementation success (Bruque and Moyano, 2007; Cotter, 1993), extent of usage (Ayu and Abrizah, 2011) and effectiveness and success of adopted IT based on acceptance of or satisfaction with IT (Chen et al., 2012; Hwang, 2010). Some of the perspectives that have been offered are theories about diffusion, and these explain and predict how and why a technology is adopted through different channels. Other theoretical perspectives involve human behavior and the impacts they have on an individual's willingness to adopt and their likely effectiveness in using a technology. Many theories that deal with technology adoption are not specific to Internet Marketing adoption, yet it still has relevancy when being view in a general technology adoption context.

### ***6.1 Theories about Diffusion of Innovation***

Many previous works have referred to Beal and Bohlen (1957) who introduced a various stages of technology adoption started from awareness, interest, evaluation, trial and adoption. The five stage of technology adoption is a key research to understand the adoption stages among country. It offers the stages, which allow us to categorise a country in technology adoption. To compare on timing and progress of adoption, Rogers (2003) proposed 5 adopter categories which emphasis on population of the adopters. Even Roger's work hypotheses a country level, this pattern has been extended to individuals, organisations, and industries within a country. It also is expected that the pattern will be similar for the global context of social media technology. Bass in 1994 categorised technology adopters into two categories: innovators and imitators. Innovators in the Internet Marketing adoption context are firms or countries that base their technology adoption decisions independent of the decisions of other firms or countries. Meanwhile, imitators are influenced by other firms or countries in their decisions to adopt. The generalised Bass Model (Bass et al., 1994) introduced decision variables such as marketing effort and price. He concluded that marketing effort and price decision variables affected time to technology adoption. The original Bass model and the newer model only provided the same fit so long as marketing effort remained constant.

### ***6.2 Motivational Model***

The Motivation model was developed as a means for measuring situational intrinsic and extrinsic motivation (Guay et al., 2000). Eagleman (2013) applied MM in his study to understand motivations of sport organisations currently using Internet Marketing, which MM served as an appropriate scale to measure motivation. (Curtis et al., 2010) study on social media use amongst public relations practitioners used the MM to measure respondents' motivation for using internet Marketing for running their business.

### ***6.3 Theories on Behavioral Perspective (Decomposed Theory of Planned behavior)***

While related theories of technology adoption are useful to explain technology

adoption outcomes, behavioral theories focus on the individual analysis level where human behavior has its impacts. The Theory of Reasoned Action (TRA) by Ajzen (1991) stated that attitudes and subjective norms influence behavioral intention. Davis (1989) applied TRA to the individual level of technology adoption behavior. The resulting outcome was one of the most recognisable behavioral theories of technology adoption, the Technology Acceptance Model (TAM). Two key constructs influence an individual's intention to use a technology are Perceived Usefulness (PU) and Perceived Ease of Use (PEU). TAM provided a widely accepted model in many different technologies. The model had been tested for more than two decades predicting and explaining behavior. Research by Oh et al., (2009) and Grandon and Pearson (2004) has used and tested TAM across a multiple technology field. Venkatesh et al., (2003) extended TAM and introduced factors from related models, incorporated alternative belief factors, and examined antecedent and moderating factors to the existing usefulness and ease of use constructs. An example of this approach resulted in the Unified Theory of Acceptance and Use of Technology (UTAUT). It uses constructs including performance expectancy, effort expectancy, social influence, and facilitating conditions, with moderators of gender, age, experience, and voluntariness of use ultimately influencing technology adoption intentions. The result outperformed eight existing models in predicting technology acceptance. While extended TAM and UTAUT are tested and believed to be effective in investigating technology acceptance for individual, TAM is still valid and more suitable to investigate technology adoption by business organisation such as SMEs. This being supported by Rogers (1995) who defined innovation as an idea, practice, or object that is perceived as new by individual or another unit of adoption.

#### **6.4 TOE Framework**

While DOI was successfully applied to individual innovation adoption and diffusion, it was not so with organisational innovation adoption and diffusion. Several criticisms trailed its application to organisational innovations (Chau and Tam, 1997) because the framework as presented by Rogers focuses on the mass-produced items via a process of communication among individual members in the population. Thus, researchers are quick to question the validity of the applicability of such a model to a complex technological innovation at the organization level (Attewell, 1992; Brancheau and Wetherbe, 1990). Thus, new perspectives like individual (CEO) characteristics (Premkumar et al, 1994; Venkatesh et al, 2003; Fichman, 2004), characteristics of the organisational leadership (Kimberly and Evanisko, 1981) and organisational and environmental characteristics (Tornatzky and Fleischer, 1990; Thong and Yap, 1995; Thong, 1999) were integrated with the original Rogers' classical innovation characteristics to overcome some of the observed limitations. In particular, Tornatzky and Fleischer (1990) hence developed the Technology-Organisation-Environment (T-O-E) framework to study IT innovation adoption by organisations (Kok et al., 2011). Environmental and behavioural, this means that environmental factors such as social pressures, personal factors, such as personality, and behaviour are jointly determined. Individuals select the environment that they live with, in addition to being affected by their surroundings.

#### **6.5 Model of PC Utilisation**

The model to explain the acceptance and adoption of information technologies is the model of personal computer utilisation (MPCU) introduced by Thompson et al. (1991). This is an important model to explain the adoption and use of internet marketing, because the computers are the base through which individuals utilise the Internet, and the investigated construct can be applied to an internet marketing context. The model of PC utilisation depends on Triandis' (1980) interpersonal behaviour. Triandis (1971) explained that attitude includes cognitive, affective, and behavioural aspects. The cognitive components of attitude include beliefs that present what people think about a subject, issue, person or an idea. The affective component of attitude shows the positive or negative attitudes of a person towards the new idea and behavioural intentions express what individuals want to accomplish in the future. Later, Triandis (1980) suggested more variables that influence behavioural intention and thus actual behaviour. These variables include habits, social factors, perceived consequences and facilitating conditions.

### ***6.6 Social Cognitive Theory***

Social Cognitive Theory referred to human performance in terms of “triadic reciprocal causation” (Bandura, 1986). The social cognitive theory (SCT) is an additional vital theory that discussed the behaviour intention and actual use of information technologies besides, the theory of planned behaviour. It is considered to be one of the extensively accepted and empirically validated theories that explain individuals' behaviour in the information systems field. Bandura (1986) explained that it is more probable for people to perform tasks that will result in Positive outcomes than those which may lead to adverse results. The result expectations were explored in many of the information systems studies (e.g. Davis, 1989; Davis et al., 1989; Venkatesh, et al., 2003; Rogers, 2003). This theory is based on the reciprocal exchange between three elements, of individual, environmental and behavioural, this means that environmental factors such as social pressures, personal factors, such as personality, and behaviour are jointly determined. Individuals select the environment that they live with, in addition to being affected by their surroundings. Furthermore, behaviour is influenced by cognitive and personal factors, and in tum, behaviour affects these same factors (Bandura, 1986). It is difficult to explain the reciprocal relationship of the social cognitive theory, but it is useful to investigate how this theory has useful insights into the cognitive, affective and behavioural reaction of individuals to clarify the use of information technologies.

