

Analytical study of the relationship between electronic city and the needs and infrastructure of electronic commerce

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Abstract

The aim of this study was to "Analyze the relationship between electronic-city and the needs and infrastructure of electronic-commerce" and to explain and identify the relationship between electronic-commerce and electronic-city in order to better develop this business by data collection, ie library studies and to collect Information was also used from library resources, articles, required books, and the World Wide Web (Internet). Findings of this study show that electronic-city creates many opportunities for the development of infrastructure of a society, one of which is the development of electronic-commerce infrastructure as a subset of electronic-city. Therefore, by expressing the needs and necessary infrastructure in the direction of electronic-commerce and examining these needs, they were related to the opportunities obtained from the electronic-city, and the opportunities obtained from the electronic-city covered a significant part of these needs, which shows From the dependence of electronic-commerce on electronic-city and it can be said that electronic-city has a decisive role in the development of electronic-commerce

infrastructure and is one of the effective factors in accelerating the development of this vast business, which indicates the need for electronic-cities in Contemporary society.

Keywords : Electronic city, Electronic commerce development

Introduction

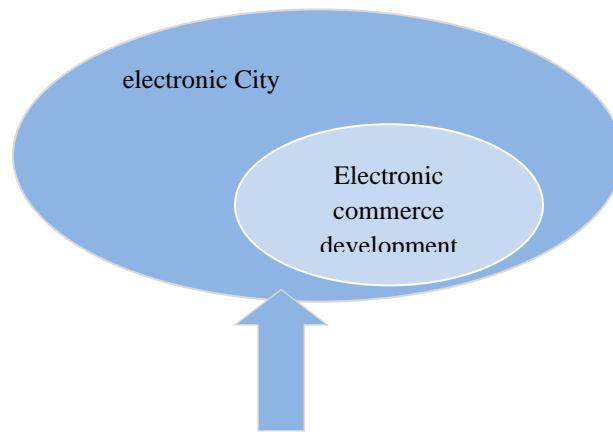
In a world where with the beginning of the formation of the industrial city, we are witnessing population growth and an increase in the number and size of cities in terms of population, physically or simultaneously. [1] The rapid growth of populations and their concentration in cities around the world affect the outlook on the lives of the majority of humanity. Cities are meaningful and increasingly vulnerable to crises, especially in developing countries. [2] In this regard, urban management, under the influence of increasing issues and problems related to the proper management of the city, need a smart plan to provide all the current and future needs of citizens and urban dwellers to keep things in mind, to keep in mind. And become urban problems. [3] Electronic city is an emerging concept that was born with the development of information and communication technology and has the ability to solve many complex problems of today's life, especially in metropolises. [4] Creating an electronic city

for economic and social interactions creates new opportunities for business and government citizens. Easy city life, high productivity and increased quality and quantity of services. There is a new way of communicating between government and citizens and governing governments . [5] Electronic commerce in its current form was realized in 1991. Since then, thousands upon thousands of businesses have entered the world. In fact, electronic commerce was defined to facilitate economic transactions electronically. The use of technology such as electronic information exchange and electronic capital transfer, both of which were introduced in the late 1970s; And allowed companies and organizations to send electronic documents; And allows trading by sending business documents such as purchase orders or invoices electronically. [6] More broadly, and from the perspective of the concept of business, electronic commerce not only includes cases where "electronic data interchange" is used, but also older technologies such as telex and teletype. Because trade and exchange of information and transaction in any context is in the concept of trade and the reference to electronic commerce merely refers directly to the method and context of information exchange and transaction. [7] Given the increase in Internet businesses and electronic commerce in the world today, in order to better develop electronic commerce and its relationship with the need for electronic cities, we must examine the role and performance of electronic cities in the realization of better infrastructure. Electronic commerce and

creating the necessary context for the development and progress of this global business. The main challenge in this research is the need for electronic city in terms of infrastructure development and opportunities in electronic commerce and the development of Internet businesses. The main challenges and questions in this research can be posed as follows:

- To what extent can electronic cities be considered effective and groundbreaking in the development of electronic commerce?
- What are the opportunities that electronic cities can provide for electronic commerce?
- To what extent can electronic commerce depend on the electronic city?
- To what extent can electronic city meet the needs of electronic commerce?

