

A study on the role of citizens' knowledge and its impact on the transformation of new services in the field of telecommunications services; (Case study: Iran cell Telecommunication Services)

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ABSTRACT: The aim of this study is to investigate the role of citizens' knowledge and its impact on the development of new services in the field of visual communications services, MTN Company in Tehran, Iran. The research method is descriptive - analytic study and population included 1,500 MTN employees in Tehran in 2013 and the sample is 306. Measuring instrument is questionnaire consisted of four demographic questions and 24 questions on the test of the hypothesis. Questionnaire's Cronbach's alpha coefficient obtained is 72.0. Statistical methods for testing the Kolmogorov - Smirnov test for normal distribution of data also evaluated, and also to test hypotheses, the Spearman correlation analysis was tested and structural equation model approach is used. The results show that developing of new services in citizens' knowledge causes 79 percentages change.

Keywords: civic knowledge, knowledge of citizens, development of new services in the field of communication, Iran cell.

INTRODUCTION

One of the fundamental changes in society is the emergence of Information and communications technology, ICT. Despite the many potential benefits, development and deployment of these technologies, but the technology must be employed by users. (Hamner & Al-qhtany, 2009, 137)

From the other side internationalization and globalization concern proposes a broad framework for national citizenship and wants to be developed this notion in a very broader level i.e. international scale. (Faulks, 2000).

Therefore, in this time with the progress of the need for citizenship, having the knowledge of citizenship and its associated rights awareness is compounded by one of the most important aspects of being an international citizen. For this reason, this study was to investigate the role of citizens' knowledge and its impact on the development of new services in the field of telecommunications services in Iran cell, this study will be assessed and evaluated based on the perspective of the selected population.

Definition of terms and technical words

Citizen's Knowledge (customer's knowledge):

Customers' knowledge is a kind of knowledge or information that used to analyze, interpret and ultimately causes to become to knowledge and this knowledge of customers can directly or indirectly impact on organizational performance (Roll, 2002, 268).

Development of new services in the field of communication:

Development of new services in the field of communication in Iran Cell consisted of; Measurement of citizens, Assess the knowledge of citizens in the MTN company has six components; Knowledge of government regulations,

Market knowledge, Knowledge of suppliers, Suppliers of products and services, competitors, Innovative knowledge and Ideas about new products and Services Company (Feng & Tian, 2005; Gebert, 2003),

About Iran cell studied company in this research

In line with the implementation of the Third Economic, Social and Cultural Development Plan and for the realization of Article 124 of the said plan, Ministry of Communications and Information Technology held the tender for the second operator in November 2003 with the purpose of development of communications and telecommunications through privatization and foreign investment. This was done to protect foreign investment, encourage local private sector participation, promote competition, ensure healthy competition, minimize government involvement, monitoring the tariffs and services quality and protect the consumers.

Iran cell Strategic Objectives:

- Become a leader in technology and customer centricity
- Overall development of the stable and advanced infrastructures based on the state-of-the-art mobile network technologies across the country.
- Development of the high speed wireless communication platform based on the modern WiMAX technology in Iran
- Provision of the best quality products and services
- Provision of the high quality services with the most cost effective prices and decentralization of service provision
- Continuous, targeted and genuine upgrade of the network
- Network capacity increase, development and update
- Moving towards becoming a leading and innovative operator in the region
- Maximum use of the local content and playing an reproductive role in overall growth of science and technology in Iran
- Developing appropriate infrastructures needed for the deployment of the mobile data services
- Creating service management platform for the customers
- Strengthening the human resources though updating their knowledge for the provision of quality services based on the technological advancements in the world. (Iran Cell, Administration Portal)

Research Variables

Description of the variables:

Independent variable;

variable that effects on the dependent variable positively or negatively.

In this research, the citizens' knowledge is independent variable.

Dependent variable:

aims to describe or predict the variability of that.

The dependent variable of this study is, development of new services in the field of telecommunications services.

Constituent elements of transformation in the field of telecommunications services follows as the followings;

- Separation of service and raising MTN products to commercial customers and citizens,
- Create a dedicated mobile network services,
- Create a secure mobile network services,
- Creation Services return package to citizenry
- Creation of SIM,
- Create a permanent plans and prepaid services (Davenport & Grover, 2001; Day, 2000),

Research Hypothesis

We have studies six main hypothesis come as follow;

1. Citizens' knowledge cause new transformations in service providing and increasing company's production in Iran cell.
2. Citizens' knowledge cause business services in Iran cell.
3. Citizens' knowledge cause business services in mobile in Iran cell.
4. Citizens' knowledge cause new service packages in Iran cell.
5. Citizens' knowledge cause message SIM cards in Iran cell.

6. Citizens' knowledge cause Credit and Permanent services in Iran cell.

MATERIALS AND METHODS

This project has been done by questionnaire with high reliability and validity among 306 sample (Male and Female) in Iranian MTN Iran Cell from the population of 1500 staff. And studied the role of citizens' knowledge and its impact on the transformation of new services in the field of telecommunications services and other hypothesis will be discussed as well.

