



Developing the Dynamic Model to Implement Business Continuity Strategy in a High-tech Industry

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Abstract. Nowadays, despite the economic and technological developments, business continuity process is discussed as a necessity in the organizations and management of this process is known as an essential part in all areas of business. So that an organization's ability to maintain and continue its vital and core activities after an accident, interruption and also the speed of recovery and return to normal state can be introduced as major factors in the success or failure of an organization. The issue of implementing business continuity management in high technology organizations, which sometimes have sensitive knowledge as well, is of particular importance, because on one hand, they are more exposed to risks of natural (earthquake, hurricane, volcano, flood, etc.) and technological (explosions, fires, etc.) incidents and on the other hand, they are exposed to air strikes, terrorism, cybercrime and bioterrorism. This paper tries to develop the implementation of business-continuity strategy model in a high-tech industry for the first time. In this paper, a set of quantitative and qualitative methods have been used to plot research models. Overall, based on conference with experts, 52 variables in nine major structures were determined as the main factors of the implementation of BCC strategy in an industry with high-tech. After drawing cause and effect diagram, dynamics model of business-continuity strategy was simulated for ten years through Vensim software. Based on the research findings two policies were formulated and reviewed

Keywords: Strategy, implementation of the strategy, BCC, system dynamics modeling, high-tech industry

1- Introduction

Having an effective business continuity management plays an important role in the success of any business organization. Experience has shown that over 50% of businesses without plans for business continuity have finally gone bankrupt. Nowadays, the need to ensure continuity of service in the organization has reached its peak, because modern organizations are providing services 24 hours, day 7 days a week, and dependence and sometimes tolerable range of the organization for availability of some IT services reaches less than an hour (Dost, 2009; Crichton, 2008).

Now all agree that the success of successful organizations, and their ability to deal with crisis and continue their business so that the organization suffers the least damage does not lie in their physical and technology dimensions, but lies in some intangible factors such as a strong corporate culture and value and beliefs of employees. Organizational culture is manifested in the belief system through language, signs and symptoms, traditions and customs that reflect the behavior of a system of belief, so the type of belief system can have a great effect on the behavior of organization members (Goldberg, 2008).

Promoting and strengthening among the staff to create a culture in which at the time of an unexpected incident everyone attempts to fill the existing gaps resulting from the crisis, which allows the continuity of the organization activity, is achievable only through the establishment of culture to handle the crisis and

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sustaining the business. Corporate culture affects all aspects of the organization including goal setting, strategy, individual behavior, innovation, employee participation, job satisfaction, and the like, in a way that the experience has shown that successful organizations and the ones resistant to crisis have had a strong and effective organizational culture. The fact is that, as long as BCC has not been established as a shared belief in institutional organizations, there is no possibility of stabilizing the business in the face of an unexpected event, regardless of having many sources and new technologies of that business. In fact, movement and the motivation to maintain organization in times of crisis should be institutionalized in the beliefs of people as BCC. As each organization has its own culture, which simply indicates the attitude of employees and their orientation and the organization in relation to environment and unexpected factors (KordNaij and Moshabbaki, 2002), creating models of corporate culture that can easily sustain the organization against the environment and unexpected events and continue their lives is essential. For this purpose and in order to create the possibility of changing the culture and people's beliefs facing an unexpected crisis, the use of quantitative, flexible and dynamic approaches that allow the business to predict the results of their various decisions regarding the culture and the relations between members and more important predict their final results on the business is essential for business owners. The dynamics of the system, which recognizes the feedback systems characteristic features and shows how the structure, policies, and decisions affect the continuity and stability of a business in times of crisis, will be very effective (Heydari, SeyyedJavadin, 2011). In fact, culture dynamics model shows the interaction among various variables and cultural parameters in the event of a problem, and due to the feedback it provides, it has high efficacy. Perhaps one of the most important reasons that necessitates the development of dynamic models of BCC is the specific nature of dynamic systems, because these systems behavior is time-dependent. As a result, modeling of dynamic systems has brought about the description of the system and understanding it through quantitative and qualitative models, and through simulation, it is capable of selecting the policies to be applied in the event of a crisis at any time (Hung et al, 2010). In fact, cultural dynamic model in an organization will be able to deeply affect the beliefs of employees, study the causal relationship between these beliefs and people's culture, the way they deal with crisis, different activities they perform to continue business and finally focus on studying the behavior of the whole system over time.

Given the importance of high technology organizations, especially the organizations that have sensitive science and technology, creating the BCC that enables them to carry out their work after the occurrence of an unexpected accident is of the utmost importance. Because on the one hand, these organizations are subject to the risks of natural and technological implications such as explosions, strikes, terrorism, cyber, and bioterrorism attacks, and on the other, the inability to sustain the activities of the organizations in times of crisis brings about irreparable damage to the country and the industries that depend on these organizations. Today, about 62 percent of the world's largest organizations have "business continuity program", but it is still considered a luxurious issue in Iran. According to the mentioned issues, the purpose of this paper is to develop the implementation of business-continuity strategy model in a high-tech industry as a case study in the high technology organizations.

2. Theoretical framework

According to what said in the field of importance of business continuity management, at least in our country, it is an unknown and unfamiliar term for organizations and their employees. So far no written plans or studies have been carried out in our country on business continuity management. Although 62% of global organizations have business continuity programs in the field of business continuity management, not much work has been done neither in Iran nor in the world. After much searching in information sources such as libraries, research and studies sites that were related to the works done in the field of business continuity, only two studies examining the relationship between culture and business continuity and institutionalization of business continuity in organizational culture were found.

