The Spread of E-Commerce in Middle East Compared with the Global World

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Abstract—**E-commerce has changed the way you buy and sell online. The Internet offers a quick and easy way for people to buy things without having to visit a real store. High-performance Internet in the world and the adaptation of advanced technologies, which have led to great prosperity in the e-business environment. Obviously, we cannot separate the regional isolation world from the rest of the world because of international globalization that deals with trade and commerce as its interventions and commitments around the world. There is no doubt that for anyone developed countries have taken the lead in this area and these countries for their physical and technical support to develop this work. As for the world of the Middle East, the situation is different when it is said that a large part of the community does not rely on the treatment of the electronic environment.**

Index Terms— **Innovation, Globalization, E-Business, Competitive Advantage, On-Line Commerce, Mobile Commerce.**

I. INTRODUCTION

E-commerce has grown considerably with the great development of the Internet has provided an efficient and efficient environment in the transfer and exchange of information. It is clear that global stability will be the main factor in attracting investment and prosperity business. But the regional world, many years ago, saw a chaotic and unstable power factor to force both the exporter and importer of transit for e-commerce as the best solution to such chaotic instability and because the wheel of life must continue [1].

When we talk about e-commerce in the Middle East world, you cannot treat the issue in isolation from the rest of the world because they understand many things and are strongly influenced by what is happening around the world. In particular, e-commerce has global extensions, including rapid technological advances in information and communication technologies and their significant impact on the speed and quality of transfer and exchange of data and Internet information [2].

II. E-COMMERCE TYPES

The major types of e-commerce are (figure 1) [3]:

Business-to-Business (B2B)E-commerce is simply defined as e-commerce between companies. This is the type of e-commerce that deals with the relationships between two or more companies. About 80% of e-commerce is of this type, and most experts predict that B2B e-commerce will continue to grow faster than the B2C segment.

Business-to-Consumer (B2C)E-commerce or business-to-consumer commerce requires customers to collect information; The purchase of physical assets (such as books or consumer products) or information assets (such as software or e-books).

Business-to-Government (B2G)E-commerce is generally defined as trade between businesses and the public sector. It refers to the use of the Internet for government procurement procedures for licensing and other government operations.

Consumer-to-Consumer e-commerce (C2C) Simply exchanges between individual consumers. This type of e-commerce is characterized by the growth of electronic markets and online auctions, especially in vertical markets, where companies / companies can bid on what they want from multiple providers.

Mobile Commerce (M-Commerce) It is delivering electronic commerce capabilities (buying and selling goods and services) directly into the hands of the consumer (anywhere, anytime) through wireless technology such as mobile phones, laptops, smartphones and tablets.
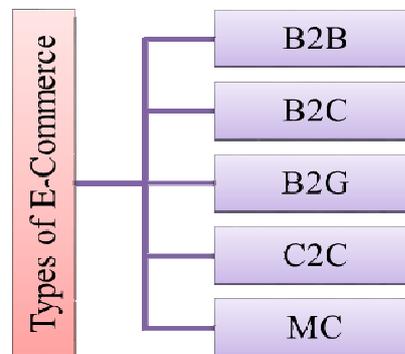

Fig. 1 Types of E-Commerce

III.   World Internet Usage Statistics

The Internet is defined as the global interconnection of individual networks operated by industry, government,academia and individuals. In recent years, the Internet has established itself as a powerful platform that changed forever the way we do business and the way we communicate [4].

Figure (2) shows that about 50% of the world population through the Internet today. In addition, in the Middle East, we have an internet penetration slightly above the world average of 57.4%, and there is significant Internet growth between 2000-2016.

The world population exceeded seven billion by the end of 2013 and now in 2016 is about 7.3 billion, and more than fourbillion are concentrated in Asia and the Middle East population is approximately ¼ of the world. Developing countries, including the Middle East suffer from a lack of advanced communications infrastructure, which is the main part of the Internet [4].

