



## STUDY OF RELATIONSHIP BETWEEN STRATEGIC THINKING AND INNOVATION AMONG MANAGERS IN THE INDUSTRIAL SECTOR IN THE REPUBLIC OF YEMEN

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### **Abstract**

The study aimed to study the relationship between strategic thinking and innovation in the industrial sector in the Republic of Yemen through managers working in senior and middle management, , Which includes the functions of general managers, department managers, department heads and supervisors of large industrial companies. The researchers used the analytical descriptive method. The main tool of the study was in a structured questionnaire that included closed questions for the purpose of this study. The questionnaire was distributed to a representative sample of the study's community. The questionnaires were distributed to 150 target managers. 125 managers responded with 83.3% response to measure their innovative thinking and strategic thinking. . The results of the study indicate a good positive response in the general rate of measuring the trend towards innovative thinking and strategic thinking among the sample members, This shows that the industrial sector is an incubator suitable for innovation, creativity and strategic thinking that can be invested to promote innovation, the study also concluded that there is a strong relationship between strategic thinking and innovative thinking among managers in the industrial sector. Through this paper, the researchers recommend that industrial organizations invest the incubating environment for innovation and enhance the capabilities of their employees, and taking advantage of experienced capabilities. The researchers also recommend that the organizations conduct a systematic analysis to determine their needs of the required expertise, and that the organizations follow creative strategies to develop the innovation skills of managers and develop rules and procedures to improve the creative environment and to organize effectively for creativity. And finally to develop the organizational structure of industrial organizations so as to be conducive to innovation appropriately.

**Keywords:** *Strategic Planning, Strategic Thanking, Innovation, Human Resource.*

### **Introduction**

Innovative and strategic thinking is one of the basic requirements of contemporary management, As it is no longer sufficient to perform the works in organizations of all kinds in traditional ways, Because the continuation of those methods may lead to the failure of organizations, In order to ensure the survival of the Organization and its continuation, it must not stand at the level of efficiency, in the sense that its do things correctly, But innovative and strategic thinking must be the hallmark of its performance. Especially after the organizations have lived constant challenges and threats imposed on them to work with new mechanisms, and adopt strategic approaches to anticipate crises, and prepare to confront them before they occur, and the activities of these organizations became proactive rather than therapeutic, and strategic thinking was among those approaches.

Human societies, especially developing ones, need to invest their human energies well, and the ability to think creatively and strategically is the ability that lies behind every progress and investment, Today's creativity is the greatest hope for the human element in solving many of the problems it faces, The future of nations depends not only on their labor force, but on the provision of an excellent type of workers, that is, on creative individuals.

### **Problem of the Study**

The industrial sector suffers from very large problems resulting from to the global variables, which include globalization, the information revolution, and the intensification of global competition, which makes innovative and strategic thinking important to study the ability of companies to achieve the necessary competition and the ability to continue especially in the third world countries, , So this study was to find out the extent of application of innovative and strategic thinking among managers of the upper and middle management category in the industrial organizations in the Republic of Yemen.

### **The Importance of Studying**

The importance of the study is to discuss one of the modern topics, which plays an important role in achieving a qualitative transition of the organizations, Therefore, the study is a scientific addition to the stock of knowledge, which will benefit researchers and scholars and interested in this area, There is also a practical importance in the discovery of the practices of organizations to think strategic and innovative and make appropriate recommendations to address the shortcomings in practice.



### Objectives of the Study

1. To know the relationship between innovative thinking and strategic thinking.
2. To measuring the relationship between individual variables and innovative thinking and strategic thinking.

### Hypotheses

- There is a statistically significant relationship between innovative thinking and strategic thinking among managers of large industrial organizations in the Republic of Yemen.
- There are statistically significant differences between demographic factors (gender, age, qualification) and the extent to which innovative thinking is applied in large industrial organizations in the Republic of Yemen.
- There are significant differences between (years of experience) and the extent of the application of strategic thinking in the large industrial organizations in the Republic of Yemen.