### ***6.7 Institutional Theory***

Institutional theory offers seemingly contradictory interpretations of organisational phenomena (Roberts and Greenwood, 1997). It tries to explain the processes by which structures, including schemas, rules, norms, and routines, become established as authoritative guidelines for social behaviour. It inquiries into how these elements are created, diffused and adopted over space and time; and how they force one unit in a population to resemble other units that face the same environment fall into decline and disuse (Scott, 1995; King et al., 1994; Abrahamson and Rosenkopf, 1993). Scott, (1995) suggests that institutions consist of three structures: cognitive, normative and regulative structures. The cognitive pillar presents the rules that constitute the nature of reality and the frames through which meaning is made. The second pillar comprises normative structure by which compliance is

obtained through social obligation and it specifies how things should be done through defining goals or objectives (e.g. adopting a technology). The third pillar provides the basis of coercive power and it presents institutions constrains and regularises behaviour. Moreover, regulative processes involve the capacity to establish rules, inspect or overview others conformity to them and rewards or punishments in an attempt to influence future behavior.

## **7. Research Problem and Questions:**

The main problem motivating this research is the need to identify and bring together in one framework the appropriate issues, variables, components and concepts that need to be addressed to encourage, motivate and enable Small, medium firms in Middle Eastern countries; in particular in Iran; to adopt internet marketing technology in the running of their businesses. On the other hand, as the theory in the field of internet marketing is still in its infancy stage and yet not well established there is a need for having more well-established studies that can be considered as a step toward a theory building in the field of internet marketing. These well-established studies need to implement the most suitable methodology to the nature of internet marketing.

Accordingly, the main five questions that the study attempts to answer are:

- 1- What are the factors and variables that are likely to influence the adoption of internet marketing by Iranian distribution companies?
- 2- What are the levels and tools of internet marketing adopted by Iranian firms for implementing internet marketing and accessing their customers nationally and international?
- 3- What is the relationship between the influencing factors of internet marketing adoption and business performance of Iranian firms?
- 4- What are the critical determinants for effective online intervention along with influencing factors for Iranian distribution firms for gaining greater share of the market?
- 5- Why Iranian distribution forms do not tend to integrate internet technology with the firm's marketing strategies?

## **8. Internet Marketing Adoption Factors in Current Study**

There are factors that could drive the users (both organisations/customers) to the adoption of the new technology or non-adoption of the new technology. These factors derived from the theories of new technology which are the decomposed theory of planned behaviour, diffusion of innovation theory (DOI), the technological-organisational-environmental framework (TOE), social cognitive theory (SCT), Institutional theory, Motivational Model and the model of PC utilisation which providing the factors that mightily influence the adoption and the acceptance of the internet marketing adoption and in parallel with these factors there are many different

external factors. there are different researches have been done for investigation of these theories for different type of new technology adoption such as online marketing, e-commerce, e-business, e-marketing and etc. These factors have been investigated through different types of business and different size of businesses

This research is focused on small-medium enterprises in distribution context and based on the factors in developing countries. by reviewing the extant literature there are considerable number of studies that have been conducted for investigating of the factors that influencing the adoption of online marketing among SMEs, some researches have been focuses on the small-medium sized firms and some factors where regardless of the size of the company and focuses on the industry. Although Motivational Model, Model of PC Utilisation, TAM, IDT, Institutional Theory and even the Decomposed Theory of Planned Behaviour have provided key factors that affecting the adoption of new technologies in an efficient way, though not all theories are the only source for investigating such factors. There are numerous researchers that have verified and investigated other factors that have impact on adoption of internet marketing on SMEs. By reviewing this literature, it is noticed that there are a significant number of studies conducted to investigate the different factors. These factors were categorised in Individual, organisational, Technical, Environmental and Legal and Regulatory Factors. Table 4 summarise most of these studies.

**Table 4. Determinants of Internet Marketing Adoption and Use by SMEs Identified in the Literature**

<i>Factors</i>		<i>Studies</i>
<i>Synthesised Factors from The Literature Review</i>		
<i>Environmental Factors</i>	<b>1-Government Policy Support</b> <b>2-Business Partner Affiliation</b> <b>3-The Nature and Characteristic of Value Chain</b> <b>4-Economic and Political Instability and Human Rights Issues</b> <b>5-Business Culture</b> <b>6-Macro-Economic Policies</b> <b>7-External and Competitor Pressure</b> <b>8-National E-Readiness</b> <b>9-Technology Consultants' Participation and Involvement</b> <b>10-Response to Risk</b>	(Poon and Swatman, 1999);(Premkumar and Roberts, 1999);(Kuan and Chau, 2001) (Chwelos et al., 2001);(Mehrtens et al., 2001),(Chang and Cheung, 2001); (Zhu et al., 2003);(Doolin et al., 2003);(Grandon and Pearson, 2004);(Ching and Ellis, 2004);(Wymer and Regan, 2005) ;(Wen and Chen, 2010) (Ghobakhloo et al., 2011) ;(Chong et al., 2011);(Abou-Shouk, 2012); (Sila and Dobni, 2012) (El-Gohary, 2012) ;(Iacovou et al., 1995);(Ching and Ellis, 2004) (Al-Qirim, 2007) (Ghobakhloo et al., 2011);(Kuan and Chau, 2001) (Premkumar and Roberts, 1999);(Chang and Cheung, 2001);(Grandon and Pearson, 2004) (Wymer and Regan, 2005);(Zhu and Thatcher, 2007) ;(Wang and Lin, 2009);(Lip-Sam and Hock-Eam, 2011 ) ; (Chong et