When we focus on the Middle East (figure 2), it is clear that Iran remains at the top of the Middle East list. On the other hand, Figure 3 shows the top ten languages in which it is clear that the English language is kept at the top of the list [4].
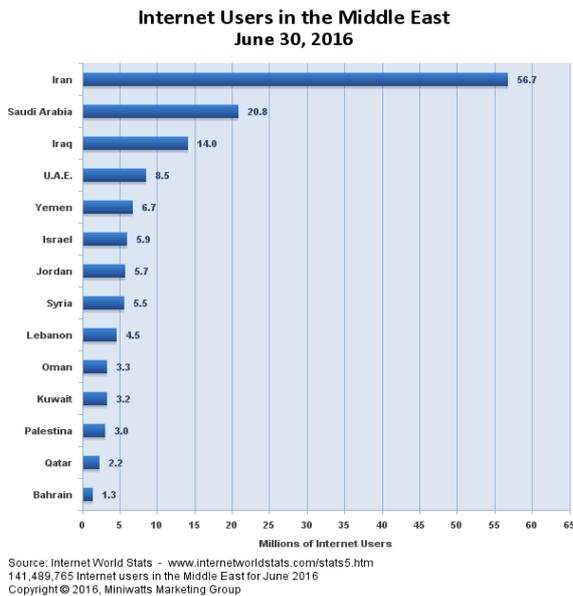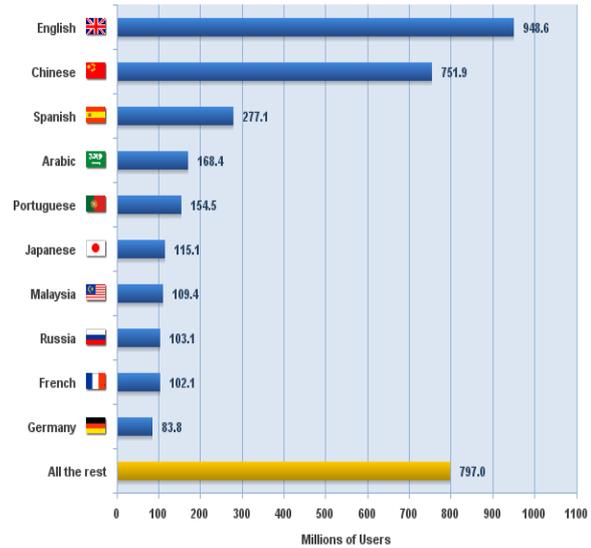

Fig. 2 Internet user in the Middle East

Fig. 3 top ten Internet language

IV.   World Mobile Usage Statistics

Here are the latest mobile growth statistics for 2013, a complete in-depth summary of where the mobile market is including things like mobile phone adoption rates, smartphone penetration rates, most popular mobile browsers, mobile/tablet sales figures, media consumption habits on mobile devices etc. Here are a few key statistics [5]:

• 91% of all people on earth have a mobile phone
• 56% of people own a smart phone
• 50% of mobile phone users, use mobile as their primary Internet source
• 80% of time on mobile is spent inside apps
• 72% of tablet owners purchase online from their tablets each week.

Figure (4) illustrate the relation between the number of traditional phone subscribers, number smart phone subscribers and number smart other cell phone subscribers. This inform us that there is a big jump of mobile users that affected directly on the e-commerce [6].
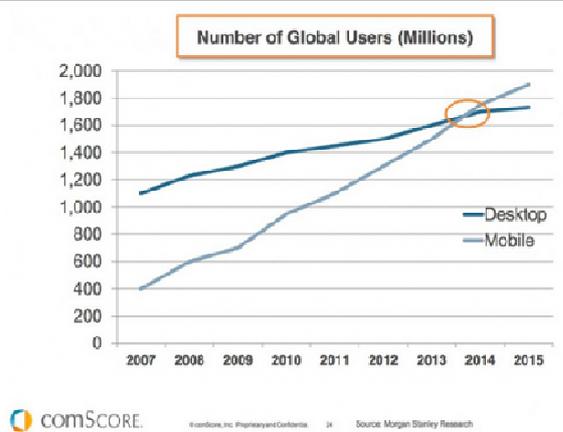
Fig.4 mobile growth statistics 2011 – 2013

V. INTERNET SERVICES

The Internet based on the principle (client / server) in its work and all applications exist on the servers and each user can access and obtain the requested information. There are a range of services and applications offered by the Internet such as [5,6]:

E-mail: This is the most important service offered by the Internet, where you can send messages to anyone at any time and anywhere in the world, so once you know the email address.

Chat:This is a form of dialogue through the Internet with one of the programs on the Internet and there is a direct connection between the parties and as well as it can be used as a complete discussion between a group of people and exchange information and conduct transactions business.

Search Engines : These are tools that allow user sets to find specific information about the network by selecting the desired options, or selecting specific words through research in a different application; Scientific, commercial, …etc.

Websites:These allow a person to use some space on the network at a low cost for a certain period when the user can display the information they want on this site, whether commercial, commercial or scientific.

Business: Recently, the great boom in the world of communication, monitoring the growth of the economy and business through the Internet, where the evolution of technology and investment was developed. The introduction of multimedia technologies gives a new vision of innovation in the relationship between companies and their customers that can be classified as Internet businesses from the following figure (5):

Advertisingis a work tool that has grown too large and can be either by email or a web page or social networks like Facebook, Twitter, YouTube and others.

Shopping means to acquire goods or services through the Internet, whether navigation and search or by email, and the future of this area have very large investments, especially if followed by a secure job.

