

***Organizational suggestion system in the era of holding  
by developing an innovative model : the case of bonyade  
ta avon holding in Iran(an applied model)***

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**Abstract**

One of the popular ways of taking advantage of personnel creativity is through suggestion systems. Our main question is how to implement suggestion system in holding with conglomerate structure. The paper presents an innovative model that were named ITFSK Model with accordance of Bonayade Taavone (a holding that has many companies and institutions with conglomerate structure). ITFSK is a model that explains how participation management and suggestion system is implemented effectively in huge Enterprises (holding) and this approach brings continuous improvement (kaizen) and it impacts the productivity of these enterprises.

The paper is based on field research and the research in Bonyade Tavan that has 22 companies and 2 institutions that activity fields of the subholdings is very varied.

Our model consists of five main parts such as ideas bank, think-tank, feedback, sharing of knowledge and kaizen that was named ITFSK.

Implementation of "Suggestion system" rules has immediate and significant effects on the productivity of activities in the jobs, thus influencing the performance of processes in the analyzed organization. Suggestion system can result in kaizen and innovation in environment of organization.

The model was used to implement and evaluate a suggestion system of holding with conglomerated structure. The application of the model to evaluate the suggestion system provided some good insights and highlighted some areas of improvement.

**Key words:**

Suggestion, Idea, Think Tank, Innovation, Kaizen.

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## **Introduction**

The best ideas can come from any employee, anytime, anywhere; people naturally think of ways to make their jobs easier, faster, and more productive. Although these words are a truism, few organizations have effective systems to solicit ideas and then implement the best ones. In many companies when ideas are accepted from employees, it happens because the idea creator was persistent and vocal, and exerted a lot of personal energy. Having a system that makes it easy for employees to contribute ideas increases the likelihood that good ideas will be submitted. (Frese, Eric, and Cees, 1999) Strong, visible support by leadership lets everyone know that individual thinking and ideas are valued, and allows everyone to be more involved with the business (Nam, and Tatum, 1997) This in turn sets an improved climate for innovation (Metaxiotis, K. and Psarras, J. 2006)

In this paper we will introduce our model for implementation of suggestion system in Bonyad for increasing productivity and cost reduction so that we can create knowledge based organization. Now we define key words to result in common point of views.

A suggestion system is a set of procedures that ensures that employee ideas are handled smoothly and fairly. It takes a great effort to get the flow of ideas started and sustaining that flow (Hartman, 2007).

Innovation is a process through which the organization creates and transforms new knowledge into useful products, services and processes for national and global markets –leading to both value creation for stakeholders and higher standards of living. The difference between invention and innovation is that invention is a new product or process, whereas innovation is a new value (Szmytkowski 2005). To turn invention into innovation requires different types of knowledge, capabilities, skills and resources. Innovation is a continuous process - often an effect of small incremental/marginal changes in the product or process.

The innovation process is an "... iterative, cumulative and cooperative phenomenon ..."

(Freel 2003) often with extra-organizational contacts. Within this context, innovation will be enhanced when cooperating with external sources (Freel, 2003). It is not only the organizational, sectional and local context that will have an effect on the application of existing theories. There is

evidence that country-specific characteristics will be influential too (Miozzo and Dewick, 2002).

In this paper, our main research question is how to implement suggestion system in holding with conglomerate structure. We are going to reach a practical model for huge holding with unrelated businesses. The secondary research questions are:

1. How can we improve business processes by implementation suggestion system in holding with conglomerate structure?
2. How can we reach kaizen by implementation suggestion system in holding with conglomerate structure?
3. How can we share knowledge by implementation suggestion system in holding with conglomerate structure?
4. How can we develop innovation process skills by implementation suggestion system in holding with conglomerate structure?
5. Research hypothesizes are:

**Main hypothesis:**

There is a meaningful correlation between ITFSK model and implementation of suggestion System.

**Secondary hypothesizes:**

1. There is a meaningful correlation between ITFSK model and knowledge sharing.
2. There is a meaningful correlation between ITFSK model and innovation.
3. There is a meaningful correlation between ITFSK model and kaizen.
4. It is meaningful correlation between ITFSK model and feedback system.

**Kaizen and suggestion system**

Toyota calls their suggestion system “soui kufuu seido”. The words “soui” means “creative idea” and “kufuu” is best described as “figure out” or “work out” and “seido” simply means “policy” or “system”. In English, Toyota calls it the “Creative Ideas suggestion system”. There are several unique aspects to this system which we will explore below as we address the four objections mentioned below (ohno,1991).