		al., 2011).
<b>Individual Factors</b>	<b>1-Owner/Manager Characteristics</b> <b>2-Level of Education</b> <b>3-Level of ICT adoption and New Technology Knowledge</b> <b>4-Social and Cultural issues</b> <b>5-Type of Internet Usage</b>	Sparling et al. (2007), Ching and Ellis (2004), Croteau and Li (2003), Zhuang and Lederer (2004), Thong (1999), Tsao et al. (2004), Huy and Filiatrault (2006), Jeon et al.(2006), Looi (2005),Nasco et al. (2008).
<b>Organisational Factors</b>	<b>1-Security, Trust, and Privacy Concerns</b> <b>2-Financial Ability and Cost Effects</b> <b>3-Size, age, type of the Organisation</b> <b>4-Perceived Benefits of ICT</b> <b>5-Organisational Culture</b> <b>6-Organisation E-Readiness (firm's financial resources, firm's IT infrastructure, Human Infrastructure)</b> <b>7-Management Team Support</b> <b>8-Organisational Learning and Market Orientation</b> <b>9-Receptivity toward Change</b> <b>10-Management awareness of Technology (IT Knowledge)</b> <b>11-Marketing capabilities of the Organisation</b>	(Poon and Swatman, 1999);(Premkumar and Roberts, 1999);(Mirchandani and Motwani, 2001);;(Tsao et al., 2004);(Kartiwi and MacGregor, 2007) (Chitura et al., 2008);(Chen and McQueen, 2008);(Wang and Lin, 2009);(Ghobakhloo et al., 2011) (Lip-Sam and Hock-Eam, 2011 );(Chong et al., 2011);(Elbeltagi et al., 2013);(Iacovou et al., 1995);(Premkumar and Roberts, 1999) (Kuan and Chau, 2001);(Mirchandani and Motwani, 2001);(Mehrtens et al., 2001);(Chwelos et al., 2001);(Doolin et al., 2003);(Zhu et al., 2003);(Grandon and Pearson, 2004);(Dholakia and Kshetri, 2004);(MacGregor and Vrazalic, 2004); (Wymer and Regan, 2005);(El-Gohary, 2012).
<b>Technical Factors</b>	<b>1-Availability and Slow Speed of Internet</b> <b>2-Complexity of Technology</b> <b>3-Lack of Payment Facilities</b> <b>4-Lack of Reliable Power Supply</b> <b>5-Language Barrier</b> <b>6-Lack of Internet Address space</b>	Kuan and Chau (2001), Beatty et al. (2001), Riemenschneider et al. (2003), Mirchandani and Motwani (2001), Mehrtens et al. (2001), Chwelos et al. (2001), Doolin et al. (2003), Macgregor and Vrazlaic (2005), Al-Qirim (2007), Sparling et al. (2007), Ching and Ellis (2004), Wymer and Regan (2005), Scupola (2003), Grandon and Pearson (2004), Teo and Ranganathan (2004), Kendall et al. (2001), Thong (1999), Huy and Filiatrault (2006), Jeon et al.(2006), Looi (2005), Seyal et al. (2004), Kaynak et al. (2005).

<b>Legal and Regulatory Factors</b>	<b>1-Bureaucracy 2-Tax System 3-Human Resources Capacities</b>	Zhu et al. (2003), Zhu and Kraemer (2005), Wymer and Regan (2005).
<b>Theories of New Technology Related Factors</b>		
<b>Diffusion of Innovation (DOI)</b>	<b>1- Compatibility 2-Observability 3-Triability</b>	(Teo et al., 1998);(Poon and Swatman, 1998);(Poon and Swatman, 1999);(Beatty et al., 2001);(Mirchandani and Motwani, 2001);(MacGregor and Vrazalic, 2004);(Ching and Ellis, 2004);(Al-Qirim, 2007);(Ghobakhloo et al., 2011);(El-Gohary, 2012).
<b>The Decomposed Theory of planned Behaviour (DTPB)</b>	<b>1-Perceived Usefulness(Complexity) 2-Preceived Ease of Use (Relative Advantage) 3-Normative Beliefs 4-Facilitating Conditions 5-Self-Efficacy 6-Technology Facilitating Conditions</b>	(Iacovou et al., 1995);(Poon and Swatman, 1997);(Teo et al., 1998) (Poon and Swatman, 1998);(Poon and Swatman, 1999);(Premkumar and Roberts, 1999) (Kuan and Chau, 2001);(Beatty et al., 2001);(Mirchandani and Motwani, 2001); (Mehrtens et al., 2001);(Chwelos et al., 2001);(Riemenschneider et al., 2003); (Doolin et al., 2003);(Grandon and Pearson, 2004);(Ching and Ellis, 2004);(Wymer and Regan, 2005);(Powell et al., 2006);(Khemthong and Robert, 2006);(Ghobakhloo et al., 2011);(Abou-Shouk, 2012);(Poon and Swatman, 1998);(Poon and Swatman,1999);(Beatty et al., 2001);(Mirchandani and Motwani, 2001);(MacGregor and Vrazalic, 2004);(Ching and Ellis, 2004);(Al-Qirim, 2007);(Ghobakhloo et al., 2011);(El-Gohary, 2012).
<b>Technological-Organisational-Environmental Framework (TOE)</b>	<b>1-Organisational (Formalisation, Degree of Centralisation, Specialisation, The Quality of HR, Amount of Slack Resources Available internally, Functional Differentiation) 2-Environmental</b>	Kuan and Chau (2001), Mirchandani and Motwani (2001), Mehrtens et al. (2001), Chwelos et al. (2001), Zhu et al. (2003), Doolin et al. (2003), Macgregor and Vrazlaic (2005), Grandon and Pearson (2004), Tsao et al. (2004), Yeh and Chang (2007), Huy and Filiatrault (2006); Michandani and Motwani (2001), Scupola (2003), Zhu and Kraemer

	<i>(General Industry Scenario, Nature of the Business Environment)</i>	(2005), Zhu et al. (2003), Huy and Filiatrault (2006), Jeon et al. (2006)
<i>Institutional Theory</i>	<i>1-Cognitive 2-Normative 3-Regulative</i>	Wymer and Regan (2005), Zhu and Kraemer (2005), Zhu et al. (2003), Jeon et al.(2006), Kaynak et al. (2005)
<i>Social Cognitive Theory (SCT)</i>	<i>1-Personal Factors 2-Environmental Factors 3-Behavioural Factors</i>	Sparling et al. (2007), Ching and Ellis (2004), Croteau and Li (2003), Zhuang and Lederer (2004), Thong (1999), Tsao et al. (2004)
<i>Motivational Model (MM)</i>	<i>1-Intrinsic Motivation 2-Extrinsic Motivation</i>	Baard, Deci, and Ryan, (2004); Black and Deci, 2000; Deci et al., (1989); Williams, Grow, Freedman, Ryan, and Deci, (1996).
<i>PC Utilisation Model (PCUM)</i>	<i>1-Affect Toward PC Use 2-Job Fit with PC Use 3-Long-Term Consequences of PC Use</i>	Srinivasan et al. (2002), Wu et al. (2003), Sparling et al. (2007)