### The Limits of the Study

1. Spatial limits: large industrial organizations in the Republic of Yemen.
2. Time limits: during the month of March - May of 2017.

### Study Definitions

#### Innovative Thinking

According to Solso (1988), thinking is: (cognitive processes and responses to new information after complex treatments including visualization, reasoning, judgment, and problem solving).

#### Definition of Innovation

Innovation in organizations is defined as "the introduction of a new product in the form of a good, service or innovation in the process of production or distribution of this product or service." This definition implies that it included the various activities of the Organization and stipulated the provision of new products. New production, open up new markets, develop new resources, and create new organizational forms in the industry.

#### The Difference between Creativity and Innovation

Garand and Carrier pointed out the difference between innovation and creativity that "creativity is about exploring a good idea, innovation is about putting it into practice in the form of a process, a commodity, or a service that the organization provides to its customers. If creativity is about people, innovation is about the organization And its productive and marketing activity. "In this sense, it can be said that creativity precedes innovation. (Garand and Carrier, 1996:3), The creativity according to (Daft) is "the adoption by the Organization of a new idea or new behavior in terms of industry, market and public environment", but Innovation is "the first or early use of an idea by one of the organizations belonging to a group of organizations with similar goals", The clearest definition of innovation is that "Innovation is the practical application of creative ideas, And creativity is a talent with a set of skills acquired and used by solving daily problems »(Daft, 625: 2001).

#### Strategic Thinking

Strategic thinking According to Mintzberg. , is a synthesizing process, utilizing intuition and creativity, whose outcome is "an integrated perspective of the enterprise." Rather than occurring hand-in-hand, traditional planning processes tend to drive out strategic thinking, Mintzberg argues, and as a result, impair rather than support successful organizational adaptation. also, according to C. K. Prahalad and Gary Hame "strategic thinking", an intellectual exercise in exploring what is likely to happen . . . strategic thinking is using analogies and qualitative similarities to develop creative new ideas." Liedtka (1998).

#### Literature Review

**Scott and Bruce (1994)** studied "Determinants of Innovative Behavior: A Path Model of Individual Innovation in the Workplace" , The study aimed at revealing the creative behavior of workers in a central unit of one of the industrial establishments in the United States. The most important results of this study: The degree of creative behavior in the sample of the study is high, and that the quality of the relationship between supervisor and subordinate affect creative behavior, , That leadership and support for creativity, management expectations for the role, career stage and systemic approach to problem-solving are all clearly and creatively linked to creative behavior. Supporting superiors to subordinates and giving them confidence and discretion makes them feel that the institution is supportive of creativity. Also, individuals who provide systematic solutions to problems High of creative behavior, it is not necessary to have an innate capacity for it.

The study recommended the following:

- Participation of subordinates in the decision-making process, especially those related to their work and the development of a spirit of understanding between presidents and subordinates.
- Working to support workers in industrial units and give them confidence and freedom to act.
- Work on developing the capabilities and creative skills of employees in the industrial units through targeted training programs.



**Graetz (2002) This study is entitled** “Strategic thinking versus strategic planning: towards understanding the complementaries”. Management Decision”, The aim of this study was to identify the elements and processes required to develop strategic thinking skills among employees in the telecommunications company, The sample consisted of 46 randomly selected workers who participated in two workshops on strategic thinking, One of the two workshops evaluated the readiness for strategic / creative thinking using the lifetime assessment test. While the second workshop was used on the planning process. A follow-up session was held two weeks after the last workshop, The study concluded that strategic thinking skills can be developed among employees.

### Methodology

The descriptive analytical approach was used in the study, and it is considered the most appropriate approach to this study. to examined the relationship between creative thinking and creative thinking among managers in the industrial sector in the Republic of Yemen and its relationship with some demographic variables.

