

Review and assessment of information security management perspective in business, service and manufacturing organizations in east Azerbaijan province

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ABSTRACT: The final goal of this study is review and assessment of information security management perspective in business organizations, service and manufacturing in east Azerbaijan province. The population is east Azerbaijan staff as a community of 385 people is considered. The validity and reliability of the questionnaire was examined them with the community. To analyze the data obtained from the questionnaires collected from descriptive and inferential statistical methods were used. Thus, for classification, summarization and interpretation of statistical data, descriptive statistical methods and assumptions were used to test the analytical level. And the result shows review and assessment of information security management perspective in business organizations, service and manufacturing in east Azerbaijan province.

Keywords: information security - Service organizations- manufacturing organization- business organization east Azerbaijan.

INTRODUCTION

Information security (ISec) describes activities that relate to the protection of information and information infrastructure assets against the risks of loss, misuse, disclosure or damage. Information security management (ISM) describes controls that an organization needs to implement to ensure that it is sensibly managing these risks.

The risks to these assets can be calculated by analysis of the following issues:

Threats to your assets. These are unwanted events that could cause the deliberate or accidental loss, damage or misuse of the assets

Vulnerabilities. How susceptible your assets are to attack Impact. The magnitude of the potential loss or the seriousness of the event.

Standards that are available to assist organizations implement the appropriate programmers and controls to mitigate these risks are for example BS7799/ISO 17799, Information Technology Infrastructure Library and COBIT (Wikipedia, 2015).

Definition of terms and Methodology

In a field study to collect the data and the library will be used. Data collection for this study the standard questionnaire that collected by the doctor Moqimi at Tehran University and its main source of Lee's "Information Security Management's effect on culture and Policy", Information Management and computer security, Vol.14, No.1, 2006, which is variable according to the operational definition of research on the theory of experts have defined.

Research Variable

Variable;

information security management

Information Security Questionnaire the questionnaire is a standard tool for measuring an organization's information security in the form of a five-point Likert format was provided has been prepared. The purpose of this questionnaire is to examine the role of information security management and organizational culture. In organizations. This instrument has 16 items and each item from totally agree to totally disagree, scaled For items valued the option value of 1 is completely disagree, disagree value option 2, option 3 the idea, choice of 4 options: Agree completely agree order value is 5. (Jorma, 2002)

Scoring and interpretation of the results of research tools:

For each option 5 strongly agree, agree, 4, neither agree nor disagree 3 Disagree 2 Disagree 1 rated and fully considered the question of calculating the sum of points is calculated.

- 80- 55 shows that organizational culture and management practices in support of the organization's information security.

- 55- 30 shows that organizational culture and management of information security organization partly supported (Bagchi, 2003)

- Below 30 indicates that organizational culture and management measures for the protection of information security is not. (Bento, 2004)

Research Hypothesis

Hypothesis 1

There are differences between male managers and manager of information security in the organization of the province,

Hypothesis 2

There are approach to information security managers with different educational organizations in East Azerbaijan province.

Hypothesis 3

The approach to information security managers of various organizations in East Azerbaijan province, is different.

MATERIALS AND METHODS

This project has been done by questionnaire with high reliability and validity among 385 sample (Male and Female) in different corporations in East Azerbaijan.

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 two variables. Kolmogorov –Smirnov Test was used and for checking the hypothesis' significance Chi –Square have been used. And the number of participants were 180 staff.

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	294	76
Man	91	24
Total	385	100

In order to evaluate the study of sex status table 1 shows that 76 % of participants are women and 24% are man (see Table 1).

Table 2. Descriptive statistics for employees' Education

Education	Profusion	Percentage
Diploma	97	25
Bachelor of Arts	195	51
Master or higher	93	24
Total	385	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	2	1
5-10 years	7	4
Above 10 years	171	95
Total	180	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' Kind of Organization

Years of old	Profusion	Percentage
Business	132	35
manufacturing	120	32
service	133	33
Total	385	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 in manufacturing.

Table 5. Intangible structure coefficient
T test on organizational development for analyzing hypothesis

Path		significant number	coefficient T
From Variable	To Variable		
Information Security	Managers' view	0.000	4.2
Information Security	Managers' Attitude among men and women	0.000	0.049
Information Security	Managers' Attitude among different type of organizations	0.050	0.08

Level of Information Security varies significantly between the second variables and the numbers vary from 4.2 to 0.049 and 0.08 and represents the relationship between Information Security among different types of organizations are significant in the level of 95 % confidence.

The path coefficient between these two variables is 4.2, 0.049 and 0.08 and the amount of variable effects on invisible structure variable indicates the development of organizational development. In other words, significant number are 0.000, and 0.050.

Discussion and Implications

The result of the hypothesis test showed that with 95% confidence we can judge that between information security in different organizations there is a direct and significant.

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