Thus, and according to what was said on the subject, it should be acknowledged that in order to develop electronic commerce as well as possible, by examining and expressing opportunities for this business in electronic cities, it is possible to develop it as well as possible and the need for electronic commerce in the city. Helped in today's society. Therefore, there is a need to conduct research to express, explain and identify the relationship between business and electronic city. In this study, while analyzing the factors influencing the development of electronic commerce and emphasizing the role of electronic cities in order to achieve this goal, a step will be taken towards the need for electronic cities.



infrastructures Electronic city

Figure (1) Conceptual model of research

Research Methods

In order to collect information of the present study, in addition to using various sources, there are various methods for this work. According to the type and purpose of the research, the most important method of data collection, namely library studies, was used to collect information in the field. Subject research has also been used from library resources, articles, required books, and the World Wide Web (Internet).

In the present study, after designing the topic, preliminary studies were conducted in this field and after selecting the research topic, in order to achieve the goals, referring to library resources was done and the necessary information was collected and collected.

electronic City

"Electronic city", "smart city" and "virtual city" are the words that invite the electronic citizen to the new world and life in modern cities. A city where you can shop online, pay your bills online, meet online, and even travel online. The electronic city takes citizens from the one dimensional world of traditional and

modern cities to the two dimensional world, which is the achievement of new information and communication technologies in the Internet world. The electronic city is a 24-hour city in which urban affairs take place around the clock. Citizens can access the information and educational, recreational, commercial, administrative, health, etc. information they need through the Internet, anytime and anywhere.

The benefits of electronic city

With the increasing development of information technology, the cities of the world have taken on a new color and smell and many cities in different countries have become electronic cities. With the increasing development of information technology, the cities of the world have taken on a new color and smell and many cities in different countries They have become electronic cities. The development of these cities has brought many achievements to citizens, urban organizations and other city stakeholders. Here are some of the most important benefits of electronic cities in the world:

1) Providing high quality and high speed internet services for citizens Creating a suitable infrastructure for connecting to the Internet and the World Wide Web

2) Providing different educational channels and lifelong learning environment Possibility of inclusive education using information technology tools and implementation of different teaching methods from anywhere and anytime for the audience.

3) Improving people's quality of life

Improving the quality of life of the people by increasing people's awareness of urban processes as well as city facilities, and facilitating urban activities and improving the economic situation of the city, which is the result of improving trade in the city.

4) Providing one-step services to citizens

Reduce all the necessary process to do a job in the city to single activities, as well as electronic them and eliminate the frequent visits to different offices and organizations to do the work

5) Strengthen the city's business competitiveness, and create more business opportunities through e-commerce

Strengthen the competitive environment of the city in the field of business, by electronic payments, receipts as well as fast awareness of traders of the potentials in the city.

6) Better communication between different urban organizations and organs

Better communication of organizations with each other electronically and facilitating correspondence through the Internet through the infrastructures created by the electronic city.

7) 24-hour access to city services

Inform the mayor and city officials as soon as possible about the existing problems and shortcomings of the city in order to expedite the discovery and elimination of defects.

8) Increase people's participation in city administration

Creating a sense of participation among citizens by giving citizens the right to express their opinion about the city as well as direct communication with the mayor.

9) Reducing city traffic due to the use of the Internet in citizens' urban activities

Reduce urban traffic by using the Internet to perform urban activities of citizens from home without the need for physical visits to organizations .

10) Reduce air pollution by reducing urban traffic

Reduce pollution caused by cars in the city by reducing traffic resulting from increased use of the Internet in urban activities.

11) Align investments with the needs of citizens and the city Use urban investments to meet the current needs of citizens and prevent additional investments in places where they are not needed.

12) Accelerate the solution of the problems created in the city through the direct communication of the mayor with the citizens Informing the officials of the city problems as soon as possible and taking action to solve them through direct communication between the citizens and the mayor and the city officials.

13) Save time and energy

Reduce the two factors of time and energy consumption to a great extent, by increasing the use of the Internet in doing electronic work.

14) Avoid investing more in the old ways of running a city

Refrain from investing more in old ways and make future investments in the city based on new infrastructure.

15) Creating the necessary infrastructure for the future development of the city No need for new infrastructure in the future development of

the city due to the existence of a suitable infrastructure that will be created by the electronic city.

