

Effective Determinations on Organization Agility Practices: Analytical Study on Information Technology organization in Jordan

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Abstract

Purpose – The purpose of the study is to examine the Effective Determinations on Organization Agility Practices, Analytical study on information technology organization in Jordan. **Design/Methodology/approach:** The questionnaire was developed and distributed to the higher managerial employees and the middle managerial employees). The researchers used the simple regression analysis to measure the impact of organization agility on Organizational Performance. **Findings:** The present study of the relationship between organization agility and organizational performance had a positive effect.

Keywords: Organization, Agility, IT, Practices, Jordan.

Introduction

Organizations work in a dynamic environment, where the competition is raising high, customers changing their preferences rapidly, the globalization, and technology development which enforce organizations to adopt the concept of organization agility to generate positive organization performance.

Organization agility applied through many factors starting with people, information technology, and innovation where they will affect organization performance, operation wise and financial wise driven by projects are characterized by a highly interactive internal process. (De Waal, 2007). The study focused on information technology companies in Jordan, where they are generally considered an enabler of organization agility, organization agility is a firm's ability to cope with rapid, relentless, and uncertain changes and thrive in a competitive environment of continually and predictably changing opportunities. (Dove, 2001).

Information Technology companies capabilities to adopt agility is more than other companies, where firms ability to acquire, deploy, combine, and reconfigure IT resources in support and enhancement of business strategies and work process to gain positive outcome. (Sambamurthy & Zmud,1997). The local and foreign investments in Information Technology sector in Jordan reach 2 billion JD, and the revenue of this sector reach 450 million JD in 2013, where 49% of revenue came from foreign investment through exported to more the 30 countries.(INTAJ,2013). Information Technology of Environment business at the moment is a complex and dynamic high therefore became necessary to take into account the need for the organization

to human capital agile coach and is able to achieve the goal at the best possible picture and enjoy gracefully high operating on the progress of the organization towards growth and development faster and investigator to target larger leading Organizational performance improvement through the use of the organization of financial and human resources optimally , leading to achieve the greatest possible return to the organization, leading to improve the performance of the organization.

The past performance Organizational help reveal the extent of the organization's ability to cope with environmental determinants and degree of appropriate measures the strategic objectives of the organization, resources and organizations today tend to possess a strategic vision for change to enable them to achieve organizational performance , and suggesting it is a substantial increase in the resources allocated to research and development and investment in human resource especially if they are fast , flexible and responsive to change and uncertainty and also characterized with high quality products and these elements of organizational agility , which works to increase performance Organizational effectively.

The research has been to highlight the organizational agility show the impact of agility in manufacturing and agility in dealing with the market and agility in dealing with manpower and Fitness in technology in promoting Organizational performance , whether financial or non-financial .

Theoretical Framework

Organizational Agility

Organization agility is an important concept where start with quick response to change and uncertainty in environment, where organizations must to act to overcome obstacles or gain and win an opportunities. In our study we did focused on three dimensions: Hr, information technology, and innovation.

Human Resource agility: which is consist of the ability and flexibility of people have key role in agile organization which faces to permanent circumstances change.

Information technology agility: A benefit of agile system is having high information capacity. In addition to exchange information among cooperated organizations shows necessary of secure their key information system, relationship and inflexibility which secure information and IT developed more than other technologies and industries and its different types is used expand with new technology.

Innovation agility: its more effective that organization provides the solution to customers than just sales the product and solve organization an creative way through new process.(Saeed et al., 2013).

Organization Performance

The organizational performance was discussed in many researches , because of the importance of performance in developing organizations, The definition of organization performance started as an instrument and measurement that used to evaluate and assess the successfulness of organizations to create and deliver value to their external and internal stakeholders.(Antony & Bhattachatyya,2010), where Moullin,2007 defined organizational performance as a measure used by organizations to manage well their effectiveness, and deliver value to stakeholders and customers. The main goal of the research is to find the influences generated by organization agility on organizational performance.

1- **Financial performance:** By eliminating the pollution, and to reuse waste materials.(Hart,1997; Taylor,1992). Green management can generate many opportunities to cut costs and in the end increase profit. There are three opportunities to increase revenues (better access to certain market; differentiating product; and selling pollution-control technology). (Ambec & Lanoie, 2008).

2- Operational performance: Operational performance relates to the manufacturing plants capabilities to more Efficiently produce and deliver products to customers, where it consists of (increase in the amount of goods delivered on time, decrease in inventory levels, decrease in scrape rate, increase in product quality and line, and improved capacity utilization). (Zhu- et al.,2008).