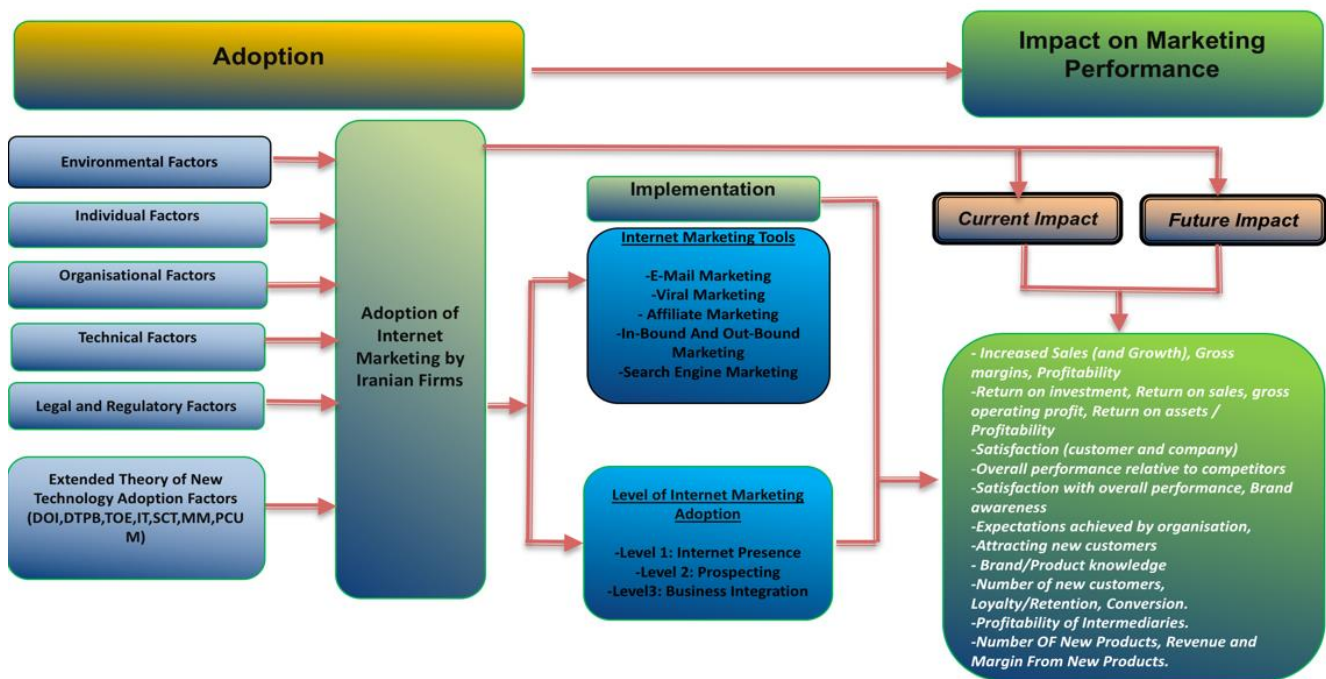
## 9. Conceptual Framework

Technology adoption frameworks have been used and investigated in various areas. In some of the studies, the process approach was attempted to examine the insights of the processes, while in others, the focus was on the association between the technology adoption and the governing variables. The dominant theories in the field of information system of technology adoption include: the decomposed theory of planned behavior, Innovation of Diffusion Theory/ Diffusion of Innovations (IDT/DOI), The motivational Model, The model of PC utilisation, TOE Framework, The institutional Theory and Social cognitive theory. Roger, defined innovation into five attributes that influence the behavior intention of a user viz., relative advantage, complexity, compatibility, trialability and observability. Lastly, Venkatesh introduced four constructs combining eight technology adoption theories.

Where performance expectancy posits benefits to a user of using a technology, effort expectancy posits the ease to use the technology by a user, social influence posits the significance of people (friends and relatives) who are important to a user while using a technology and facilitating conditions posits the enablers and support system available to a user using a technology. The adoption process of new technologies has been studied from many theoretical perspectives (e.g., Grandón, Nasco, and Mykytyn, 2011; Lee and Xia, 2006). Oliveira and Martins (2011), reviewing the literature on technology adoption models, consider the theory of diffusion on innovations (DOI) (Rogers, 1995) and the technology, organisation, and environment (TOE) framework (Tornatzky, Fleischer, and Chakrabarti, 1990) as the most prominent models being particularly relevant to firm-level studies.

Both models highlight individual as well as firm characteristics related to technology and organization as drivers of innovativeness. The TOE framework, additionally, recognises the significant role of the environmental context referring to industry, competitors, and dealings with the government in the process by which the firm adopts and implements a technological innovation. Drawing from the aforementioned theories, the conceptual model underlying this study emphasises the role of technical- related factors, Legal and environmental related factors as well as organisational and individual characteristics in shaping a firm's decision and adoption behavior with respect to ICT intentions, ICT infrastructure, and internet integration.

Based on the discussion in the earlier sections, the research proposed model, shown in Figure 3, is structured to combine all aspects and variables that have been found in the literature review previously. This model was an amalgamation of Theory of Diffusion of Innovation (DOI); the Technology Acceptance Model (Tam), Technology–Organisation–Environment (TOE) Model; Theory of Planned Behaviour, Institutional Theory, Cognitive Theory and in more detail, there were six groups of factors which were expected to affect the adoption of internet marketing. These factors were: the factors driven from literature review that have been categorised as environmental factors, Individual Factors, Organisational Factors, Technical Factors and Legal and Regulatory Factors. This proposed model was based, also, on previous empirical studies on the adoption of internet marketing among SMEs. This proposed model aimed to focus on the factors which influenced the adoption of internet marketing among Iranian SMEs and impact on marketing performance by the idea of implementing the internet marketing can be adopted through various internet marketing tools and level of internet adoption. The following is the conceptual framework been using for this research. This research Framework in (Figure 2) is developed for the Iranian Small-Medium firms for adoption of internet marketing for managing the organisation and leading it through more developed institution through online tools. The framework has been developed by assuming that internet marketing can be done through different levels of implementation and different internet marketing tools. Prior to discussing the applied methodology in this study, it is necessary to introduce the research model. The model is designed based on existing literature discussed in previous sections with the aim of understanding the influencing factors of internet marketing adoption among Iranian SMEs. Figure 3 is the proposed conceptual model for this study.



**Figure 3.** The proposed research model of Internet Marketing adoption by Iranian SMEs

## 10. Discussion and Future Research Direction

Many economists, experts and prospective in recent years' belief that revolutionary industrial revolution occurred similar to that of the world into "information age" has made many aspects of economic, social and cultural undergoing the transformation has been profound. One aspect of this transformation, profound changes in the economic relations between individuals, companies and governments. Commercial exchanges between people with each other, companies and individuals together with companies and governments to speed their traditional mode based mainly on the basis of exchange of paper documents is carried out and the exchanges through the use of electronic information-based systems is moving. Investment, marketing, electronics, electronic payments, online stores, great specials. Therefore, Study concerning the appropriate factors in adoption of internet marketing seems to be necessary. based on an extensive literature review of internet marketing adoption in developing countries, a number of issues have been identified in the existing models and frameworks used for exploring internet marketing adoption by SMEs. In particular, the review shows that there is a lack of a comprehensive framework that gives a multi-faceted account to the phenomenon of internet technologies adoption.