16) Reduce corruption

Reduce the disturbances and disturbances that exist in administrative affairs due to doing administrative affairs electronically.

17) Increase order in city activities by using a comprehensive information system

Increase order in urban processes by precisely defining urban activities .

18) Increasing the level of public awareness

Improving the level of awareness of people about their place of residence by increasing people's awareness of the situation in the city and also the close relationship with the electronic city.

19) Fixed urban income with the establishment of a stable system of money circulation in society

Eliminate delays in payments and thus create a stable income for the city due to the creation of tax payment systems, fines and online bills.

20) Dissemination of culture and ideas

Dissemination of culture and beliefs of the city, by increasing the available tourist information such as customs and lifestyle in the city, etc. on the World Wide Web.

21) Management and supervision of the urban unit

Prevention of parallel activities, disorder and disturbances and all activities under the supervision of the unit management, due to the establishment of integrated systems in electronic municipality.

electronic commerce

Electronic commerce refers to the conduct of all business activities, including the process of buying, selling or exchanging products, services and information through computer networks and the Internet. More broadly, and

from the perspective of the concept of business, electronic commerce not only includes cases where "electronic data interchange" is used, but also older technologies such as telex and teletype. Because trade and exchange of information and transaction in any context is in the concept of trade, and the reference to electronic commerce merely refers directly to the method and context of information exchange and transaction.

Advantages of e-commerce

- Increasing business growth
- Increase sales
- Reduce overhead costs and create competition at the international level
- Quick access to information
- Absence of intermediaries
- Reducing the costs of advertising goods, especially at the international level
- Entering trans-regional markets for global marketing

Electronic-commerce infrastructure and needs

- A smooth and accurate banking system
- Customs, tax and electronic banking laws
- Product trade code
- Preparation and compilation of national information system and legal information system (copyright)
- Information security
- Fast internet access
- Confidentiality of personal information
- Compliance of national regulations with uniform international regulations
- Development of general technologies such as microelectronics, software engineering
- Existence of a legal basis for conducting electronic commerce

- Cooperation of universities, research centers and various organizations
- Acceptance of electronic documents by the judiciary (instead of the original ownership document)

- Provision of issuance and use of credit cards and electronic document transfer system by the banking network

Assessing the relationship between electronic city and electronic commerce needs

Table 1- Communication of electronic city and electronic commerce needs

Connection of fields	
Electronic commerce needs	The advantages of electronic city
<ul style="list-style-type: none"> - Existence of a legal basis for conducting electronic commerce - Product trade code - Compliance of national regulations with uniform international regulations 	<ul style="list-style-type: none"> - Strengthen the city's commercial competitiveness, and create business opportunities
<ul style="list-style-type: none"> - Cooperation of universities, research centers and various organizations 	<ul style="list-style-type: none"> - Better communication between different urban organizations and organs
<ul style="list-style-type: none"> - A smooth and accurate banking system - Providing the issuance and use of credit cards and electronic transfer system - Documents by banking network 	<ul style="list-style-type: none"> - Fixed urban income by creating a stable system of money circulation in society - Providing one-step services to citizens - Save time and energy - Improving the quality of life of people
<ul style="list-style-type: none"> - Development of general technologies such as microelectronics, software engineering 	<ul style="list-style-type: none"> - Providing different educational channels
<ul style="list-style-type: none"> - Preparation and compilation of national information system and legal information system (copyright) - Information security - Confidentiality of personal information - Acceptance of electronic documents by the judiciary (instead of the original ownership document) 	<ul style="list-style-type: none"> - Reduce corruption - Management and supervision of the urban unit
<ul style="list-style-type: none"> - Internet access 	<ul style="list-style-type: none"> - Providing high quality and high speed internet services - Reduce city traffic due to the use of the Internet - Save time and energy

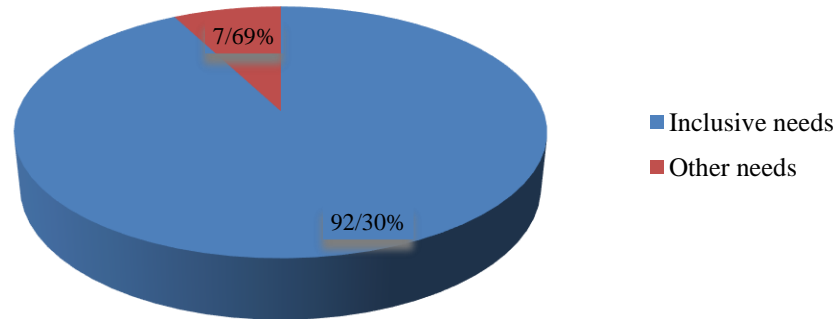


Chart 1- Assess the relationship between electronic city and electronic commerce needs