Kaizen covers every part of a business. From the tasks of laborers to the maintenance of machinery and facilities, kaizen has a role to play. All improvements will eventually have a positive effect on systems and

procedures. Many top Japanese executives believe that kaizen is 50 percent of management's job, and really, kaizen is everybody's job! (Recht, Wilderom, 1998)

It is important for management to understand the workers role in kaizen, and to support it completely. One of the main vehicles for involving all employees in kaizen is through the use of the suggestion system. The suggestion system does not always provide immediate economic payback, but is looked at as more of a morale booster. Morale can be improved through kaizen activities because it gets everyone involved in solving problems.

In many Japanese companies, the number of suggestions made by each worker is looked at as a reflection of the supervisor's kaizen efforts. It is a goal of managers and supervisors to come up with ways to help generate more suggestions by the personnel.

Displaying goals, recognition and suggestions helps to improve communication and boost morale In Bonyad Taavon holding.

Kaizen begins when the personnel adopts a positive attitude toward changing and improving the way they works. Each suggestion leads to a revised standard, and since the new standard has been set by a workers own volition, he takes pride in the new standard and is willing to follow it (Stenmark, 2000).

If, on the contrary, they are told to follow a standard imposed by management, they may not be willing to follow it. Thus, through suggestions, employees can participate in kaizen in the workplace and play an important role in upgrading standards (Slaughter, 1998).

In general, Japanese managers have an easier time implementing employee suggestions than managers in the U.S. Japanese managers are more willing to go along with a change if it contributes to any of the following goals:

- ◆ Making the job easier\* ◆ Making the job more productive\*
- ◆ Removing drudgery from the job ◆ Improving product quality
- ◆ Removing nuisance from the job\* ◆ Saving time and cost\*
- ◆ Making the job safer\* (Fairbank, Williams, 2001)

**Process-oriented thinking**

Another change you will notice with kaizen is that it generates a process oriented way of thinking. This happens because processes must be improved before you get improved results. In addition to being process oriented, kaizen is also people-oriented, since it is directed at people's efforts. (Amabile, 1996)

A process-oriented manager should be people-oriented and have a reward system based on the following factors:

- Discipline
- Participation and involvement
- Time management
- Morale
- Skill development
- Communication

**Kaizen vs. innovation**

Kaizen vs. innovation could be referred to as the gradualist-approach vs. the great-leap-forward approach.

Innovation is characterized by major changes brought on by technological breakthroughs, or the introduction of the latest management concepts or production techniques. (Carrier, C. 1998) Kaizen, on the other hand is subtle, slow, and maybe even boring. The results of kaizen are not often immediately visible. kaizen is continuous, while innovation is a one-shot deal. To further this comparison, innovation is technology and money-oriented whereas Kaizen is people-oriented and process-oriented.

In the U.S., a middle manager can usually obtain support for innovative projects because those projects offer a return on investment that is hard to resist. However, when an organization manager wants to make a small change in the way his personnel perform a task, obtaining management support can be difficult. This is so, because it's a small improvement that does not immediately show a large return on investment. (Turrell, 2002)

Kaizen does not call for a large investment to implement it, but it does call for a great deal of continuous effort and commitment. For implementation kaizen, we need only simple techniques. Often, common sense is all that is needed. On the other hand, innovation usually requires sophisticated technology, as well as a huge investment. (Van Dijk, Van Den Ende, 2002) In this paper, when we explain our innovative model, it will be

indicated suggestion system can result in kaizen and innovation in environment of holding.

### **Integration of innovation into business need (In Bonyade Taavon holding)**

One of the popular ways of taking advantage of employee creativity is through suggestion systems. Creativity is basic human capability (Fairbank and Williams, 2001). However, in a civilized society, ideas cannot be forced out of people, people themselves need to volunteer them (Pluskowski, 2002). Suggestion systems primarily consist of administrative procedures and infrastructure for collection, judging and compensating ideas, which are conceived by employees of the organization (Van Dijk and Van Den Ende, 2002) In addition, suggestion systems have the capability of being all inclusive by being able to focus on capturing ideas from all staff, and not just ideas from identified few smart staff (Fairbank and Williams, 2001)

Organizations should encourage employees to be innovative. It is important to motivate employees and increase their commitment to innovation. When people face new and challenging situations, their needs for competence can be satisfied by performing creatively.