Study Model

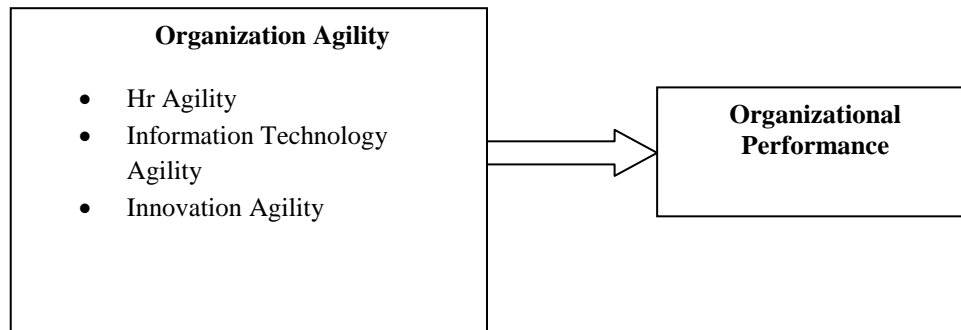


Figure (1) Research Model

Hypothesis

H.o.1: there is no significant impact of overall organizational agility on organizational performance. Which is consist of three sub – hypothesis:

H.o.1.1: there is no significant impact of Human Resource agility on organizational performance.

H.o.1.2: there is no significant impact of Information technology agility on organizational performance

H.o.1.3: there is no significant impact of Innovation agility on organizational performance

Methodology

Study Population: The population of the study is consist of 200 companies where they are registered in the information and communication association of Jordan in 2014. The companies has employees around 80 thousand. (INTAJ,2014).

Sample of the Study: The research was ably on large companies where it represented (12) companies which it consist of more than (250) employees according to Jordanian ministry of Industry and Commerce.

Unit Sample: The study relies on determining the sample of all the employees in top management and middle management levels in 12 companies. Where the research applied the stratified Random Sampling, where the questionnaire was distributed in the companies location. The returned questionnaire was (176) responses, (161) questionnaire were accepted.

Study Instruments: The study rely on gathering the data by using the questionnaire and the previous literature studies was addressing each of the variables tested, it contains of three domains, the first is about demographic and characteristics of responding questions (gender, age, education, company name, Position, and number of years in company) about the study population, the second is about Organization Agility which includes three sub domains and was covered by (18) questions: Human Resources Agility (6) questions, Information Technology Agility (6) questions, Innovation Agility (6), the third about Organizational Performance which included of two sub domains and was answered by 10 Q: financial Performance (5) Q, Operational Performance(5) Q .

Study Validity: Face Validity for the questionnaire was obtained from four members of the Business Administration department from Jordanian University and some of the questions were modified or deleted, content validity by using factor analysis where the factor loading for the study items were high, discriminate Validity where the measure have low correlation with the variable.

Study Reliability: The study consistency percentage was (86%); and to double check for results computed Cronbach's alpha was used and the value was (0.871).

Measurements Tools interval scale was used in the questionnaire and measuring the study variables which is organized as strongly disagree to strongly agree and which takes the weight of (1-5), and the researcher used the nominal and ordinal scale.

Statistical Analysis: The researchers used the following analysis tools :

A) The tools for describing the study variables

- *Frequency*
- *Percentages*
- *Mean*
- *Standard Deviation*

B) Hypothesis testing

- *Simple Regression*
- *Stepwise Regression*
- *F -Test*
- *T -Test*

Study Results

Table (1) Characteristics of the study sample

| | | | |
|----------------------------------|-------|-------------------|--------|
| Gender | | Position | |
| Male | 66.1% | Top management | 38% |
| Female | 33.9% | Middle Management | 62% |
| Age | | Education | |
| 25 or less | 11.8% | Diploma | 56.3 % |
| 25 -35 | 39.4% | Bachelor | 38.9% |
| 36 - 46 | 27.5% | Graduate | 4.8% |
| 47- 57 | 15.5% | | |
| More than 58 | 5.8 | | |
| No. of respondents: (161) | | | |

Description of Study Variables

Table (2) Means and Standard Deviations

| Item | Mean | Std. Deviation | Degree of Agreement |
|--------------------------------|------|------------------------------|---------------------|
| Organizational Agility | 4.3 | 0.4414 | High |
| Human Resource Agility | 3.9 | 0.9741 | High |
| Information Technology Agility | 3.7 | 0.6425 | High |
| Innovation Agility | 3.4 | 0.5423 | Moderate |
| Organizational Performance | 3.8 | 0.4421 | High |
| High: 3.67 – 5.00 | | Moderate: 2.33 – 3.66 | |
| | | Low: 1.00 – 2.32 | |

Table (2) consist of the means of the organization agility diminutions were from (3.4) to (3.9)., and organizational performance were (3.8) .