### The Study Population

The study population consists of the largest industrial organizations in the Republic of Yemen, which number 140 companies, , 25 organizations were targeted, Total managers in these companies 200 managers.

### The Sample

A total of 150 questionnaires were distributed, and 125 valid questionnaires were obtained, representing 83.3% of the total questionnaires, It is a representative sample of the study population.

### Collection of Data

Primary Data and Secondary Data both were used in this research, Reviews of Literature and reports were used for understanding and exploring the problem under investigation.

Primary Data has been collected through questionnaire.

A structured questionnaire with closed questions suitable for the purpose of this study was used. The questionnaire consists of three parts:

- The first part covers social demographic information.
- The second part consists of a set of questions designed to measure innovative thinking.
- The third part consists of a set of questions aimed at measuring strategic thinking. **Measurement Estimation:** The five-degree Likert measurement was used. The sample members were given five options to answer each question and they had to choose one answer to the question.

The measurement estimation grades are distributed as follows:

The answer Degree	Strongly 1	agree 2	have no 3	disagree 4	Strongly 5
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### Data Entry and Analysis

Data was entered and analyzed in the computer using the SPSS program, used many statistical tests such as duplicates, averages, t-test and ANOVA and Correlation.

### Data Analysis

The results of the survey will be presented here, the results of the statistical analysis will be presented according to the statistical process. To interpret the results we will adopt a specific measure as follows: 50 <Very weak, 50-60 weak, 65-75 good, 75-85 very good, 85 and above are excellent.

The sample response averages for the topics of study (innovation and strategic thinking) among managers in industrial organizations in Yemen:

The study axes	Mean Average	Standard Deviation
The organization's orientation towards innovation	76.4	12.9
Developing innovation capabilities	73.7	9.7
Developing an innovation culture in the org.	69.9	13.0
Learning management to develop new ideas	69.4	14.4
Effective organization for creativity	53.7	16.6
Making wise decisions	66.4	14.0
Innovation	68.7	9.2
Analysis of the work environment	49.9	13.3
Systems and rules	66.5	18.2



Focus and affiliation	73.2	17.0
Thinking at suitable time and in a suitable method	80.3	12.7
Strategic thinking based on assumptions	70.9	14.1
Dealing with opportunities intelligently	81.1	12.0
Strategic thinking	68.5	11.2
Innovation and strategic thinking	68.7	9.2

The above table indicates that the overall response rate of the sample to innovation, thinking and strategy was  $68.7 \pm 9.2$ . This indicates a good response to all axis of the questionnaire in aggregate. As for innovation, the sample response rate was 68.7, , Which also reflects a positive response towards measuring innovation among the sample respondents. At the same time, the sample response rate to strategic thinking was 68.5, This reflects a positive response also by respondents towards strategic thinking.

### Results of Statistical Analysis

The results of the statistical analysis of the study variables are presented here. We used some statistical analyses such as t-test as well as ANOVA and Correlation to explore the differences between the response rates between the study variables.

**Sex:** To find the differences in the sex response rates, we used the t-test, which showed slight differences between the sample response rate for creative and strategic thinking by sex. These differences were not statistically significant ( $p = 0.994$ ), indicating that there are no differences between male and female managers In the working conditions or laws applicable to them.

**Age Group:** The study indicates that age group managers under 35 years of age are more responsive to innovative thinking and strategic thinking. This age group belongs to the youth group, which is the most receptive to the culture of innovation and change, which continuously seeks to develop self and try to plan for the future. The differences are not statistically significant ( $p = 0.628$ ). Industrial organizations should therefore increase their interest in developing the competencies of these managers.

**Educational Level:** The study found that there were very small differences of statistical significance in innovative and strategic thinking by educational level ( $p = 0.149$ ).

**Years of Experience:** The study concluded that the years of experience did not have a statistically significant effect on the differences in the creative and innovative thinking of the sample ( $p = 0.892$ ).