Training can be given to employees on the innovation process, as part of the business need and infrastructure already exist. It is useful for the organization to spell out what specific business need it intends to address – higher sales, lower cost, short turnaround time, better product or service in order to ensure that employees is involved in the training and initiative.

With conglomerate Structure in Bonyad Ta avone, there are variety businesses for integration of innovation. It is useful to gather problems of subholdings and classify to some categories. We can meet a think tank oriented to the problem.

Adoption is, first of all, a communication process through which uncertainty about a newsolution is reduced and the perception to benefit from the solution is increased. In construction industry adoption is challenging (Hartmann, 2007).

In the construction sector, new ideas are seldom adopted by the company, as in mass production industries, but rather into specific projects (Slaughter, 1998; Winch, 1998). In addition, the products of the construction sector are large, complex, long lasting and created by a temporary project organization. The innovations often affect more than one organization in the process making it harder for a single company to adopt something new

(Miozzo and Dewick, 2004). Since the organizational context of the projects is defined through the choice of procurement and contractual forms chosen by the client it is clear that clients have a profound role to play in providing an organizational context in favour of innovation and innovation diffusion.

For innovation we must have creative environment for creation innovative organization. We describe it in figure 1 as follows:

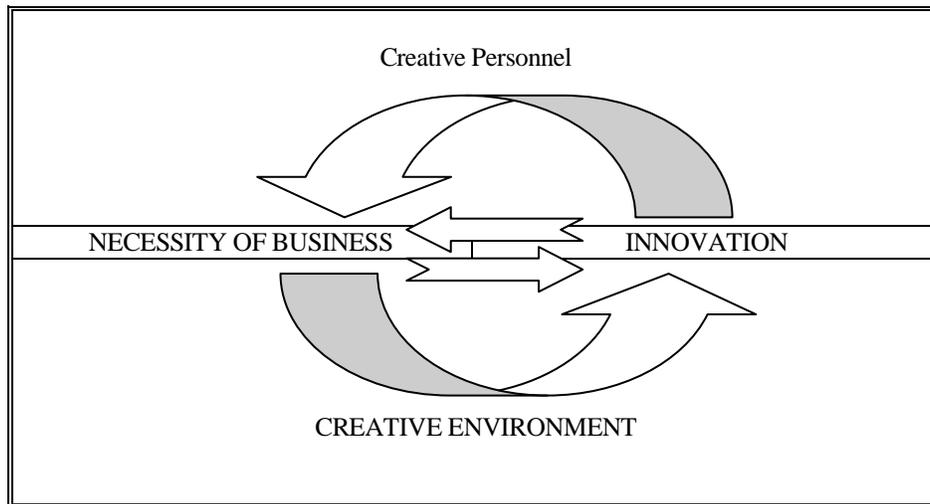


Figure1: Integrated Of Innovation In Buisness Need

### Development of Innovation Process Skills

Research has shown that skills in the innovation process can be learned, nurtured and managed (Basadur and Gelade 2006). It is therefore important to train employees from top management downwards in skills of the innovation process. Top management must also develop specific strategies to maintain the innovation skills in their daily lives. They must lead the way by learning and visibly using the innovation process to create new managerial activities and new organizational structures to engage the rest of the members of the organization in applying the process daily. These activities include rewarding, modeling, publicizing, providing resources, coaching and teaching and visibly taking risks to promote the change-making process (Basadur and Gelade 2006). Figure2 shows three approaches for developments in Bonyad holding.

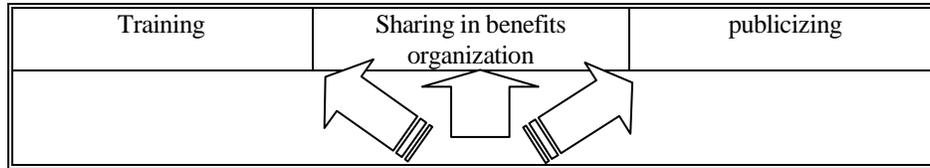


Figure 2: Approaches of development of innovation process skills in bonyad holding

### Beyond employee suggestions in holding

However, when dealing with old problems that were never adequately resolved, ideas contributed by employees tend to be restatements of old ideas and therefore have little capacity to solve the problem. (Verespej, 1992) Breakthrough ideas are needed that have never before been put forward. In these cases an intensive problem solving process is called for. Generically called "creative problem-solving", these workshops dig deeply to get past all the easy and obvious ideas that have already been addressed. (Păunescu, Purcărea, Pantea, 2008).