The word "Farhang" (culture) is composed of two components: "far" and "hang" synonymous with pull and education. In English and French "Culture" is used for something whose meaning has been cultivation

or growing, and it is still used in agriculture and hoe in the same sense. Roman and British used civilization instead of culture for so long and concluded the meaning of education, sanitation, purification and social progress from that (Trefry, 2006). It is not so long time ago that the concept of Culture has been used about human society and history, apparently after 1750, and for the first time in the German language (Alavi and Yadollahi, 2003). In the works of Persian literature, culture is used in different meanings such as "peace of soul" and "source of neatness", "leading to magnanimity", "source reputation", and "mental health" and other interpretations of this kind. Of different meanings for the word culture given in Persian literary works, it can be concluded that the term culture has a widespread notion in our country's culture: a set of virtues and the arts, culture and moral knowledge and education, and all forces that free human from the spirit of the primitive human and leads towards perfection (Saghafy, 2005).

In Qabusname, the word culture is synonymous with art and used in the meaning of "learning" and "implementation" and in Burhan Ghateis cited as knowledge, courtesy and above magnanimity and with the start of new education and training in Iran the word culture is used with the meaning of Education. However, today, regarding diversity, breadth of meaning and history and interpretations, the term culture has gotten so broad dimensions that cannot be limited just to the concept of "knowledge and education" (Rooholamini, 1989).

Culture is not transferred biologically (heredity), but all its components must be learned through experience and education. Edgar Schein (1991) considers culture as "a pattern of basic assumptions that has been made, discovered or emerged by a certain group in the process of experience of dealing with the difficulties inherent in the external adjustment and internal integration." Surely, it must be admitted that man creates culture and culture makes human (Monavarian, 2008).

Culture has different definitions, and everyone looks at it from a certain angle. Edward Burnett Tylor offered a comprehensive definition of culture in 1871. According to this British anthropologist, culture is "a complex set of science, knowledge, concepts, thoughts, beliefs, laws, regulations, customs, traditions, and in a nutshell all the practices and habits that human obtains as a member of society."

According to Kolia, "Culture is a set of behaviors learned to think, feel and action passed from generation to another and ensures visualization of these patterns in the financial sector (Kolia, 2002).

Shih and Huang have also defined culture as "a set of valuable holdings of the community where the members are involved in its development" (Shih & Huang, 2010). Of all definitions provided for the culture, a common point could be found and that is a set of beliefs ingrained in man that leads his unconscious and in the words of "Edgar Schein" has occupied human existence in three layers "artifacts and invention, values and basic assumptions" (Iranzadeh, 1998).

Culture has the following characteristics:

1. Culture is teachable: in fact, culture is geographical, local and biological heritage of human.
2. Culture is pleasing: Any person who acts in accordance with the values and norms accepted by society pleasure and satisfaction is brought to him.
3. Culture creates unity: Culture causes the people living in the same territory to act the same.
4. Culture is a social issue: Culture is created amongst a group of people, and there should be a group of people to form and strengthen it.
5. Culture is a mental and imaginative issue: Many cultural institutions cannot be implemented and are in people's mind and thought.
6. Culture brings consistency: When culture settles in a place, it tries to make the environment compatible with itself (Iranzadeh, 1998).

George Grodon considers corporate culture as a set of assumptions and values of the organization that are most widely respected and lead to certain behavior patterns (Grodon, 1991).

Moreover, in another place, Gordon sees organizational culture as a consistent pattern of beliefs and shared values of an organization that grow and develop over time (Gordon, 1992).

In his book *Management*, Robbins defines corporate culture (CC) as CC identifies the methods of carrying out the affairs in the organization for employees: the same perception of an organization that is seen in all members and shows common and constant characteristics that distinguish the organization from other organizations. In other words, CC identifies social identity of each organization (Robbins, 1991).

Edgar Schein, of the most prominent figures in the field of CC on organizational culture, in defining CC says: "CC is values, beliefs, norms, expectations and assumptions that bind people and systems together" (Schein, 1985).

Goldberg (2008) has discussed the importance of business continuity program in a paper. He believes that in order to be able to manage a business continuity plan, first, the business effect and importance should be examined. This researcher says that, effective planning and implementation of business continuity programs in an organization when faced with unexpected event will be possible only by institutionalizing the BCC in the CC.

Of course, for this purpose, there is no need to change the overall culture of the organization, but it can be achieved by institutionalization of continuity culture among managers and leaders who have profound effect on employees and their beliefs. If the business continuity management is institutionalized in the culture of an organization, the solutions and suggestions that employees and officials present to manage continuity, in the event of a crisis, can efficiently be used.