Comparatively there is little research that has focused on the Internet Marketing, scholarly research on internet marketing and its marketing communications role within the business and organisation industry is expanding. Internet marketing refers to the use of internet and related technology in order to conduct a firm's marketing activities. Even many SMEs facing many limitations including technology adoption as the obstacles for this group to grab the opportunities that can help the company enhancing their business performance, internet marketing perceived as a very promising channel of business communication. However, with their limited resources, any misconception and lack of understanding on technology would have a severe effect on small businesses. By reviewing the relevant literature, it is noticed

that definitions of internet marketing have a significant relationship with e-marketing. Since internet marketing only refers to the Internet, World Wide Web, e-mails, El-Gohary (2010) proposed a diagram to show how internet marketing is a subset of a broader scope e-marketing. Meanwhile Kaplan and Haenlein (2010) refer internet marketing as an online application that has a close aligned characteristic with internet application. Thus, there is a significant evidence to categorise internet marketing as a part of E-marketing. From the author's point of view, it is valid to define, classify and assess internet marketing as a part of e-marketing. From the literature, shown that many studies applied technology adoption theories and frameworks to evaluate and assess various effect on businesses and organisation. Individual factors and organisational has been identified as a main contributor that affect the adoption. For SMEs, it is valid to include factors such as individual and organisational as long as business environment, technical and legal factors are also important, thus to include such factors as external determinant is also relevant for future research direction.

This research therefore develops a theoretical framework of internet marketing adoption which is composed of five dimensions: Organisational factors, Environmental Factors, Technical factors, Individual Factors and Legal and Regulatory Factors integrated with the factors driven from the theory of new technology adoption. This framework can be used to serve various purposes including creating specific research models of internet marketing adoption in a given context by aggregating potential factors that influence internet marketing adoption under each dimension in the framework. These dimensions can be investigated independently or together in order to portray a more complete picture of the phenomenon of internet marketing adoption. The proposed framework developed to a more specific research model to guide future study in exploring internet marketing adoption by SMEs. The research model is novel for the following reasons. First, it provides a holistic view of potential factors that may influence the adoption of internet marketing by SMEs. This integrated view would help in explaining the adoption or non-adoption of internet marketing by SMEs. Second, this model includes a number of factors driven from the theories of new technology. Prior research combined 2 theories of new technology, hence this research integrating seven theories and will give new insight within this context. As the next step, the proposed research model will be empirically validated by administering a survey questionnaire among SMEs in distribution industries in Iran. The study is an original attempt, to the best of the researchers' knowledge based on the literature review of the subject, at establishing a conceptual framework and its dimensions to outline the adoption of the Internet among Iranian SMEs in distribution sector. This study can be considered as a step toward theory building by considering the new technology adoption theories. It clarifies the confusions surrounding the concepts and practice of internet marketing adoption. The results from this research will be of great benefit to top management, marketers, IT executives, business managers and others who are using or planning to adopt the Internet for marketing purposes. This study intends to help practitioners understand better of internet marketing adoption by considering the influencing factors (inhabitants or facilitators). This research will help practitioners to make a more systematically analysis of the process and understand how the management of certain elements are managed can improve effectiveness and competitiveness. However, this study has limitations: I) focusing on understanding Iranian SMEs. In contrast, future study might diversify in larger case such as other Middle-east or other developing countries; II) this study is also limited to distribution industries. On the other hand, future study may focus on other industries case.

## 11. References

- Alghamdi, R., Drew, S., AlGhaith, W., 2011. Factors influencing E-Commerce adoption by retailers in Saudi Arabia: a qualitative analysis. *Electron. J. Inf. Syst. Dev. Countries* 47 (7), 1–23.
- Ahmadi Moghaddam Ermeki, Mohsen, Mohammad Ali Vahdat Zadeh, Mohammad Reza Zare Banadkooki, (2009). Iran's Small and Medium Production Industries Development Strategy, second National Conference on Manufacturing Engineering.
- Ambler, T. and Kokkinaki, F. (2001), "Measures of marketing success", *Journal of Marketing Management*, Vol. 13, pp. 665-678. 3.
- Ambler, T. and Riley, D. (2000), "Marketing Metrics: A Review of Performance Measures in Use in the UK and Spain", Draft Paper, London Business School, pp. 1-30.
- Arvanitis, S. (2005). Computerization, workplace organization, skilled labour and firm productivity: Evidence for the Swiss business sector. *Economics of Innovation and New Technology*, 14(4), 225–249.
- Barba-Sánchez, V., Martínez-Ruiz, M. D. P., & Jiménez-Zarco, A. I. (2007). Drivers, benefits and challenges of ICT adoption by small and medium sized enterprises (SMEs): A literature review. *Problems and Perspectives in Management*, 5(1), 103–114.
- Barker, D. (2002). *Marketing Channels and Supply Chain Management*. South Western pub.
- Bartel, A., & Lichtenberg, F. (2008). The comparative advantage of educated workers in implementing new technology. *The Review of Economics and Statistics*, 69(1), 1–11.
- Bharadwaj, S. (2006). *Distribution and Channel Management*. Management Science II, Indian Institute of Technology Madras.
- Black, S. E., & Lynch, L. M. (2004). What's driving the new economy?: The benefits of workplace innovation. *The Economic Journal*, 114(493), F97–F116.
- Boateng, R., Heeks, R., Molla, A., Hinson, R., 2008. E-Commerce and socio-economic development: conceptualizing the link. *Internet Res.* 18 (5), 562–594.
- Bolton, J. E. (1971). *Small Firms: Report of the Commission of Inquiry on Small Firms*. Published by HMSO. Cmnd4811
- Brynjolfsson, E., & Hitt, L. M. (2003). Computing productivity: Firm-level evidence. *The Review of Economics and Statistics*, 85(4), 793–808.
- BRYMAN, A. and CRAMER, D. 2012. *Quantitative Data Analysis with IBM SPSS 17, 18 and 19: A Guide for Social New York, USA*, Routledge.
- Burnham KP, Anderson DR (2004) Multimodel inference: understanding AIC and BIC in model selection. *Sociol Methods Res* 33:261–304.
- Center of distribution Industry Associations of Iran (2015). Last accessed on Jan 2018, Retrieved from <http://www.ifif.ir/>.
- Chaffey David (2015), 30 cutting-edge digital marketing tools and techniques to help grow your business last accessed on 20<sup>th</sup> of March 2017, available at: <http://www.smartinsights.com/managing-digital-marketing/marketing-innovation/digital-marketing-trends-2015/>
- Chaffey David, Chadwick f, Mayer r. And Johnston K., (2012), *Internet marketing Strategy, Implementation and Practice*, 4th Edition, Published by Prentice