Only by emptying the box can one get out of the box, so attention is paid to really and truly emptying the box completely before attempting to use any of the "out of the box" techniques. The techniques to force thinking out of the box generate truly innovative ideas that have never been raised before. A simplified diagram of a creative problem-solving process is shown in Figure 3. Notice that the five sections are identified as (1) Problem identification, (2) Think tank meeting oriented to identified problem (3) Brain storming and idea generation (4) idea selection (5) implementation and control. This process pays special attention to clearly defining the right problem, and then goes far beyond traditional brainstorming by using "pattern-breaking thinking" which creates breakthrough ideas.

To more easily reach consensus on the best ideas, criteria are used to make the selections. Some processes take the unusual step of working to improve each selected idea to increase its chance of success. For each idea that makes the final cut (4-6 ideas), a project plan should be created with names of those who accept responsibility for taking the next steps and the dates expected to complete the next steps (Uden, Kekäle, Naaranoja, 2007).

In summary, Employee Suggestion Systems and creative problem-solving are complementary ways that together can overcome the dilemma of involving every employee in solving business problems while finding breakthrough yet workable solutions when required ( Ford, 1996) (Oldham, Cummings, 1996).

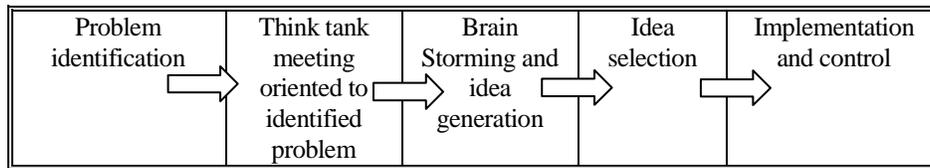


Figure3: Procedure steps in creative problem solving

### Criteria for evaluating suggestions

A suggestion is a written constructive idea submitted to management by one or more

employees to improve directly the operations and processes of the organization (Szymtkowski, 2005). To receive an award, each suggestion must meet one or more of the following criteria:

1. Make a savings in labor, material supplies or energy.
2. Introduce new or improved methods, equipment or procedures.
3. Eliminate unnecessary or redundant methods, procedures or equipment.
4. Improve working conditions and employee morale.
5. Improve public relations and communication with the general public.
6. Improve productivity, cost reduction, value engineering or other things result in kaizen in holding.

Utilization of the above criteria in Bonyad Ta avone is dependent on conditions of sub holdings and situation of companies field. Table 1 shows mains criteria for evaluation of suggestion for giving awards:

Table1:Criteria for evaluating suggestions in Bonyad holding

Improvement of Productivity	Improvement of Ergonomics	Elimination Of Muda(Waste)	Cost Reduction	Value Engineering	Kaizen Activity
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In an article in the June 2003 issue of Quality Digest, author Norman Bodek reveals that the savings through a “Quick & Easy Kaizen” suggestion system at Technicolor range from \$50

to \$200 per idea, with some as high as \$30,000. According to Bodek, as of September 2003 Technicolor calculated they were saving \$3,000 per employee per year.

**Pay awards in holding**

As per the ISO 9241-11 document (1998) guidance on usability issued by International Organization for Standardization, usability is defined as: "the extent to which a product can be used by specified users to achieve specified goals with effectiveness, efficiency and satisfaction in a specified context of use" (wikipedia, 2005). The most widely accepted definition of usability is the one proposed by Jakob Nielsen (2003).

Reward is key element identified as a major success factor for suggestion system (Woodman et al. 1993; Amiable, 1996; Oldham and Cummings 1996; Fairbank and Williams, 2000; Brief and Aldag, 1977; Frese et al, 1999; Carrier, 1998; Recht and Wilderom, 1998; Stenmark, 2000). This factor focuses on incentives given to workers for submitting ideas via suggestion systems

The exact amount of the award shall be determined by the committee for any suggestions

judged to be acceptable. Generally, the cash award will not exceed 10% for suggestions with

one-time savings and 15% for suggestions with recurring savings, with no award to exceed a

total of an amount for example \$500. However, the committee may recommend to the Bonyad administrator that larger amounts be awarded in cases that the committee judges the suggestions to be exceptional. (Kuramaswamy, Love, Dulaimi, Rahman, 2004)

In determining the amount of the award, the committee shall consider the significance and

extent of the suggestion's applicability to other companies and institutions in this holding.. Those with general application to all or most companies shall receive the maximum award. For example suggestions that result in cost reduction in 20 companies in Bonayd holding.