Because in fact people who are practically involved in these events are more familiar with their essence about and offer key solutions to protect organizations. Logical chain that connects the continuity of business and culture together in the opinion of the author includes:

Obtaining the support of key managers and decision makers of the organization creates a sense of ownership and commitment towards this programming, commitment and accountability bring responsibility to maintain ownership of their business, and this accountability makes managers and employees conscious and aware people about the issues and the nature of the business. This awareness and participation in business continuity programming and encourage them become a permanent behavior and eventually permanent behavior turn into corporate culture. He also refers to the important role of organizational leaders in institutionalizing BCC in people and states that, the leaders who can have a great impact on employees must have some abilities such as self-confidence, a comprehensive verification by the staff, great social experience, intelligence and ability to influence people. In another study, the researcher states the four steps of business continuity program as the following:

- Informing on business continuity
- Business continuity planning
- Business continuity management
- Business continuity culture

On BCC he has stated "Everyone has a role in the maintenance of the organization. This belief should be induced to the members at the start of the job." He believes that business continuity plans should be a part of employment. While hiring and during the time that employees are working in the department continuous training should be given to deal with unexpected issues. He suggests the process of "dynamic learning" to institutionalize business culture in the staff and management. He says there should be warning box in the organization so that when a member of the organization feels the danger puts it into the box in written form. These warnings should be reviewed from time to time and those who have been able to effectively predict the potential risk or in the event of problems in the organization have helped to maintain the position of the organization be awarded and encouraged by the directors. By doing this, both the staff will

be empowered in dealing with unexpected risks, and business continuity is institutionalized as a value in their culture (King, 2003).

In this study, the author has only theoretically dealt with the importance of institutionalizing business culture in the organization. To do this, he has just pointed out the role of leaders and managers and ignored other influential factors in this context. Even his claims on the role of leaders in the institutionalizing BCC is stated theoretically and cannot operationally be implemented in the organization.

The advantage of this study compared to Goldberg, 2008 is that, at least, it has offered a conceptual framework under the title of dynamic learning for business continuity culture. Nevertheless, none of the two studies is found in research form in the organization, and indeed their claims are not documented with studies and quantitative data. In both studies, the authors offered their opinions and views without any testing and implementation.

To learn more about business continuity process, some recent research done in this area are discussed below.

In a survey conducted among 22 large building companies in Singapore, the researchers found that (82%) of these companies have no knowledge of the business continuity management process, and (92%) of them think of solutions to reduce the damage of an incident and deal with it just at the time they encounter the unexpected event. In fact, the researchers concluded that not only are these companies unfamiliar with business continuity management, but they also have no written plans to reduce the damage caused by the crisis that their business may face. In that study, the authors suggested that the Singapore government should force these companies, which held a large part of the building industry in the country, to offer plans to predict the crisis and ways of dealing with it, and for establishing business continuity thinking in these companies, use financial incentives and tax relief (Low et al, 2010). By referring to the September 11 attacks and the problems caused by this event, Savage (2002) has seen the necessity of having a business continuity planning (BCP) for the organization as essential. His proposed plan for organizations to achieve BCP includes the following steps:

- Analysis of risk and its impact on business
- Documentation of necessary activities to prepare the organization to deal with unexpected events (such as the recovery strategy for the affected areas)
- Identification and assuring the activities related to the covering processes when an unexpected event happens
- Testing these processes
- Staff training
- Implementation of risk coverage processes a continuous updating of them

In extending Savage's (2002) work and developing it, some researchers designed a multi-step multi-purpose BCP procedure that can be used at the organizational and sectorial levels. They have tested their method at three senior management, IT managers and staff levels and concluded that the method they have offered can be implemented and enforced at higher-level management and staff in private and public organizations (Lindström et al, 2010).

One of the researchers has developed and improved a service-oriented IT management process with respect to BCP processes. His goal of carrying out this work is to analyze the impact of services when handling an unexpected event. The framework that he has offered is based on literature in the field of service management and business continuity management. According to the results he has gotten from organizations active in the field of IT services, he states that the knowledge of conservation of information in the field of service management is a new challenge in the field of service management and business continuity management in the event of an unexpected accident (Wan, 2009).

In another study, a model is designed to evaluate the maturity of the existing processes for strategic management of business in the banking industry in the UAE. The stated model has been in three major banks in UAE in two steps: the development of model based on five levels and assessing the validity of the model through the use of institutional groups. The results of this study show that this model is useful in assessing the banks' business management maturity and identifying the gap between the status quo and desired business continuity management. (Randeree et al, 2012).

3- Research Methodology

Research method is fundamental regarding the objective and based on data collection method, it is combined (quantitative-qualitative). Given the ultimate goal of this research, exploration design - typology development model - was used. Because based on the qualitative data collected from participants, the dynamic model of implementation of business continuity culture strategy in a high-technology industry should be developed. The research processes are shown in the following figure.