### Relationship of Innovative Thinking and Strategic Thinking

In order to study the relationship between strategic thinking and innovative thinking among managers in industrial organizations, we conducted a correlation test between the axis of innovative thinking and strategic thinking. The result showed that there is a strong relationship between the strategic thinking and creative thinking of managers in industrial organizations.

### Conclusion

The results of the study indicate a good positive response in the general rate of measurement of the trend towards innovative thinking and strategic thinking among sample members working in the industrial sector in the Republic of Yemen. This proves that the industrial sector is an incubator suitable for innovation, creativity and strategic thinking that can be invested and promoted for development and innovation. The study concluded that there is a strong relationship between strategic thinking and innovative thinking among managers in the industrial sector.

### Recommendations

- The industrial organizations should invest the incubating environment for creativity and enhance the capabilities of their employees, especially youth groups, and benefit from the abilities of those with experience.
- Organizations should conduct systematic analysis to identify their needs for the required expertise. Organizations should follow innovative strategies to develop managers' innovative skills and develop rules and procedures to improve the creative environment and to effectively organize for innovation.
- To develop the organizational structure of industrial organizations so that they are conducive to appropriate innovation.



### **Study Limitations**

1. Lack of references, especially on strategic thinking, and many references focus on creative thinking as innovative thinking.
2. The war in most areas of Yemen and the closure of many industrial organizations.
3. 3Managers' preoccupation makes communication with them difficult and weakens their response to the study.

### **References**

1. Carrier,C., & Garand, D.J (1996).: The concept of innovation: debates and ambiguities in 5th International Conférence on Strategic Management, Lille: France.
2. Cottam, A., Ensor, J., & Band C.(2001). "A benchmark study of strategic commitment to innovation", European Journal of Innovation Management, Vol. 4 Iss: 2, pp.88 – 94
3. Daft, R.(2001). organizational Behavior, Harcourt college Publishers, Inc, 2001,P 625.
4. Dangayach G.S., pathak v. & dasharma, A. (2005), « Managing Innovation ». cacci Journal , vol (01), P: 03.
5. Dardess,M.,B.,& Machan,R.,K., (2003), tracking innovation report staff , north Carolina board of science and technology,htt://www.ncsciencandtechnology.com, P: 01.
6. Davil,T., Epstein M.,& shelton,R. (2006), « Innovation : Creatinglong team value in new business models and technology, paper for meodile meeting 30-31 march, research, european commission , warton school publishing.
7. Edquist, C.(2007), The Systems of innovation approach and innovation policy : An account of the state of the art , national systms of innovations and public policies, htt://www.tema.liu.se/temer-t/sirp/chaed.htm P: 09
8. Graetz,F., (2002). "Strategic thinking versus strategic planning: towards understanding the complementarities". Management Decision, Vol. 40, No. 5, PP 155- 160.
9. Hamal Q & Prahalad C. K. (1989). "Strategic Intent", Harvard Business Review, Vol. 67, No. 3, P. 63-69.
10. Liedtka Jeanne M., 1998, Strategic Thinking: Can it be Taught?, Elsevier science Ltd, vol. 31(1),Pp.120-129.
11. Laurance,E.(1999), "Strategic Thinking, a discussion paper", paplic service commission of Canada,Aprile,in : www.psc-cfp.gc.ca/research/knowledge/startthink e.pdf.
12. O,Regan N., & Ghobadian, A.(2004). "Innovation in SMEs: The impact of strategic orientation and environmental perceptions". International journal of productivity and performance management: 54(2). Pp. 81- 97.
13. Scott, S., and Bruce, R., ( 1994). "Identification of innovative behavior",Academy of Management Journal, 37, PP, 580-60.
14. Solso, R.L.(1988). Cognitive Psychology. 1st ed., University of Nevada.
15. Comprehensive Industrial Survey Report 2010, Ministry of Industry and Trade, Republic of Yemen.