- Hall.
- Chan, C. and Swatman, P. M. C. (2012), "From EDI to Internet Commerce: The BHL Steel Experiences" *Internet Research: Electronic Networking Applications and Policy*, 10(1): 72-82.
- Chen L, Tan J (2004), Technology adaptation in e-commerce: Key determinants of virtual stores acceptance, *Eur. Manage. J.*, 22(1): 74- 86.
- Charlesworth Alan, (2009), *Internet Marketing a Practical Approach*, Published by Elsevier.
- Chau, P. Y. K. and Hu, P. J. (2002) Examining a Model for Information Technology Acceptance by Individual Professionals: An Exploratory Study. *Journal of Management Information Systems*, 18 (4), pp. 191-229.
- Constantinides, E. (2010). *Connecting Small and Medium Enterprises to the New Consumer: The Web 2.0 as a Marketing Tool*. IGI Global. DOI: 10.4018/978-1-61520-627-8. ch001.
- Cragg, P.B. and King, M. 1993, "Small-firm computing: motivators and inhibitors", *MIS quarterly*, vol. 17, no. 1, pp. 47-60.
- Creswell, J.W., (2007). *Qualitative Inquiry and Research Design: Choosing Among Five Approaches* 2nd ed. Thousands Oaks: Sage Publications, Inc.
- Deh Moled, Feiz Poor, Mohammad Ali, Babak, (2009). Innovation management and intellectual capitals in small and medium industries for textiles and non-metallic minerals, Yazd Province, the first International Conference on Intellectual Capital Management.
- Dibb, S., Simkin, S., Pride, W. AND Ferrel, O. (2001), *Marketing concepts and strategies*, 4<sup>th</sup> European Ed. Houghton Mifflin, New York, chapter 1, an overview of the marketing concept.
- Drew, S. (2003) Strategic use of e-commerce by SMEs in the east of England, *European Management Journal*, 21,1,79-88.
- Duncombe, R., Molla, A., 2009. Formalisation of information systems in developing country small and medium enterprises. *Afr. J. Inform. Syst.* 1 (2), 1–29.
- Dutta, Soumitra, Stephen Kwan, and Arie Segev (1997), *Transforming Business in the Marketplace: Strategic Marketing and Customer Relatio*.
- Eid, R., and El-Gohary, H, (2013). The Impact of E-Marketing Use on Small Business Enterprises' Marketing Success: The Case of UK Companies, *The Service Industries Journal*, 33 (1), pp: 31-50.
- Eid, R., and El-Gohary, H, (2013), Testing and Validating Customer Relationship Management Implementation Constructs in Egyptian Tourism Organizations, proceedings of the 27th Annual British Academy of Management Conference, BAM 2013 Conference, 10th - 12th September 2013, Liverpool, UK.
- Ellis-Chadwick, F.E., Doherty, N.F. and Hart, C.A. (2002), "Signs of Change? A Longitudinal Study of Internet Adoption in the UK Retail Sector", *Journal of Retailing and Consumer Services*, Vol. 9 No.2, pp 71-80.
- El-Gohary, H. and El-Gohary, Z. (2016). An Attempt to Explore Electronic Marketing Adoption and Implementation Aspects in Developing Countries: The Case of Egypt, *International Journal of Customer Relationship Marketing and Management (IJCRMM)*, 7(4), pp: 1-26.
- El-Gohary, H, (2013), The impact of Egyptian revolution on Egyptian tourism industry and Egyptian tourism SMEs, proceedings of the ISBE 2013 Conference, *Escape Velocity: Internationalising Small Business Environments*, Cardiff, UK, 12th and 13th November 2013.



- El-Gohary, H. (2012), Factors affecting E-Marketing adoption and implementation in tourism firms: An empirical investigation of Egyptian small tourism organizations, *Tourism Management*, 33(5), pp: 1256-1269
- El-Gohary, H. (2012), *The impact of E-Marketing Practices on Marketing Performance: A Small Business Enterprises Context*, Germany, LAP Lambert Academic Publishing.
- El-Gohary, H. (2012), *Transdisciplinary Marketing Concepts and Emergent Methods for Virtual Environments*, USA, IGI Global.
- El-Gohary, H. and Eid, R., (2013), *E-Marketing in Developed and Developing Countries: Emerging Practices*, USA, IGI Global.
- El-Gohary, H, Edwards, D., and Huang, J (2013). Customer Relationship Management (CRM) Practices by Small Businesses in Developing Economies: A Case Study of Egypt, *International Journal of Customer Relationship Marketing and Management (IJCRMM)*, 4 (2), pp: 1-20.
- El-Gohary, H, Eid, R., and Khalifa, M. (2012), Factors Affecting the Choice of Export Entry Mode by Developing Economies Firms, proceedings of the ISBE 2012 Conference, *Creating Opportunities through Innovation: Local Energy, Global Vision*, Dublin, Ireland, 7-8 November 2012
- El-Gohary, H, (2011), *Electronic Marketing Practises in Developing Countries: The case of Egyptian business enterprises*, Germany, VDM Verlag Dr Müller, ISBN: 978-3-639-27461-5.
- El-Gohary, H, (2010). E-Marketing-A literature Review from a Small Businesses perspective, *International Journal of Business and Social Science (IJBSS)*, 1(1), October 2010, pp: 214 – 244.
- El-Gohary, H, Trueman, M. and Fukukawa, K. (2009), Understanding the factors affecting the adoption of E-Marketing by small business enterprises – Book Chapter, in the book: *E-Commerce Adoption and Small Business in the Global Marketplace*, edited by: Thomas, B. and Simmons, G., IGI global, USA, pp: 237-258.
- European Commission 2011, "Green Paper. Towards an Integrated European Market for Card, Internet and Mobile Payments", EC, Brussels.
- European Commission (2016). *Europe's digital progress report (EDPR) 2016*. Brussels.
- Fabiani, S., Schivardi, F., & Trento, S. (2005). ICT adoption in Italian manufacturing: Firm-level evidence. *Industrial and Corporate Change*, 14(2), 225–249.
- Feizpour, M. A., and Jamali, R. (2009). SMEs Employees Gender Composition and Firm Growth: Evidence from Manufacturing Industry in Cooperative Sector during the Second Development Plan in Iran from 1995 to 1999. *International Review of Business Research Papers*, 5(3), 311-332.
- Fink, D. (1999). Guidelines for the Successful Adoption of Information Technology in Small and Medium Enterprises. *International Journal of Information Management*, 18(4), pp. 243-253.
- Fink, D. 1998, "Guidelines for the successful adoption of information technology in small and medium enterprises", *International Journal of Information Management*, vol. 18, no. 4, pp. 243-253.
- Eriksson, L.T., Hultman, J., and Naldi, L. (2008). Small business e-commerce development in Sweden: an empirical survey. *Journal of Small Business and Enterprise Development*, 15(3), pp. 555-570.