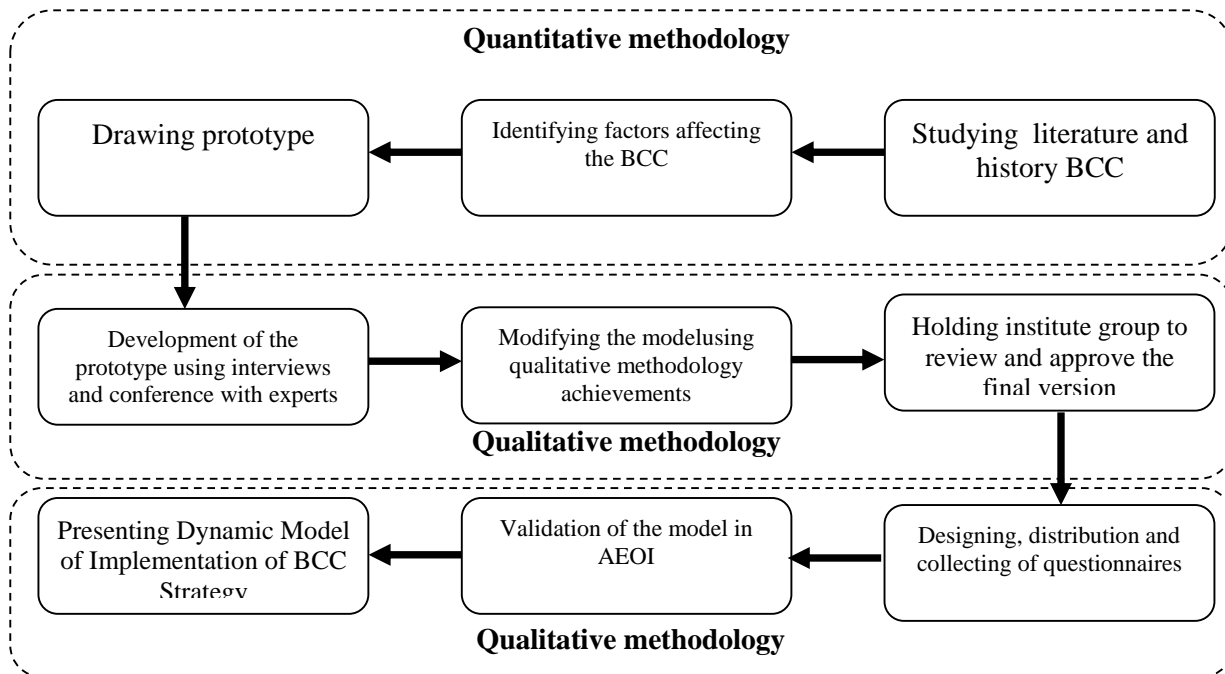


Figure 4. The process of carrying out the research at a glance.

Given that the modeling approach used in this study, due to the lack of successful sample, is of prescription type, the qualitative phase consists of experts relevant to the research by referring to whom factors of business continuity will be identified and thus the conceptual model of the research will be extracted. Participants in the qualitative phase of the research were selected from among faculty members and experts from the Atomic Energy Organization of Iran (AEOI). Thus, in order to carry out sampling at the initial stage of research, theoretical sampling was used. Theoretical sampling is a kind of purposeful sampling that helps the researcher in the creation or discovery of theories whose theoretical concepts' association with the theory of evolution has been proved. In theoretical sampling of samples are gotten from the events and not necessarily from the people; if we refer to the people, the aim is to explore events, events that represent various issues related to the phenomenon of research. Theoretical sampling guides are questions and comparisons that arise during the analysis of the provisions of interviews with people

and lead to the discovery of appropriate output characteristics and their dimensions (Strauss & Corbin, 1998).

Theoretical sampling continued to reach the theoretical saturation, theoretical saturation is a point where the new data in relation to the issues do not arise, research model gets a suitable range and the relationship between the output is established and the approved (the Glaser, 1978) (Glaser & Strauss, 1967). The volume number was 24 of the experts who were surveyed as samples until reaching the saturation level.

To ensure the validity of the first phase of the study, that is the accuracy of the findings from the researcher's perspective, participants or readers research (Creswell & Miller, 2000) the following actions were taken

Peer examination: six sessions conference were held with the AEOI experts and their opinions were gotten and applied about encodings done and the outputs obtained.

Participatory research: simultaneously the participants were asked for help in the analysis and interpretation of the data.

4. Research findings

Step 1: Determining the factors affecting the BCC

At this stage of the research, semi-structured interview is used. This is one of the most accessible qualitative methods to researchers who cannot use navigation and observations (Silverman, 2000). In this study, to create an accurate and comprehensive picture of the theoretical component of the research topic, the researcher used semi-structured interview that is one of the main sources of data collection. The use of interview in this research leads to a process to discover and to identify the factors and components affecting BCC. After carrying out semi-structured interviews and identifying the primary components, the final component of the study group were identified and approved through holding conferences with management elites of the concerned industry. At this stage, a total of 9 major structures of designing dynamic model of BCC were determined. Moreover, at this phase of the research, a list of criteria to assess criteria of research model was identified and developed. These nine structures with their variables are as follows:

Business Continuity: includes variables of management support, accountability, flexibility and business agility, team building, the extent of people's understanding of the purpose and nature of the business, the maturity of the business, creating different skills in people for replacement, testing, maintenance and reviewing business continuity plans, including business continuity topics at the monthly meetings of the organization.

Strategic: the variables of clarity of strategic direction, goals and objectives, vision, coordination and coherence in the business, alignment of individual and organizational goals, bottom-up determination of policies and strategies of business continuity, independence and freedom

Human resources: includes variables of employees' self-management, encouragement and reward, job security, job satisfaction, staff commitment and attachment to the business, fairness of reward.

Leadership: includes variables of capability development and empowerment of employees, supporting individual initiative in the field of business continuity solutions, reception of staff error on the part of management, attention to detail and members of the organization, attention to shared values.

Corporate culture: includes variables of tolerance of risk acceptance, compatibility with conflicts, awareness of BC through the internal network, creating a spirit of cooperation, building trust, fluidity of business culture, organizational culture power.