- Measurement of citizens
- Assess the knowledge of citizens in the MTN company has six components;
- Knowledge of government regulations,
- Market knowledge,
- Knowledge of suppliers,
- Suppliers of products and services, competitors,
- Innovative knowledge and
- Ideas about new products and Services Company (Daniel, 2005; Davenport, 2001),

The questionnaire has 28 questions and 23 questions of those questionnaire are related to measuring service transformation.

Numbering research questions to analyze the total amount of the score of the questionnaire has been numbered in five as following:

Totally disagree = 1, disagree = 2, somewhat = 3, agree = 4, agree = 5

Data Analysis

To assess normal distribution, Descriptive statistics was applied. But the data was not normal and does not have normal distribution then the non-descriptive statistic has been used. To determine the relationship between citizens' knowledge and service transformation, Kolmogorov –Smirnov Test was used and for checking the hypothesis' significance Chi –Square have been used. And the number of participants were 306 staff in Iranian MTN Iran Cell in Iran.

RESULTS AND DISCUSSION

Results

Below tables shows the results of data analysis for the instrument – citizens' knowledge and service transformation questionnaire which is used in the study.

Table 1. Descriptive statistics for sex status

Marital Status	Profusion	Percentage
Women	106	35.3
Man	194	64.7
Total	300	100

In order to evaluate the study of sex status table 1 shows that 35.3 % of participants are women and 64.7 are man (see Table 1).

Table 2. Descriptive statistics for employees' Education

Education	Profusion	Percentage
Diploma	79	26.3
Bachelor of Arts	152	50.7
Master or higher	69	23.0
Total	300	100

To evaluate the education of participants, descriptive statistics shows that most of participants have Bachelor of Arts degree (see Table 2).

Table 3. Descriptive statistics for employees' Experiences of work

Experiences	Profusion	Percentage
1-5 years	50	16.7
5-10 years	208	69.3
Above 10 years	42	14.0
Total	286	100

To evaluate the experience of participants descriptive statistics shows that most of participants have 5-10 years experiences and the second rank is for 1-5 years. (See Table 3).

Table 4. Descriptive statistics for participants' Years of old

Years of old	Profusion	Percentage
under 30 years	131	43.7
30-40 years	147	49
Above 40 years	22	7.3
Total	286	100

To evaluate the years of old descriptive statistics shows that there is somehow normal distribution in this factor and as Table 4 shows this but less participants are above 40 years.

Table 5. Moral Intelligence Chi –Square test on CSR for analyzing hypothesis

Path From Variable	To Variable	significant number (t-value)	Compared with 0.05 With a confidence level of 1.96	Path coefficient (β)
Citizens' Knowledge	Service transformation	5.002	Greater than 1.96	0.790
Citizens' Knowledge	Knowledge related to environment	5.463	Greater than 1.96	0.353
Citizens' Knowledge	Knowledge related to company	5.459	Greater than 1.96	0.065
Knowledge related to environment	State laws	3	Greater than 1.96	0.320
Knowledge related to environment	Market	4.342	Greater than 1.96	0.380
Knowledge related to environment	suppliers	3.253	Greater than 1.96	0.232
Knowledge related to environment	Products and Services Competitors	4.760	Greater than 1.96	0.473
Knowledge related to company	Knowledge and creative ideas	3	Greater than 1.96	0.342
Knowledge related to company	Knowledge of the company	4.822	Greater than 1.96	0.484
Service transformation	Permanent plans and prepaid services	3	Greater than 1.96	0.381
Service transformation	SIM Services	4.390	Greater than 1.96	0.467
Service transformation	Services for residents returning package	4.145	Greater than 1.96	0.412
Service transformation	Business services, secure mobile network	3.102	Greater than 1.96	0.258
Service transformation	Mobile VPN services	3.306	Greater than 1.96	0.282
Service transformation	Services and enhanced products	4.786	Greater than 1.96	0.490

Level of knowledge varies significantly between citizens' knowledge and the development of new services is 5.002 which is greater than 1.96 and represents the relationship between citizens' knowledge and development of new services is significant in the level of 95 % confidence.

The path coefficient between these two variables is 79.0 and the amount of variable effects on citizens' knowledge variable indicates the development of new services. In other words, path coefficient is 0.790 among the citizens knowledge of new services in the field of telecommunications services in Iran cell.

Discussion and Implications

The result of the hypothesis test showed that with 95% confidence we can judge that between citizens' knowledge and the development of new communication Services Company MTN there is a direct and significant.

The results of the study is in the same path of the study of Sua (2006), Sua and his colleagues, used customer knowledge in new product development and concluded that benefits and consequences of customer knowledge is useful for both the customer and the organization (Bullinger, 2003; Drucker, 1993).

Also the result of this study is approved by the study of Bose & Sugumaran (2003) they concluded that the use of customers' knowledge in determining features and prices of products and services is much important (Al-Shammari, Minwir, 2009).

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