Conclusion

The electronic city that has emerged with the advancement of technology and information, can play an important role in improving people's lives, part of which is the development of electronic commerce, which as a subset of electronic city, important parts of the basic infrastructure of society. Affects.

According to the results and studies conducted in the research, electronic city provides many opportunities for the development of cities and improving the quality of life today, which can be used to develop related areas such as electronic commerce, which includes It is all business activity and provides many benefits to a country, it can be considered as part of the electronic city.

These opportunities include:

- It was the strengthening of the commercial competition of the cities that overshadowed several needs of this trade.
- Providing quality Internet services that had a direct impact on the development of electronic commerce.
- Managing and supervising the reduction of corruption, which is an effective step in the security sector of this business.

- Indirect communication between their educational departments.
- The relationship between citizen services and improving the quality of life of the people of the city with the e-commerce banking system.
- The role of electronic city in the best cooperation of various organizations and organs.

Therefore, by expressing the necessary needs and infrastructure for electronic commerce and examining these needs, we related them to the opportunities obtained from the electronic city. In this regard, we saw the relationship and the extent of direct and indirect impact of an advantage in several electronic commerce needs. Or direct communication, which includes 92% of the needs of electronic commerce with electronic city, which is a significant percentage, it can be said that electronic commerce is largely dependent on the electronic city and can cover a large part of the needs of this business, which shows It is dependent on the electronic city.

Thus, it can be stated that the electronic city has a decisive role in the development of electronic commerce infrastructure and is one of the effective factors in accelerating the

development of this vast business, which indicates the need for e-cities in today's society.

References

- [1] Ziari, K.A; Mahdian, M.A and Bahnamiri M., Electronic urban managenet: A stride towards actualizing urban sustainability an investigation into the status of electronic municipality in metropolises (the case of the municipality of the city of qom), Journal of urban economics and managenet, Volume 1 , Number 3; Page(s) 109 To 125, Summer 2013.
- [2] Kazemi Mohammadi S.M.M and Shakoi H., Assessing social sustain ability of development in qom city, Geographical research quarterly, Volume 34 , Number 43; Page(s) 27 To 4, Winter 2003.
- [3] Pauleit, S. and Friedrich, D. (2000). Assessing the environmental performance.
- [4] Hatami Nasab S.H, Taleefar R, Askarinejad M and Dehghani A; Evaluation of manager's viewpoints on e-city position (case study : yazd e-city), Journal of business administration research, Volume 3 , Number 5; Page(s)1, Spring-Summer 2011.
- [5] Ergazakis, E. et al. (2011). Digital Cities: Towards an integrated decision support methodology. Telematics and Informatics, 28(3): 148-162
- [6] HeydarAbadi Kave, 2010, *Business online* ,Tehran, Rassam Publications.
- [7] Darabpur M, Elsan M, Khoshnudi R and Darabpur M, 2018, *Principles and Principles of International Trade Law: Competition Law, Representation, e-Commerce, and Intellectual Creations (Vol. 5)*, Ganje danesh Publications.
- [8] Pouyan Academic Education and Research Portal (com.daneshgahi.www), 2009, Familiarity with e-commerce and its infrastructure.
- [9] Jalali Aliakbar, 2005, *Electronic city*, 180 pages, Iran University of Science and Technology Publications.
- [10] Proceedings of the World Conference on Electronic and Internet Cities, Kish Island, 1-3 May, 2001
- [11] Proceedings The First Conference Electronic Banking, Development and Export Bank of Iran, July, 2000
- [12] Proceedings of the first upcoming conference on Internet and e-commerce in Iran, Tehran, Sharif University of Technology, March, 2001
- [13] Turban,E. ,lee,J. ,King,D.and Chung,H.M. ,Electronic Commerce:Management Perspective,Prentice Hall,2000