

Impact of Trust on Creativity of R&D Staff

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ABSTRACT

Management based on trust is a new expression of an old thought that its place is evident and obvious in the current relationship in a company and its application can be effective in achieving good individual and organizational results. The aim of this study is to evaluate the impact of trust on creativity of R & D staff. This research is practical and descriptive- analytical research with emphasis on correlation branch. In terms of supervision type and degree of control, this study is a field research. Statistical population of this study is included managers, experts and staff of R & D part in food industry in Rasht. Number of samples was 189 and sampling method was simple random. Regression was used to analyze the data. The results indicated that systematic structures and processes impact on competence trust and goodwill trust confidence. Goodwill trust and competence trust had an impact on the creativity.

KEYWORDS: goodwill trust, competence trust, systematic structures and processes.

1. INTRODUCTION

Compatibility of organizations with complex and changing environment around them is important issue. This organizational change can be achieved by creativity. Organizations should actively attempt for their enduring success in now and future and focus on optimum performance, continual change and transformation that come through creativity (Pourtahmasbi et al., 2010).

Researchers have noted the importance of trust as a mediator. Trust allows to organizations to focus on long-term activities and can be regarded as an essential element of effective change (Baird & Amand, p 7-9). Trust seems to induce environments that are more open, supportive, tolerant, less hostile and less competitive (Carnevale & Probst, 1998; West & Anderson, 1996). It is argued that giving more freedom to team members tends to trigger ideas and to mitigate conflicts. All these elements should favor higher levels of creativity. Yet, previous research does not indicate the existence of a definite link between trust and joint-creativity, thus leaving room to uncertainty about the relationship between the two variables (Bidault & et al, 2008).

Today's, scholars in other field, especially business management, have described confidence as a strategic alliance, partnership and inclusive organizational behavior in the business environment (Atkinson & Butcher, 2003). Charlton indicates that leaders trust their employees to do the work that needs to be done. Leaders need similarities in words and deeds (Martins, 2002). Therefore, trust is a dynamic phenomenon that depends on the interaction of various factors that may affect the development of a model for trust (Taylor, 2003). Trust can lead to collaboration between individuals, groups and organizations.

This paper show how Systematic process and structures has relationship with trust and in following more trust to staff is led to more creativity.

2. LITERATURE REVIEW

With regard to technology changes in the third millennium, organizations must always have the ability to compete and sustain and it would be possible if they have the ability to develop and create innovative services (Drew, 2002; Hitt et al., 2004; Porter 2004). Creativity plays an important role in the future development of countries. Previous studies of creativity have focused on the view that indicates that creativity is an important factor in the ability to compete in national development (Burgelman, 2006; Kanter, 1999; Tahmasbi, 2010). To consider the competitive conditions of the surrounding businesses, developing new products is the only way for them to survive profitably (Berk et al., 1998). The researchers thought that creativity reaches its peak when the people are stimulated by internal commitment, challenge, accountability, job satisfaction and self-discipline and self-control mechanisms (Sadeghi Mal Amiri, 2007). However, with time, the creative authors in their research developed their views of the individual variables to background variables and found that environment provides opportunities by removing barriers and rewarding to flourish creativity (Shin, 2009). In some companies, new product development is an important factor in strengthening the business and success. Study of new product development process has many researchers in strategic management, engineering, marketing and other scientific fields (Gilaninia, 2010). From the early 1950s onwards, the traditional belief and unscientific notion of

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creativity as a genius was began to lose and replaced with a new perspective that obtained from scientific and systematic research of creative experts including Makinun, Taylor, Maslow, Barron, Barron and Harrington and Torrance. From this perspective, creative is potential and general and can be developed by effective factors (Tahmasbi, 2010). Previous researches showed that trust is as an important component in product development because it enhances learning and also stimulate creativity in individuals (Barczak et al., 2010). Trust to the competence of individuals provides confidence that they can do the job well, so there is a possibility of creativity when trust to eligibility is high. The ability to be creative in product development is essential (Amabile et al, 1996; Heinze et al, 2009; Lwamura and Jog, 1991). On one hand, companies advise to reduction of diversity through processes and systematic structures (Cooper, 1992) and on the other hand, they recommend increasing the diversity of the processes and structures in order to stimulate creativity in product development (Amabile, 1979). Creativity and systematic structures and processes are important aspects of innovation (Bassett-Jones, 2005).