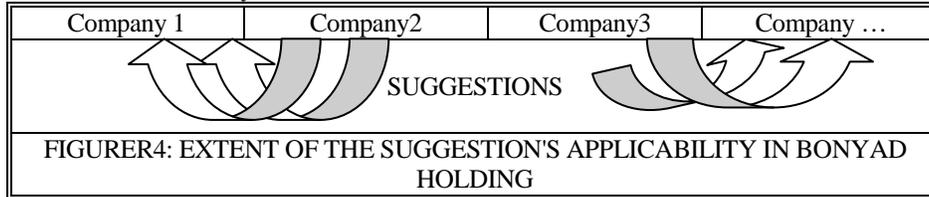
The minimum cash award shall be an amount for example \$25. In the case of intangible suggestions, when the value cannot be measured in actual dollar savings, the committee shall determine the amount of the award which shall not exceed an amount for example \$100.

At the discretion of the holding administrator, cash awards will normally be funded out of the

budget of the department that will receive the benefit. If more than one department will benefit

from a suggestion, the cash award will be funded from all affected departments on a pro-rata

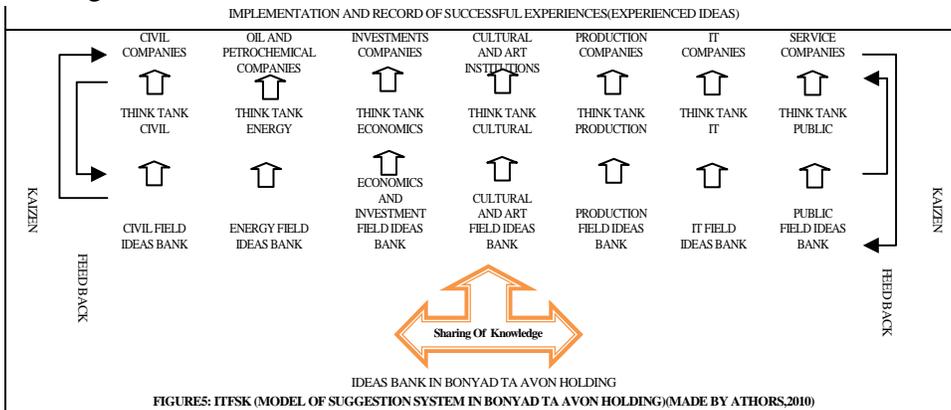
basis or from other budgetary sources. We named this method benefit share that means personnel share in creation benefits of suggestions in organization. Figure 4 shows extent usage of suggestions for companies and institutions of Bonyad:



**Designing the suggestion system model In Bonyad Tavaon (ITFSK model)**

ITFSK is an innovative model for implementation of suggestion system in such companies that has conglomerated holding structure with variety of activities. In this model, we give ideas and save in Ideas Bank In holding company. The bank of ideas are divided to seven categories such as civil, energy, economics and investment, cultural, production, IT and public fields. When ideas are categorized to associated fields, think tank of that field is established and then results of think tank meeting flows to associated companies and institutions. Companies and institutions apply these ideas and after usage of ideas, results and outputs of application of ideas are recorded. The records flows into holding company as feedback. In holding successful experiences flows as sharing of knowledge. In this interactions from field ideas bank to Continuous, we confront continues improvement(Kaizen).In think tank this is used using different techniques such as Delphi system, AHP, Expert choice, Scenario.

Suggestion system can result in kaizen and innovation in environment of organization.



**Feedback**

One other success element for suggestion system is appropriate and timely feedback (Axtell et al., 2000; Fairbank and Williams, 2001; Turrell, 2002; Ford, 1996; and Amabile, 1996). Feedback is important for application, because having no feedback can lead to personnel's feeling ignored and dissatisfied. In addition, all the investigated idea management models recognize the importance of feedback. Feedback can also help in error discovery where personnel can further improve the quality of their ideas based on the feedback they receive. In addition, feedback can improve efficiency as personnel will have the system coordinator / suggestion, to committee comment on their ideas over a period of time, to have better understanding the functioning of the suggestion system. By applying usability guidelines, feedback can be further divided into the mechanism of feedback and the promptness in providing the feedback. As in the case of rewards, feedback should also be flexible in its delivery using e-mail, verbal, or specially designed certificate. Applied studies on websites show that long loading time for websites or providing information increases user frustration and decreases traffic (Nielsen, 2003). Thus, making a case for, making the feedback faster, in order to make it more usable. Finally feedback should be detailed enough to aid personnel know the status of their idea, how to receive the reward (if any) and if it was rejected, and why?