Information servicesmeans that you can get information over the Internet and all the information, whether scientific or commercial, medical or otherwise and anywhere, at any time, and it is expected for this market to grow very quickly.

Electronic payment services Where you can pay and transfer payments to the party through the Internet. It was very good for the trend in the world of communications and information security to have the greatest impact on the growing popularity of these services as it provides more time and effort.

E-learningor online learning is the use of electronic media, educational technology and information and communication technology (ICT) in education. Online learning includes many types of media that provide text, audio, images, animations and video, as well as applications and technological processes.

Other servicesinclude specialized programs and analyzed for specific purposes in specific areas, such as consultancy, training courses and scientific conferences, specialized programs for specific purposes… etc.

Fig.5 Business via Internet

VI. WORLD WIDE E-COMMERCE STATISTICS

The impression is true that developed countries preceded developing countries on the side of technological development and the use of information technology for decades. According to figure (6), there is a declining degree of e-commerce sales, such as Asia Pacific, North America, Western Europe, Central and

Eastern Europe, Latin America and the Middle East and Africa. It is clear that the Arab world located on the last of the list of e-commerce, so these countries must introduce great efforts on this side of technology [5, 6].
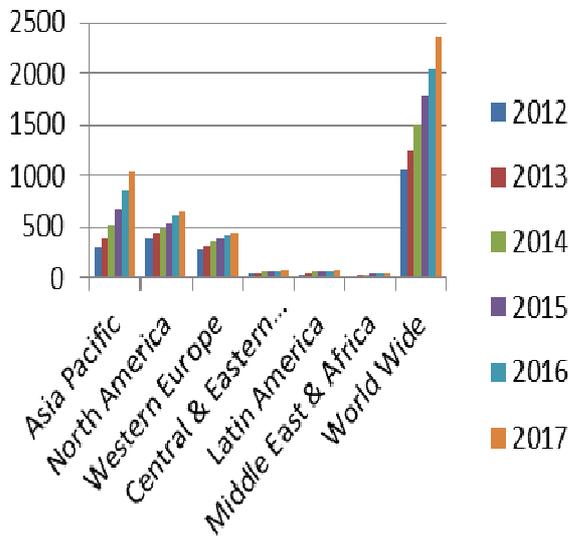

Fig. 6 e-commerce sales worldwide by regions

The top e-commerce markets are:
- China is the biggest e-commerce market in the world with $562.66B in sales projected for 2015.
- The US comes in second with $349.06B in projected e-Commerce sales in 2015.
- The UK is third on the list with $93.89B in projected online sales for 2015.
- $79.33B is Japan's total projected online sales that year.
- Germany is an European economic powerhouse and has $74.46B in projected online sales for 2015.
- France had $42.62B in projected total online sales at that year.
- $36.76B is the total for 2015 of projected online sales in South Korea.
- Canada has $28.77B total in projected online sales this year.
- $20.30B is Russia's total projected online sales for 2015.
- With $18.80B in projected total online sales for 2015, Brazil is number ten on the list.

VII.   LITERATURE REVIEW

Many researches are published related to this work, in addition we concentrated on the papers published by the author in one year 2012:

Muzhir Shaban Al-Ani, Rabah Noory & Dua'a Yaseen Al-Ani, (2012),designed Internet billing system in which it is possible to pay invoices electronically. This approach is implemented through virtual banks, in which the money transfer process can be implemented. On the other hand many applications can be made such as; The presentation of electronic money, the withdrawal of electronic money and the determination of the balance of the account [7].

Zahra Abd Alsalam Saed and Muzhir Shaban Al-Ani,(2012), presented E-Shopping Perceptions Assessment in Jordan. E-commerce application in Jordan is considered at the beginning. This research resulted that E-Shoppers presented 14% of the overall sample individuals. Practicing e-commerce in Jordan is influenced by cultural resistance, lack of trust, luck of awareness and absence of regularity framework [8].

Muzhir Shaban Al-Ani (2012), introduced an advanced characteristics of future generation of cellular mobile applied in the learning environment. Mobile Learning has drawn a great deal of application all over the world. The proposed system based on web mobile integration that constructs a new environment to introducethe future technologies via new mobile learning system [9].

Muzhir Shaban Al-Ani (2012), proposed a new technology tries to eliminate the limitations of telecommunication technologiesthat leads to advanced approach able to demonstrate an easy and efficient method to overcome all technical and managerial issues. This algorithmoffered and analyzed the characteristics of available systems with their services and offered future approach of next generation cellular mobile communications [10].