- Gibbs, J., Kraemer, K.L., Dedrick, J. (2002). Environment and policy factors shaping E-Commerce diffusion: A cross-country comparison. Center for Research On Information Technology and Organizations. Retrieved from <http://www.escholarship.org/uc/item/2x73003z>
- Ghobakhloo, M., Hong, T.S., Standing, C., 2015. B2B E-commerce success among small and medium-sized enterprises: a business network perspective. *J. Organ. End User Comput.* 27 (1), 1–32.
- Ghobakhloo, M., Sadegh Sabouri, M., Sai Hong, T., & Zulkifli, N. (2011). Information technology adoption in small and medium-sized enterprises; an appraisal of two decades literature. *Interdisciplinary Journal of Research in Business*, 1(7), 53–80.
- Grandón, E. E., Nasco, S. A., & Mykytyn, P. P. (2011). Comparing theories to explain e-commerce adoption. *Journal of Business Research*, 64(3), 292–298.
- Haghizadeh, P. 2011. E-Commerce. Termeh Publisher. Tehran, Iran. 201 p.
- Hamad, H., Elbeltagi, I., Jones, P. and El-Gohary, H, (2015). Antecedents of B2B E-Commerce Adoption and its Effect on Competitive Advantage in Manufacturing SMEs, *Strategic Change*, DOI: 10.1002/jsc.2019, 24(5), pp: 405–428.
- Hamilton, B.A. 2003, "Business in the information age: The international benchmarking study 2003", London: DTI.
- Hoffman, Donna L., Thomas P. Novak, and Thomas P. Peralta (1999b), "Information Privacy in the Marketplace: Implications for the Commercial Uses of Anonymity on the Web", *The Information Society*, Volume 15, Issue 2, pp. 129-139.
- Hoffman, D.L., and Novak, T.P. (1996), a New Marketing Paradigm for Electronic Commerce, Vanderbilt University, the Information Society.
- ILO. (2015). An Employment Strategy for the Islamic Republic of Iran: A Report Prepared for The Government The Islamic Republic of Iran in Collaboration with the Ministry Labour and Social Affairs under UNDP SPPD funding. [Online] Available: [http://www.ilo.org/public/english/region/asro/newdelhi/download/publ/iran/strategy\\_rep.pdf](http://www.ilo.org/public/english/region/asro/newdelhi/download/publ/iran/strategy_rep.pdf). Ismail, N.
- Irani, H.R., Shahanaghi, K., and Jandaghi, Gh. (2015). Develop a Framework for Selection of Intermediary in Marketing Channel. *Iranian Journal of Management Studies*, 4 (1), 25-42
- Kartiwi, M., and MacGregor, R.C. (2007). Electronic commerce Adoption barriers in small to Medium-sized Enterprises (SMEs) in Developed and Developing countries: A cross- country comparison. *Journal of Electronic Commerce in Organisations*, 5(3) edited by Mehdi Khosrow-Pour © 2007, IGI Global.
- Kimberly, J.R., Evanisko, M.J., 1981. Organizational innovation: the influence of individual, organizational, and contextual factors on hospital adoption of technological and administrative innovations. *Academy of Management Journal* 24 (4), 689–713.
- Kotelnikov, V. 2007, Small and medium Enterprises and ICT, Asia-Pacific Development Information Programme.
- Kula, V. and Tatoglu, E. (2003) An exploratory study of Internet adoption by SMEs in an emerging economy, *European Business Review*, 15,5,324- 333.
- Kurnia, S., Peng, F. (2008). Electronic commerce readiness in developing countries: The case of the Chinese grocery industry. In: *Proceedings of the 41<sup>st</sup> Annual Hawaii International Conference on System Sciences*, pp. 1–25.

- Lai, A. K. P., H'ng, A. S. C., Lee, A. B. K. and Ngu, G. K. C. (2002) Information technology and e commerce for successful SMEs, *Malaysian Management Review*, 37,2,30-39.
- Lamb, R., Kling, R., 2003. Reconceptualizing users as social actors in information systems research. *MIS Q.* 27 (2), 197–236.
- Laosethakul, K. and Boulton, W. (2011), Critical success factors for e-commerce in Thailand: Cultural and infrastructural influence.
- Mackinnon, A.C. (1986). *The Physical Distribution Strategies of Multiple Retailers*. Cassel Publishers Ltd.
- Maleki Nejad, Amir, (2006). Analysis of the role of small and medium industries in the economic development, *strategy magazine*, No. 8.
- Martinsons, M.G. (2008). Relationship-based e-commerce: theory and evidence from China.
- Mehrtens, J., Cragg, P. B. and Mills, A. M. (2001) A model of Internet adoption by SMEs, *Information and Management*, 39,3,165-176.
- Mentzer, J.T., Flint, D.J. and Hult, G.T.M. (2001). Logistics service quality as a segment-customized process. *Journal of Marketing*, 65, 82-104.
- Mentzer, J., Gomez, R., and Krapfel, J. (1989). Physical Distribution Service: A fundamental Marketing Concept?. *Journal of the Academy of Marketing Science*, 17 (1), 53-62.
- Millman, C. and El-Gohary, H, (2011). New Digital Media Marketing and Micro Business: A UK perspective, *International Journal of Online Marketing (IJOM)*, 1 (1), pp: 41-62.
- Ministry of Industry, Department of Industrial Development plans for Iran in 2021, requirements and strategies for industrial development in Iran - 2021.
- Molla, A. and Licker, P. S. (2005) E-commerce adoption in developing countries: A model and instrument, *Information and Management*, 42,6,877-899.
- MVF Global Customer Acquisition (2015), Lead Generation and Internet Marketing in Iran, Visited Online, Last Accessed on 10th of April 2016 at: <http://www.mvfglobal.com/iran>.
- Mwangi, W., 2006. The social relations of e-government diffusion in developing countries: the case of Rwanda. *Proceedings of the 2006 International conference on Digital Government Research*. Digital Government Society of North America, pp. 199–208.
- Nasco, S. A., Toledo, E. G., & Mykytyn, P. P. (2008). Predicting electronic commerce adoption in Chilean SMEs. *Journal of Business Research*, 61(6), 697–705.
- Naser Bakht, Javad, (2009). Small and medium enterprises, formation, capacities and policies, *Journal of Industry*, No. 62.
- Nejad, O. D. (2010). A note on the post-revolution Iranian economy and the banking sector. *Middle Eastern Finance and Economics*, 6, 91-98.
- Newman, D.A (2010). Missing Data: Problems and Prospects. Center for the Advancement of Research Methods and Analysis (CARMA) Live webcast, School of Business, Wayne State University, Detroit, MI.
- Ngai, E.W.T., Wat, F.K.T., 2002. A literature review and classification of electronic commerce research. *Inf. Manage.* 39, 415–429.
- nklaar, R., O'Mahony, M., & Timmer, M. (2005). ICT and Europe's productivity performance: Industry-level growth account comparisons with United States. *Review of Income and Wealth*, 51(4), 505–536.
- OECD (2004). *ICT, E-Business and SMEs*, Organisation for Economic Co-Operation