**Sharing of knowledge**

Knowledge sharing culture needs to be created in the organization. One method for knowledge sharing is to use online communities. (Pollard, 2006). This helps to establish community of practice. It is also important to bear in mind that employees with highly specialized knowledge, who bring new ideas and experiences, should be recognized and rewarded to make knowledge sharing a reality in the organization that supports innovation (Popadiuk, Choo, 2006, Pluskowski, 2002).

**Method:**

Our method is field research in Bonyad Ta avon holding and it is applied research that data were gathered with survey research. For data analysis, we had used descriptive research as type of correlation. The questionnaires are distributed among managers and key experts in different businesses of Bonyad Ta avon holding.

### Reliability an validity and reliability:

We designed a questionnaire and some experts and professor to express their comments and then we corrected our questionnaire based on idea of those experts.

For validity, we had done pretest with 30 questionnaires in the target population and Kronbakh alpha coefficient calculated 0.83 by SPSS software.

### Research findings:

The main hypothesis had verified the relation between ITFSK model and suggestion system with 0.01 error level based on information of table 2. ( $r=0.701$ )

Table2:Spearman Correlation Coefficients between ITFSK model and suggestion system

Independent Variable	Spearman correlation coefficient	P Value
ITFSK MODEL	0.701	0.000 **

Explanation: \*\*0.01 error level, \*0.05 error level

Based on table3, it is showed the correlation between secondary independent variables of ITFSK model and suggestion system. Innovation is the highest correlation with suggestion system. Then, secondary hypothesizes were verified.

Table3: Spearman Correlation Coefficients between secondary independent variables of ITFSK model and suggestion system

Independent Variable	Secondary Independent Variables	Spearman correlation coefficient	P Value
ITFSK MODEL	KNOWLEDGE SHARING	0.345	0.000**
	INNOVATION	0.369	0.035*
	KAIZEN	0.251	0.003**
	FEEDBACK	0.330	0.000**

Explanation: \*\*0.01 error level, \*0.05 error level

Based on table4, the results of priorities of secondary independent variables in the recommended model are: innovation, knowledge sharing, kaizen and feedback and innovation has the first grade mean in ITFSK model (suggestion model).

Table4: The result of Friedman test for priorities of ITFSK model indexes

Independent Variable	Secondary Independent Variables	Grade Mean	Grade
ITFSK MODEL	INNOVATION	3.86	1
	KNOWLEDGE SHARING	3.67	2
	KAIZEN	3.66	3
	FEEDBACK	3.34	4

Based on table5, significance of Friedman test for ITFSK model is lower than error level, we can conclude that significant difference is among grade mean of independent variables.

Table5: The result of Friedman test for priorities of ITFSK model variables

N	140
Chi-square test	19.696
DF	3
Sig.	.001

### Conclusion and recommendation for future researches

No matter how big or small the organization is, if the organization does not innovate, it will not be able to survive in competition. Organizations continuously need new knowledge. Knowledge creation have different forms such as new business, improved organizational processes and systems, new products and services.

Implementing new products and processes, as well as obtaining and creating new knowledge, is an undeniable requirement for market competition.

To implement sustainable innovation processes and skills requires that organizations continue to find, define and solve problems and implement sustainable solutions.

Innovations should indicate, and contribute to, the development and realization of environmentally and socially sustainable business strategies and practices. Research should be conducted to address many of the issues of innovation. In this paper we tried to develop an applied model for huge enterprises with variety of activities.

The model (*ITFSK model*) is explained, it depend on the states of organizations and it is contingency model. The aim of the model is creation of an environment for innovation and creativity to attract personnel's ideas and management should consider those ideas and create kaizen in organizational activities. According the above model, suggestion system can result in kaizen and innovation in organization.

Also, we determine the indexes of ITFSK model such as innovation, knowledge sharing, kaizen and feedback system and the model was tested by Spearman correlation coefficient and Friedman testes and all of hypothesis are verified. This model was designed for holding with conglomerate structure and unrelated businesses such as Bonyad Ta avon.

We must ponder on further research into these issues if we are to remain competitive in a knowledge society. Research should be conducted to address many of the issues of innovation. How can suggestion system and innovation contribute to sustainable value creation in the new economy? What opportunities for advancing sustainability are provided by emerging new technology? What are the critical social system and cultural issues involved in turning suggestion system and innovation into a vital, dynamic, self-renewing learning system in support of sustainability?

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