According to the previous research, it is concluded that there is a close relationship between goodwill trust and creativity, and competence of trust is not stimulus of creativity. However, this study considers and assesses competence of trust as an effective factor on creativity.

Therefore, the main research question is as follows: Is trust as an important factor in innovation and product development?

In study conducted by Brattström et al. (2012), innovation and arranged processes and structure have been as fundamental aspects of product development and trust have been introduced as a mediating variable. They showed that systematic processes to obtain information and application of rules and organizational structures in product development provide trust in the organization.

According to previous researches, it is concluded that there is a close relationship between goodwill trust and creativity, and competence trust is not necessarily stimulus of creativity. In this study, competence trust has been considered as a factor influencing creativity.

Therefore, research model is presented as follows:

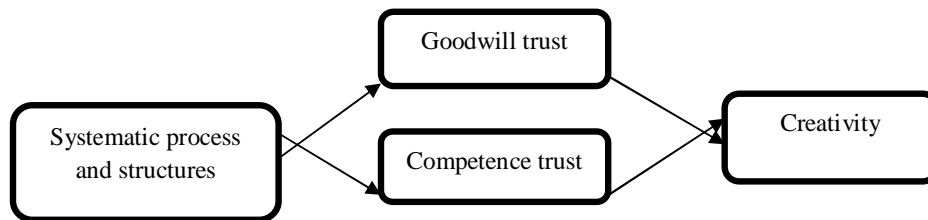


Figure (1) :Conceptual model of research

Systematic process and structures: is defined as details of structures and processes that how and by whom must be done, and its goal is to reduce the deviation related to work (Gilson et al, 2005; March, 1991; Brattström et al, 2012).

Creativity: is defined as generation of new and applicable ideas (Amabile, et al., 1999) that appear in the organizational environment (Brattström et al, 2012)

Competence trust: Trust is defined as psychological state that includes the intention to accept vulnerability based upon positive expectations of the intentions or behavior of another (Rousseau et al., 1998). Competence trust is defined as trust what the other person promises considering their ability to perform (Mayer et al, 1995).

Goodwill trust: is defined as trust to moral integrity of other side (Ring and Van De Ven, 1994) and refers to employee interest to welfare and better goals (Doney and Cannon, 1997). Also, goodwill includes benevolence and integrity in the work (Mayer et al, 1995).

According to the content expressed and research model, research hypotheses are as follows:

- 1) Systematic structures and processes effect on competence trust.
- 2) Systematic structures and processes effect on goodwill trust.
- 3) Goodwill trust effect on creativity.
- 4) Competence trust effect on creativity.

3. METHODOLOGY

In this context, this research is practical research. In terms of methodology and implementation, this study is descriptive- analytical research with emphasis on branch correlation. In terms of supervision type and degree of control, this study is a field research, because, was examined variables in their natural state. Statistical population of this study is included managers, experts and staff of R & D part in food industry in Rasht. Number

of samples was 189 and also sampling method was simple random sampling. Data collection method was a field type. Tool of research was questionnaires that were distributed among selected samples and assessed their opinion about variables. . Research questionnaire was designed based on previous research and its reliability or validity was confirmed by advisors and supervisors. To determine the reliability of the research questionnaire focusing on internal consistency of questions, Cronbach's alpha method was used. Considering that, all alpha coefficients obtained are more than 70 percent; therefore, questionnaire has the necessary reliability. Research hypotheses were examined by regression analysis.