VIII.   PROPOSED E-COMMERCE MANAGEMENT MODEL

The implementation of various e-commerce applications depends on many categories as shown in figure (6):people, public policy, marketing/advertising, and supply chain logistics as well as the supported infrastructure.In this figure it is clear the framework for understanding the relationships among the e-commerce components.
The e-commerce infrastructure leads to five infrastructures as listed below:

- Common Business Services Infrastructure including security smart cards/authentication, electronic payments, directories/catalogs.
- Messaging and Information Distribution Infrastructure including EDI, e-mail, Hypertext Transfer Protocol, ChatRooms.
- Multimedia Content and Network Publishing Infrastructure including HTML, JAVA, World Wide Web, VRML.
- Network Infrastructure including VAN, WAN, LAN,
  Intranet, extranet Access.

- Interfacing Infrastructure including databases, logistics, customers, and applications.
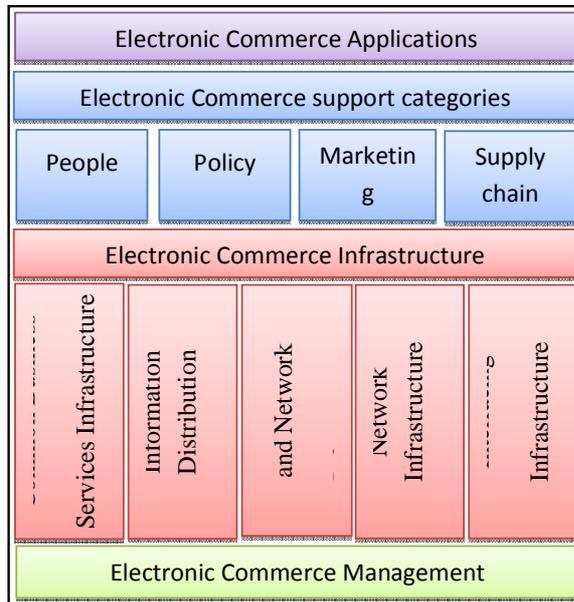
Electronic Commerce Applications
Electronic Commerce support categories

People	Policy	Marketing	Supply chain

Electronic Commerce Infrastructure

Services Infrastructure	Information Distribution	and Network	Network Infrastructure	Infrastructure

Electronic Commerce Management

Figure (6) proposed e-commerce management framework

IX. TIPS FOR PUSHING INNOVATION FORWARD E-COMMERCE

Many important tips are required to push Innovation forward e-commerce:

- The Internet has made information instantly available to everyone at any time.
- The Mobile has made information instantly available to everyone at anytime and anywhere.
- Possible to use the Internet for entertainment, but this is the main goal.
- Learning the correct use of the Internet for effective and feasible work.
- Adopting the principle of confidence in dealing with the electronic environment and break the barrier of fear.
- You know through the website you see in all parts of the world, so it must be well done.
- Do not exaggerate in the description of your goods more than it deserves and tell the truth and be honest in everything.
- Building a good and effective site to reflect the company's digital interface effective and efficient.
- Consult experts when building the website of the company and the adoption of the principle of confidentiality and information security.

- The Mobile Internet data connections are following the growth of mobile phone connections.
- All of the above are the main support of the competitive advantage of your business.

X. BENEFITS OF INTERNET COMMERCE

The benefits of Internet commerce or e-commerce can be represented as business benefits as below:

- Cost reduction for buyers through increased online competition.
- Reduce costs for online auction providers.
- Reduce errors, time and overhead costs for information processing.
- Reduce inventory and warehouse.
- Increased access to real-time inventory information, acceleration of orders and acquisition process time.
- Easy to access new markets effectively.
- Easy to create new markets and gain new customers.
- Automated business processing.
- Transfer of cost-effective documents.
- Reduce the time needed to complete business transactions, accelerate delivery.
- Reduce business overhead and improvement business management.

XI. CONCLUSION

Clearly the Internet has changed and continues to change the way we do business. For the most part, a lack of trust remains to be one of the biggest barriers keeping consumers from shopping online, along with unsuitable payment options and lack of online retailers. On the merchant's side, the number of businesses with an online presence alone is strikingly low at 15% estimated by Google. In addition, support from logistics and payment providers has been very limited, leaving many SMEs struggling to keep up with inventory and shipments to their customers.

The Internet continues to be the most democratic of all the mass media. With a very low investment, anyone can have a web page in Internet. This way, almost any business can reach a very large market, directly, fast and economically, no matter the size or location of the business. With a very low investment, almost anybody that can read and write can have access and a presence in the World Wide Web. Mobile Internet growth is the growth of the Internet when accessed via a mobile phone, laptop, etc. Mobile phone connections are increasing more rapidly than purchases of any other consumer product.

Although, it is clear that there is a wide spread of the Internet in the Middle East world, there is still a big gap in the use of the Internet effectively in commerce and business.

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