Learning and growth: includes variables of career development routes, continuous learning and in line with business changes, group learning, development of capability and staff empowerment;

Organizational structure: includes variables of organic organizational structure, alignment of formal communication with informal communication, and communication pattern;

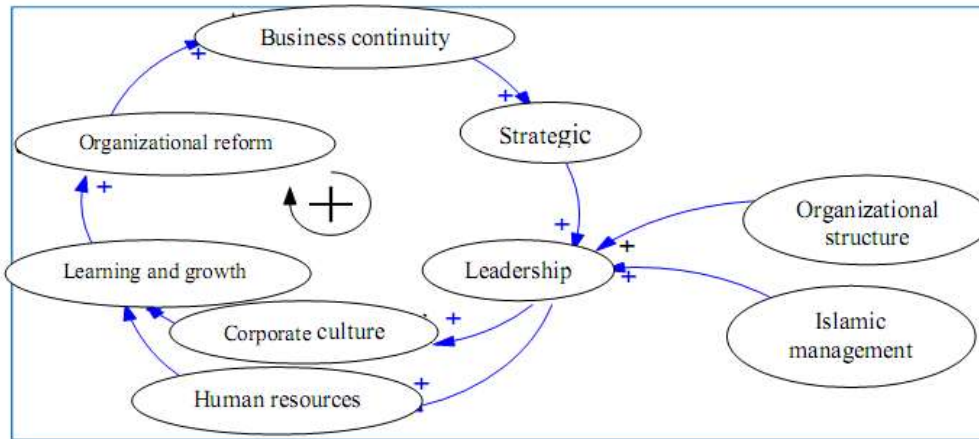


Diagram 1. Dynamic hypothesis.

Organizational transformation: includes variables of modernization in the organization, providence of business, the use of change management, separatism and militancy, creativity acceptance, coordination with change, entrepreneurial leadership, the resistance to change;

Islamic management: includes Islamic spirituality, Islamic philosophy, Islamic-organizational justice, Islamic ethics, attention to the religious value system;

Step 2: Developing the dynamic hypothesis

According to the experts' views and the results of studies in the literature, the dynamic hypothesis was proposed. This dynamic hypothesis can be considered in the form of strengthening rings called "rings of increasing business continuity." In relation to reinforcing feedback loop, it can be concluded with increase in strategy leadership will be upgraded. It should be noted that the factors of organizational structure and Islamic management also lead to the growth of leadership. Leadership development increases corporate culture and human resources and thus increases learning. Learning and development brings about organizational change and finally organizational change causes business continuity.

Step 3: Causal Loop Diagram

Causal Loop Diagram shows causal structure of a model. Diagram 2, shows the Causal Loop Diagram of dynamics model of the factors affecting business continuity. In what follows, we describe the causal structure of the model.

In Diagram 2, Causal Loop Diagram of dynamics model of identifying factors affecting business continuity is seen. According to the dynamic hypothesis, all issues of business: continuity, strategy, human resources, leadership, organizational culture, learning and development, corporate structure, organizational change and Islamic management as identified factors were divided and causal relationships have been established between them. This classification is mentioned in step 1.

Step 4: Time Horizon

Time horizon on the one hand, should cover the history background of the issue so much that one can make sure of the validity of the model in reproducing system behavior, and on the other hand, it should continue to a point in the future that cover the life cycle of the issue. In this study, the time horizon will be considered as 10 years. Because of feedback relationships, there is a need for a long time to evaluate the policies.

Step 4: Key variables

According to the table (2), key variables of the model are separated in the form of endogenous and exogenous variables. Endogenous variables are variables that focus of the model is on them, and during the simulation of the model it changes. Exogenous variables are variables that are outside the boundaries of the model, and there is no feedback from endogenous variables to them.

Table 2. Key variables.

Exogenous variables	Endogenous variables
- Organic organizational structure	- Manager Support
- A combination of formal communication with informal	- Flexibility and Business Agility
- Relationship model	- Team building
- Islamic spirituality	- Understanding of the people of the goals and nature of business
- Islamic Wisdom	- Responsibility
- Organizational-Islamic justice	- Business Maturity
- Islamic ethics	- Various skills of people in order to replace
- attention to the religious value system	- Testing, maintenance and reviewing business continuity plans
	- Including business continuity topics at monthly meetings