Testing the Study Hypothesis

Testing the main hypothesis:

H.o.1: there is no significant impact of overall organizational agility on organizational performance.

To test this hypotheses the researcher performs simple regression, the results show that the coefficient of determination (R^2); which represents the percentage of the explained differences in the organizational performance due to the organizational agility dimensions is not less than ($R^2 = .421$) which is an acceptable result indicating that(42.1%) from the total differences in the organizational performance are highlighted by the dimensions of the organizational agility, the remaining percentage (%57.9) represents the percentage of the excluded variables which were excluded from the study model. In addition, the strength of the relation between the overall organizational agility and organizational performance is ($R= 0.561$), the value of the computed ($F= 19.128$) at freedom degrees of (2-159) and significance level (0,001) and that indicates that the regression curve is good in explaining the relation between the organizational agility and organizational performance.

Table (3) The Impact of overall organization agility on organizational performance

| | β | T | Sig |
|----------------------|---------|-------|-------|
| Organization agility | 0.561 | 0.727 | 0.01* |

($R = 0.561$; $R^2 = 0.421$; $F = 19.128$); * significant level at $P \leq 0.05$

To test the sub- hypothesis by using stepwise regression, table (4) show the results between the dimensions of the organization agility (HR agility, IT agility, and Innovation agility) and organizational performance; it's important to find out whether the dimensions of organizational agility affect on organizational performance; so the percentage important of the organizational agility dimensions in the regression curve model indicates and with following the partial regression coefficient (Beta) for each dimension, table (4) shows that the most important affecting dimensions are: HR Agility ($\beta = 0.371$), and Information technology agility ($\beta = 0.223$), where there was not any effect for the Innovation Agility on the organizational performance.

Table (4) The Impact of organization agility dimensions on organizational performance

| | β | T | Sig |
|--------------------------------|---------|--------|--------|
| HR agility | .371 | 0.9421 | 0.000* |
| Information Technology agility | 0.223 | 0.8109 | 0.002* |
| Innovation Agility | 0.112 | .7201 | 0.000 |

($R = 0.451$; $R^2 = 0.391$; $F = 21.167$); * significant level at $P \leq 0.05$

Results Discussion

Based on the study results there is a strong relationship between organization agility and organizational performance, the organizational agility is a very important tool for the companies especially in the situation where there is uncertainty environment, Where companies must adopt the flexibility, proactive, and speed in the dimensions of Hr, IT, and Innovation to survive and to create competitive advantage.

Also the study results show that the sub domains were all ranked high, except innovation domain. The HR agility domain got the highest rank, then at the second rank, the domain of Information technology.

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References

- Antony, J.P. & Bhattacharyya, S. (2010) "Measuring organizational performance and organizational excellence of SMEs-parts: an empirical study on SMEs in India, *Measuring business excellence*, 14(3), 42-52. <http://dx.doi.org/1108/13683041074209>.
- Moullin, M. (2007) "performance measurement definitions :linking performance measurement and organizational excellence. *International journal of health care quality assurance*, 20(3), 81-3. <http://dx.doi.org/10.1108/095268071743327>.
- Harts, S. (1997) "Beyond greening :strategies for a sustainable world", *Harvard business review*, vol.75 no.1, pp.66-67.
- Taylor, S. (1992). "Green Management : the next competitive weapon", *future*, September, pp.669-80.
- Zhu, Q., Sqrkis, J. and Lai, k. (2008), "Confirmation of a measurement model for green supply chain management practices implementation", *International journal of production economics*, vol.111 no.2, pp.261-73.
- Ambec, S. and Lanoie, P. (2008) "Does it pay to be green? Systematic overview", *Academy of management perspective*, vol.22 no.4, pp.45-62.
- De Waal, A. (2007). "The characteristics of high performance organization", *Business strategy series*, Vol.8 No.3, PP.179-85.
- Dove, R. (2001). "Response Ability: The Language, Structure, and culture of the Agile Enterprise, New York: John Wiley & Sons.
- Sambamurthy, V., and Zmud, R. w. (1997). "At the heart of Success: Organization-Wide Management Competences, in steps to the future :Fresh thing on the Management of IT-Based organizational transformation, C.sauer and P. Yetton, San- Francisco, CA: Jossey-Bass Publishers, PP.143-164.
- Saeed, Abesi; Abolhasan, Faghihi; Faheri, Feizi; Mahdi, Mohammad; Norooz, Ali, (2013) "Designing and Explanation of a model Agility organization" *Australian Journal of business and Applied Science* Vol .7(4) pp-328-332.
- Information and Communication Report(2014). Information and Communication Association of Jordan, Available @ www.INTAJ.NET, 20/12/2014, Time 10:00 AM.