- and Development, Retrieved 04 October 2016, from <http://www.oecd.org/dataoecd/32/28/34228733.pdf>.
- O'Connor, G. C. and O'Keefe, B. (1997) Viewing the web as a marketplace: The case of small companies, *Decision Support Systems*, 21,3,171-183.
- Ojukwu, D., Georgiadou, E., House, R., 2007. Towards improving inter-organisational trust amongst SMEs: A case study from developing countries. In:Proceedings of the 9th IFIP International conference on the social implications of computers in developing countries. Retrieved from <<http://www.ifipwg94.org.br/fullpapers/R0096-1.pdf>>.
- Ongori, H., & Migiro, S. O. (2013). Information and communication technologies adoption in SMEs: Literature review. *Journal of Chinese Entrepreneurship*, 2(1), 93–104.
- P. Palvia, S. Palvia, and E. Roche, Ivy League Publishing, New Hampshire, 123-143.
- Livingston, D. (1990). How EDS Will Build the World's Biggest Private Network? *Systems Integration*, vol 23, no 2, 3439.
- Paryab, H., J. Aliakbai and M. Amini. 2006. E-Commerce in Agricultural Sector- case study of Iran. 4th national Conference of E-Commerce. Tehran, Iran.
- Peet, S., Brindley, C. and Ritchie, B. (2002) The European Commission and SME support mechanisms for e-business, *European Business Review*, 14, 5,335-341.
- Perreault, Jr. W. D., Cannon, J., McCarthy, E.J. (2010). *Essentials of Marketing* (13th Edition). McGraw-Hill Higher Education.
- Pitt, Mark, Shahidur Khandker, O. Choudhury, and D. Millimet. 2003. "Credit Programs for the Poor and the Health Status of Children in Rural Bangladesh." *International Economic Review* 44 (February): 87–118.
- Poon, S. and Swatman, P.M.C. 1997, "Small business use of the Internet: Findings from Australian case studies", *International Marketing Review*, vol. 14, no. 5, pp. 385-402.
- Premkumar, G., and Roberts, M., 1999, "Adoption of new information technologies in rural small businesses," *The International Journal of Management Science*, 27, pp. 467-484.
- Quayle, M. (2002). E-commerce: the challenge for UK SMEs in the twenty-first century. *International Journal of Operations and Product Management*, 22(1 O), pp. 1 148- 1 16 1.
- Raghubansie, A., El-Gohary, H, Samaradivakara, C. (2013). An Evaluation of the Viral Marketing Research, *International Journal of Online Marketing (IJOM)*, 3 (4), pp: 1-27.
- Rashid, M. A., and Al-Qirim, N. A., 2001, "E-commerce technology adoption framework by New Zealand small to medium size enterprises," *Research Letters in the Information and Mathematical Sciences*, Institute of information and mathematical sciences, 2, pp. 63-70.
- Ravanbakhsh, Moqtdalanam, (2007). Explain the development strategies of Small Industries and Industrial Parks Organization of Iran, the Second International Conference on Strategic Management.
- Rayport, J., and Jaworski, B. *Introduction to E-Commerce*. New York: McGraw-Hill, 2001.
- Rogers, E. M. (2003) *Diffusion of Innovation*, 5h Ed. New York: The Free Press.
- Rogers, Everett M., *Diffusion of Innovations*, (Third Ed.), The Free Press, New York, 1983.
- Swanson, E. Burton, *Information Systems Implementation: Bridging the Gap Between Design and Utilisation*, Richard Irwin, Inc., Homewood, IL, 1988.

- Riemenschneider, C.K., Harrison, D.A. and Mykytyn, P.P. 2003, "Understanding IT adoption decisions in small business: integrating current theories", *Information and Management*, vol. 40, no. 4, pp. 269-285.
- Riemenschneider, C. K. and McKinney, V. R. (1999). Assessing the adoption of Web-based Ecommerce for Business: A Research Proposal and Preliminary Findings. *Electronic Markets*, 9(1/2), pp. 9-13.
- Ryan, G. W., and Bernard, H. R., (2000), Data management and analysis methods.
- Sainiee, S. (1998). "The internet and international marketing: is there a fit?" *Journal of Interactive Marketing*, 12 (Autumn), 5–21.
- Sarmadsaidi, S. and V.R. Mirabi. 2006. *E-Commerce*. Parsman Publisher. Tehran, Iran. 200 p.
- Saunders, M. N., Saunders, M., Lewis, P., and Thornhill, A., (2011), *Research methods for business students*, 5/e. Pearson Education India.
- Saunders Mark Lewis, Philip Thornhill Adrian, (2009), *Research Methods for Business Students*, 4<sup>th</sup> Edition, Prentice Hall.
- Sawe, D., Simbo, N. (2002). Proposal for Tanzania's ICT Policy Formulation Framework: Final version 2.3.
- Smith, K. T., (2007), the Marketing Mix of Integrated Marketing Communication: A Move from the 4 P's to the 4 C's. Last accessed on 15<sup>TH</sup> of March 2017, available at: <http://www.scs.unr.edu/~khalilah/eMarketing.pdf>
- Spanos, Y. E., Prastacos, G. P., & Poulymenakou, A. (2002). The relationship between information and communication technologies adoption and management. *Information Management*, 39(8), 659–675.
- Taylor, M. J., Mcwilliam, J., England, D. and Akomode, J. (2004) Skills required in developing electronic commerce for small and medium enterprises: Case based generalization approach, *Electronic Commerce Research and Applications*, 3,3,253-265.
- Thatcher, S.M.B., Foster, W., and Zhu, L. (2006). B2B e-commerce adoption decisions in Taiwan. *Electronic Commerce Research and Applications*, 5, pp. 92-104.
- UNIDO. (2015). To enhance the contribution of an efficient and competitive small and medium-sized enterprise sector to industrial and economic development in the Islamic republic of Iran [Online] Available: [http://www.unido.org/fileadmin/import/18229\\_AbsFinal.pdf](http://www.unido.org/fileadmin/import/18229_AbsFinal.pdf)
- Windrum, P. and De Berranger, P. 2003, "The adoption of e-business technology by SMEs", *Competitive Advantage in SMEs*, pp. 177-201.
- Windrum, P., de Berranger, P. (2002). The adoption of e-business technology by SMEs. MERIT-Infonomics Research Memorandum series. Retrieved from <<http://arno.unimaas.nl/show.cgi?fid=205>>.
- Van Akkeren, J., and Cavaye, A.L.M. (1999). Factors affecting entry-level Internet Technology Adoption by Small Business in Australia: An Empirical Study. Proceedings of the 10<sup>th</sup> Australasian Conference on Information Systems.
- Vatanasakdakul, S., Tibben, W., Cooper, J. (2004). What prevent B2B eCommerce adoption in developing countries? A socio-cultural perspective. In: 17<sup>th</sup> Bled eCommerce Conference on eGlobal, pp. 1–15.
- Xing, Y., Grant, D. B., McKinnon, A.C., and Fernie, J. (2010). Physical distribution service quality in online retailing. *International Journal of Physical Distribution and Logistics Management*, 40(5), 415-432.
- Zheng, J., Caldwell, N., Harland, C., Powell, P., (2004). Small firms and e-business: cautiousness, contingency and cost-benefit. *Journal of Purchasing & Supply*

Management, 10, pp. 27-39.

Zohari, T. (2013). Iranian government globalization policy impacts on SMEs and the corresponding effect on Iranian-Swedish trade. [Online] Available: [http://digitpro.co.uk/paper/iran\\_sweden.pdf](http://digitpro.co.uk/paper/iran_sweden.pdf).