Step 5: Flow and level diagram

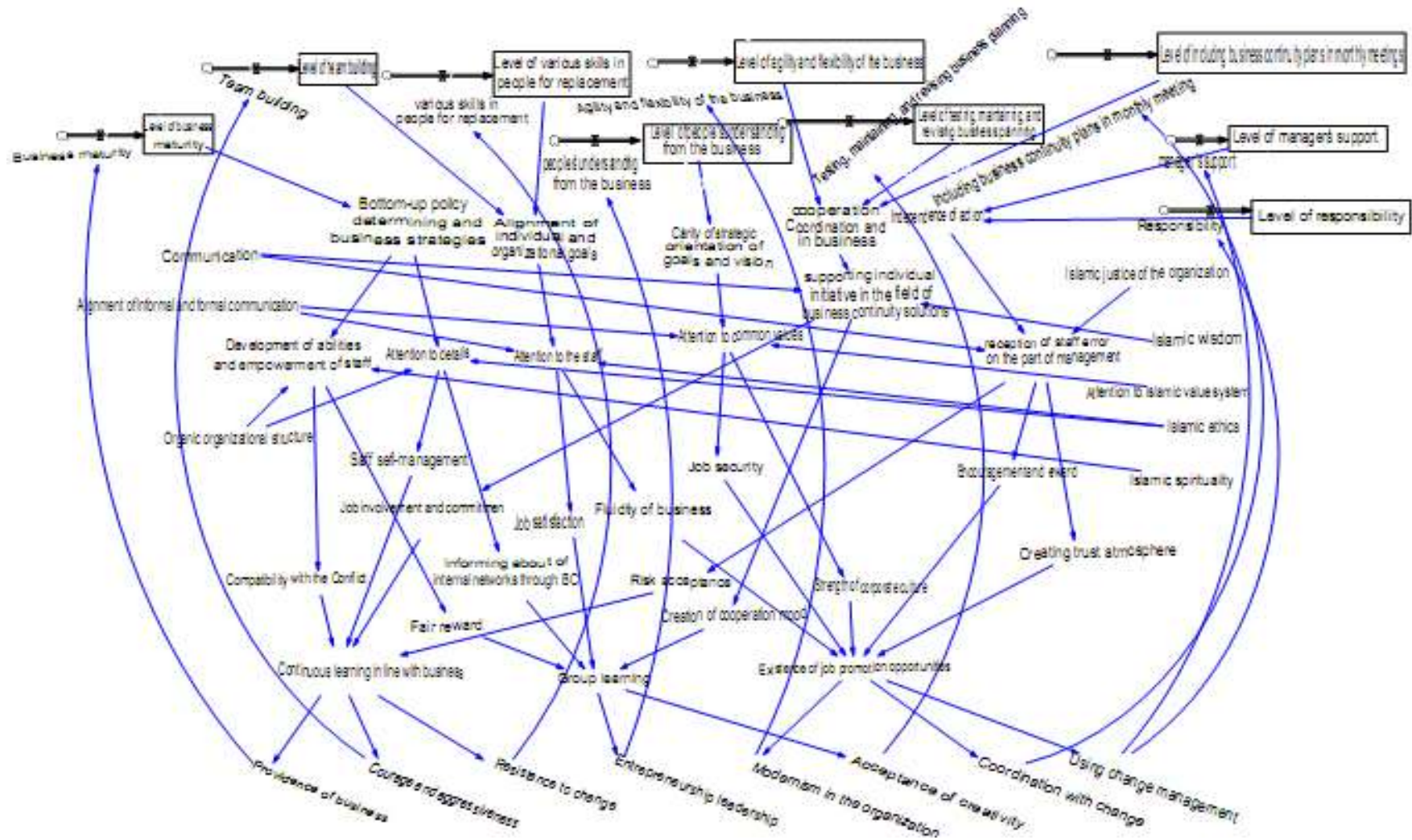
By flow and level diagram, based on dynamic theory, cause and effect diagrams and equations between variables were created. Flow and level diagram model was simulated using Vensim software. Time unit was considered year the model was simulated for 10 years.

Here, each of the levels has been described:

Regarding the purpose of modeling that is to investigate the factors affecting business continuity, following levels were selected for decision making:

- The level of manager's support
- The level of flexibility and business agility
- The level of team building
- The level of understanding of the people from the purpose and nature of business
- The level of responsibility
- The level of business maturity
- Various skills in people in order to replace
- Level testing, maintenance and reviewing business continuity plans
- The level of including business continuity topics at the monthly meetings of the organization

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(3) - Flow and level diagram

As can be seen in Diagram 3, issues of organizational structure and Islamic management have been defined as the constants of the model that we will use to select the best policy in the part of defining policies.

Step 6: Model's Test:

1. The stability test:

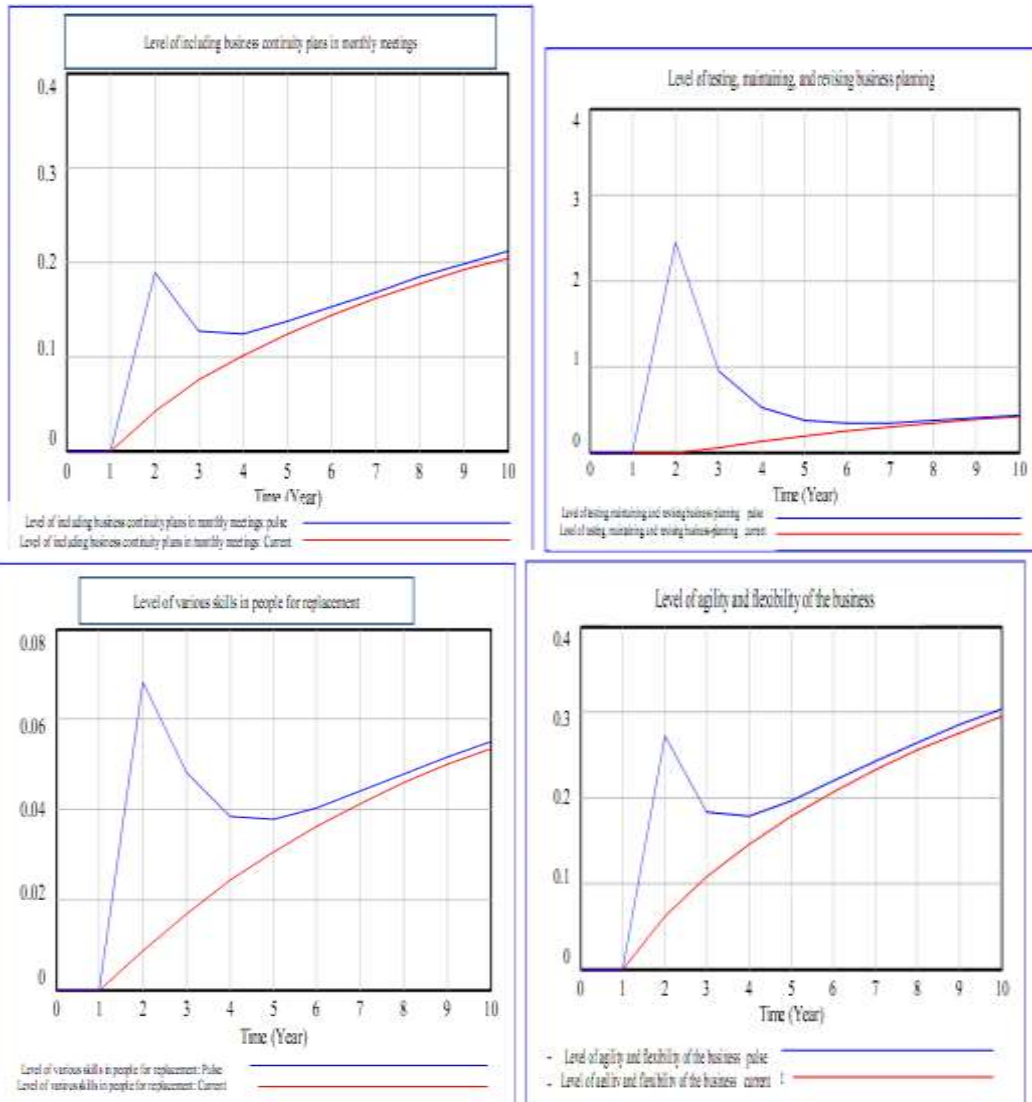
In this test, the values of the variables change in a short period. If after a period, the model returns to equilibrium, it indicates the stability of the model. To carry out this test, PULSE function was used in variables equations, as follows:

Organic organizational structure = $0.5 + 0.5 * \text{PULSE}(0, 1)$

Alignment of formal with informal communication = $0.5 + 0.5 * \text{PULSE}(0, 1)$

Communication pattern = $0.5 + 0.5 * \text{PULSE}(0, 1)$

After applying the above equations, we ran the model. According to Diagram 4, we observe that after the sudden change in the variables and its impact on decision variables, again after some time, the system returns to equilibrium. Therefore, this behavior indicates that the model is stable.