4. Analysis of Data

Table 1) Summary of hypothesis testing

Hypotheses	R	B	Sig	Result
First hypothesis	0.347	0.389	0.000	Accept
Second hypothesis	0.168	0.149	0.021	Accept
Third hypothesis	0.416	0.381	0.000	Accept
Forth hypothesis	0.517	0.598	0.000	Accept

1) Test results of first hypothesis: as R is equal to 0.347, therefore systematic structures and processes has significant (sig=0.021<0.05) effect on competence trust. In addition, to determine direction of this effect, according to the positive value of the coefficient B (+0.389), it can be concluded that this effect is direct. On the other hand, determination coefficient in this hypothesis is 0.121 meaning that independent variables can predict the dependent variables approximately 12 percent. Therefore, regression model at 95% significant can be written as below where X₁ and Y are as systematic structures and processes (independent variable) and competence trust (the dependent variable), respectively.

$$Y = 2.197 + .389 X_1$$

2) Test results of second hypothesis: as R is equal to 0.168, therefore systematic structures and processes has significant (sig =0.021<0.05) effect on goodwill trust. In addition, to determine direction of this effect, according to the positive value of the coefficient B (+0.149), it can be concluded that this effect is direct. On the other hand, determination coefficient in this hypothesis is 0.028 meaning that approximately 3 percent of the dependent variables can be predicted by independent variables. Therefore, regression model at 95% significant can be written as below where X₂ and Y are as systematic structures and processes (independent variable) and goodwill trust (dependent variable), respectively.

$$Y = 3.985 + .149 X_2$$

3) Test results of third hypothesis: as R is equal to 0.416, therefore goodwill trust has significant (sig =0.000<0.05) effect on creativity. In addition, to determine direction of this effect, according to the positive value of the coefficient B (+0.381), it can be concluded that this effect is direct. On the other hand, determination coefficient in this hypothesis is 0.173 meaning that approximately 18 percent of the dependent variables can be predicted by independent variables. Therefore, regression model at 95% significant can be written as below where X₂ and Y are goodwill trust (independent variable) and creativity (dependent variable), respectively.

$$Y = 4.785 + .381 X_3$$

4) Test results of forth hypothesis: as R is equal to 0.517, therefore goodwill trust has significant (sig =0.000<0.05) effect on creativity. In addition, to determine direction of this effect, according to the positive value of the coefficient B (+0.598), it can be concluded that this effect is direct. On the other hand, determination coefficient in this hypothesis is 0.268 meaning that approximately 27 percent of the dependent variables can be predicted by independent variables. Therefore, regression model at 95% significant can be written as below where X₂ and Y are competence trust (independent variable) and creativity (dependent variable), respectively..

$$Y = 1.357 + .598 X_4$$

5. Conclusions and Recommendations

Previous researches presented trust as an important element in product development because it increases learning and encouraging creativity. Trust of management has a positive effect on product success. Trust in the product development team would facilitate learning and knowledge transfer. Systematic processes and structures increase trust. The results of this study indicate that systematic structures and processes impact on competence

trust and goodwill trust. Goodwill trust and competence trust has an impact on creativity. Thus, according to the results, the following recommendations are offered:

- 1- According to test results of first hypothesis, it is suggested that laws and regulations of the organization should be clear and be explained structures and processes to the participants to help market development and considering it, have sufficient resources, and share information.
- 2- Based on the test results of second hypothesis, it is suggested that the structures and processes for employees should be a intimate and friendly environment between individuals of company and create a sense of compassion between people and increase trust each other.
- 3- Based on the test results of third hypothesis, an intimate and friendly environment should be between individuals of company due to employees help each other in product development and innovation.
- 4- Based on the test results of fourth hypothesis, it is suggested that sufficient resources for product development should be given to create a sense of creativity and innovation in staff and would make a dynamic organization by placing the necessary facilities and there should be no difficult to implement ideas and opinions. Leaders must trust in the competence of its employees to encourage creativity in product development. Managers must encourage competence trust of their employees to creativity in product development.

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