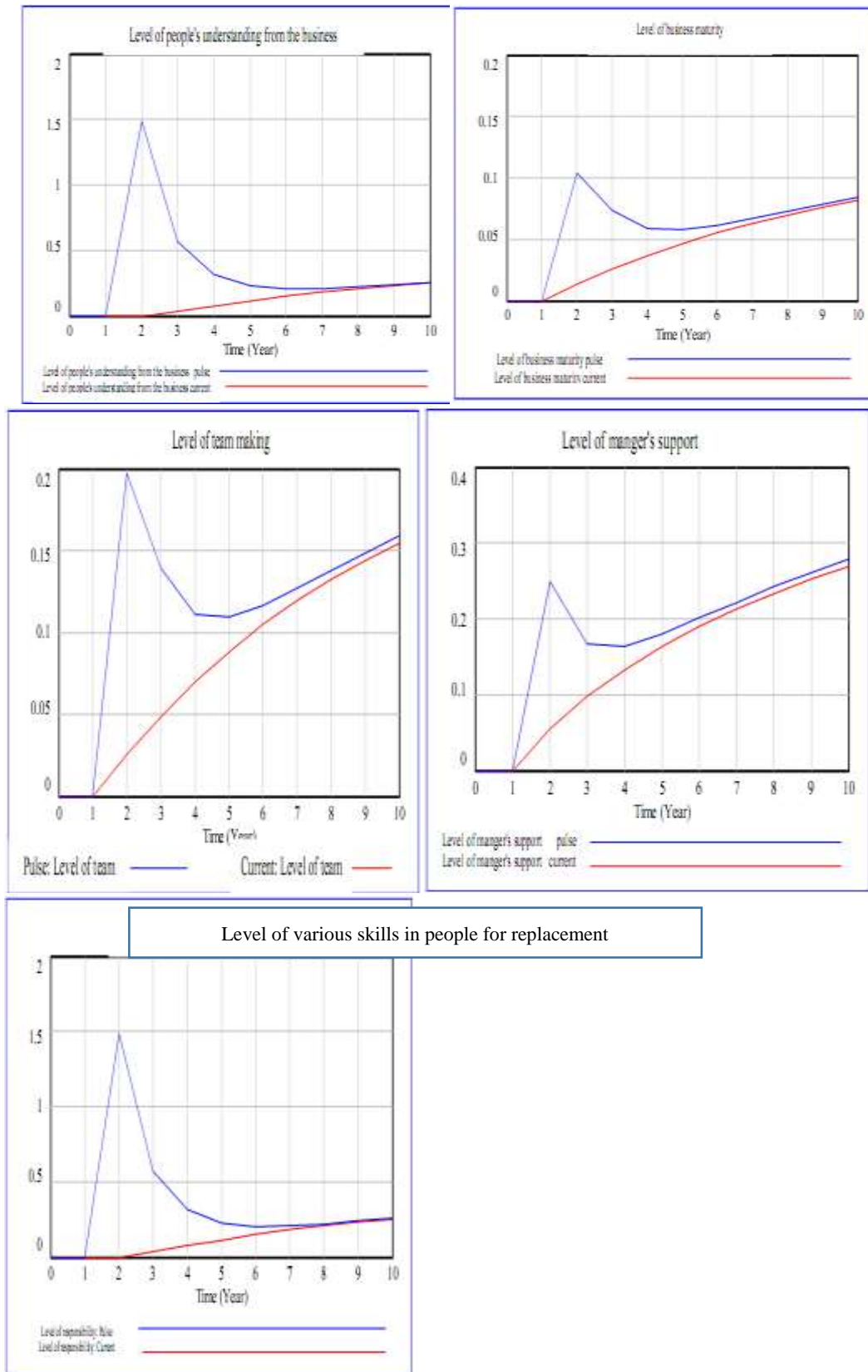



Diagram 4. Levels diagrams after sudden change in model variables using PULSE function.

2. Reality Check Test:

One of the most common defects in the levels is that, they may get negative, but in reality, considered level never gets negative. In this model, levels should never have a negative value, i.e. a negative value means nothing to them in reality. To test the model, adapting to the reality feature of the Vensim software () was used and nonnegative of all levels was investigated.

Step 7. Policy Making:

At this stage, to help managers to make better decisions, we implemented various policies on the model. These policies are described below:

Policy making 1: Which factors of organizational structure have more influence on leadership?

At this stage, three policies were defined. These policies are shown below:

A:

Organic organizational structure = $0.5 + \text{STEP}(0.5, 1)$

B: Alignment of formal with informal communication = $0.5 + \text{STEP}(0.5, 1)$

C: Communication pattern = $0.5 + \text{STEP}(0.5, 1)$

The results showed that in relation to the development of capabilities, empowering staff and attention to detail, policy A is better than other two policies. Policy A is improvement in organic organizational structure. About the factors of attention to the members of the organization and attention to common values, policy B is better than other policies. Policy B is improvement in alignment of formal with informal communication. In relation to the protection of individual initiative in the field of business continuity strategies and reception of staff error on the part of management, policy C is better than other policies. Policy C, is improving communication patterns.

Policy making 2: Which factors of Islamic management have more effect on leadership?

At this stage, 5 policies were defined. These policies are shown below:

A:

Islamic spirituality = $0.5 + \text{STEP}(0.5, 1)$

B:

Islamic wisdom = $0.5 + \text{STEP}(0.5, 1)$

C:

Islamic-organizational justice = $0.5 + \text{STEP}(0.5, 1)$

D:

Islamic ethics = $0.5 + \text{STEP}(0.5, 1)$

E:

Respecting religious value system = $0.5 + \text{STEP}(0.5, 1)$

The results of above studies showed that this policy in relation to the development of staff capabilities and empowerment, policy A is better than other policies. Policy A is improvement in Islamic spirituality. In relation to the supporting protection of individual initiative related to business continuity strategies, policy B is better than other policies. Policy B is improvements in Islamic wisdom. In connection with the admission of error by staff on the part of management, policy C is better than other policies. Policy C is improvements in the Islamic-organizational justice. In conjunction with the attention to detail and attention to members of the organization, policy D is better than other policies. Policy D is improvement in the ethics of Islam. In relation to the issue of attention to shared values, policy E is better than other policies. Policy E is improvement in attention to the religious value system.

5. Conclusions

BCC strategy is a dynamic and continuous process that concerning the impact of impairment on resources and on what aspects of their business has been effective helps the organization to predict, prepare, prevent, respond and recover from failure. Given the importance of high technology organizations, developing a culture of business continuity that enables them to carry out their work after the occurrence of an unexpected accident is of the utmost importance.

The aim of this paper was to develop a dynamic model of BCC strategy implementation in a high-tech industry. Due to this, based on a review of literature and other related studies, 52 variables in nine structures were identified as factors affecting BCC. In the next stage, based on surveys and interviews with experts of the studied industry, the dynamics model of implementing BCC strategy in a high-technology industry was developed. The proposed model of business-continuity strategy was simulated for ten years through Vensim software. Based on the research findings two policies were formulated and reviewed. The results obtained from policy making 1 showed that, the improvement in the organic organizational structure has a greater impact on the development of staff capabilities and empowering and attention to detail. Improvement in the alignment of formal communication with informal has greater impact on factors attention to members of the organization and common values. Improvement in communication pattern has a greater impact on the protection of personal initiative in the field of business continuity strategies and reception of staff error on the part of management.

The results of policy making 2 showed that improvement in Islamic spirituality has a greater impact on the development of capabilities and empowering staff. Improvements in Islamic wisdom have a greater impact on the protection of personal initiative in the field of business continuity strategies. Improvement in the Islamic-organizational justice has a greater impact on the admission of error by the staff on the part of management. Improvements in Islamic ethics has a greater impact on attention to detail and attention to members of the organization. Improvement concerning the attention to religious value system has a greater impact on attention to shared values.

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