Determining and Prioritization of Creative Opportunities
Case Study: Beautification Organization of Isfahan

Dr. Behrooz Arbab Shirani
Assistance Professor, Department of Industrial Engineering, Isfahan University Of Technology,
Isfahan, Iran
Email: ashirani@cc.iut.ac.ir

Dr. Arash Shahin
Associate Professor, University of Isfahan, Isfahan, Iran
Email: arashshahin@hotmail.com

Sasan Ghasemi
Master of business administration, Department of Management, University of Isfahan, Isfahan,
Iran
Email: Sasanghasemi@yahoo.com

Abstract

The concept of creativity has attracted the attention of numerous scholars and practitioners from various disciplinary perspectives. Many believe that organizations have to be creative in such competitive environment. To achieve this goal effort, hard work, and training play an important role in the creative process. In the other hand the creativity within the organization directly refer to the creativity of employees. Therefore, this article by the aim of training creativity to gain novel ideas, from managers and experts of Beautification Organization, through a training course and workshop, was held. The details of the course and workshop with its restrictions were provided. At last the creative opportunities were prioritized by GAHP method in order to efficient decisions of implementing.

Keywords: creativity, organizational creativity, creativity process, GAHP

1. Introduction

As a fact, we live in the creative age of information, communication and collaboration. Creativity appeals many attentions because of its importance for personal and social prosperity (Florida, 2002; 2005). Creativity and innovation is increasingly recognized as a key source of sustainable competitive advantage that organizations can use to cope with the rapidly changing economic environment (Zampetakis et al., 2007).
Continuous improvement, production and effective adoption of new services, products or processes indicates a major industrial challenge. Studies have recommended that creativity and innovation in products, work processes, and services are key contributors to long-term organizational survival and success (Amabile et al., 1996; VanGundy, 1992; Kao, 1997). As a fact, today, we have and need creative industries (Wong, 2008).

As Williams and Yang (1999) mentioned: “To remain competitive, businesses can no longer follow time-tested formulas of precedent; they must be able to produce and be receptive to innovation, which is synonymous here with creativity in an organizational context” (Williams et al., 1999).

But how a company can be creative? Firms can improve their creativity either through hiring or through internal development of their employees. Since creativity resides with individuals, organizational creativity can essentially vary based on that of its human resources. Depending on the static or dynamic nature of creativity, hiring or development may be more appropriate (Azadegan et al., 2008).

In the other hand, in competitive environment, the adoption of effective problem solving methods can be critical and increase competition across enterprises and industry raising the level of awareness about the significance of creativity in problem solving (Zampetakis et al., 2007). To gain this goal, today, numbers of creative classes rise (Florida, 2002; 2005).

In this field, some theoreticians mentioned that: “finding, identifying and clarifying problems are a preceding and perhaps more creative act than the more convergent behavior of problem solving” (Castiglione, 2008).

Many articles have investigated concept and applications of creativity but just a few of them have studied about creativity in public organizations. The numbers of creative public organizations are still small, but most of them consider creativity as necessity. They admire their creative employees and try to improve the skills of creative problem solving in their work environment (and almost Bureaucracy structure). One way to improve creativity between employees is holding creativity training courses, as what Beautification Organization done for its managers and experts. Beautification Organization is such a public creative organization which related to Isfahan municipal. Its mission, vision and perspective are creativity. Maybe it can be mentioned that its nature of existence is creativity. Isfahan is the central city with high Population and emigrates. Historic, religious, and cultural considerations of Isfahan as cultural capital of Iran, with diversity population and different demands and desires of its citizens, always have forced on Beautification Organization to behave more and more creatively.

Some surveys have been done by Isfahan municipal to discover citizens' demand and needs about beautifying Isfahan city. These surveys show that their demands and needs are changing as the society and culture and their requirements' change. Therefore, discovering potential places or spaces for beautifying aligned with citizens' new demands or requests has become one important tasks of Beautification Organization. To achieve this goal, Beautification
Organization held creativity training class and workshop for its managers and experts through ALA consultants group. The training course included training concept, requirements and applications of creativity, and training problem solving techniques. The workshop included used creativity techniques to discover potential beautification opportunities as creative ideas.

This article first, reviews the literature of creativity, creative organization and problem solving techniques. Then, it explains how opportunities in the creativity training course were extracted. Finally the paper ranks these potential beautification opportunities by GAHP method to identify which opportunities should be carried out by Beautification Organization (by attention to their limited budget). The results of this paper can be used by creativity trainers, by managers, and by other similar organizations for beautifying.

2. Theory literature

2.1. Creativity

Some researchers consider the same meaning for creativity and innovation. But others usually explain “creativity” as "an internal and intellectual process of bringing about new ideas" while “innovation” refers to the "practical application of such ideas" (Mostafa, 2005).

In fact, creativity can be precondition for an organization’s innovation, effectiveness, and long-term survival and can facilitate an organization’s adjustment to shift environmental conditions and take advantage of emerging opportunities (Binnewies et al., 2008).

Webster’s College Dictionary (1991) explains creativity as: “The state or quality of being creative. This is an ability to create meaningful new forms, interpretations, and etc., in an original manner. This is a process by which one utilizes creative ability” (Herbig et al., 1996).

We can put kinds of creativity definitions into some parts. Some definitions of creativity pay attention to the nature of thought processes and intellectual activity applied to generate new insights to problems. Other definitions indicate the personal characteristics and intellectual abilities of individuals, and still others focus on the product with regard to the different qualities and outcomes of creative attempts (Mostafa, 2005).

Most scholars called Creativity as the ability to produce work that is both new and valuable (Amabile, 1998; Sternberg, 1999, p. 3; Dahlen, 2008). New refers to unusual, unique, new point of view, varied, original, breaking from existing patterns and contributing something to the field which was not there before. Valuable means that the product meets a need or solves a problem; it is useful, effective, and efficient, serves a purpose and contributes to society (Martens, 2011; Sadi et al., 2008).

ALA is a consultant company which holds training courses about innovations, creativity, management, and so on.
Ideas can be called novel when “they are unique relative to other ideas currently available in the organization” (Shalley et al., 2004), and they are called useful when “they have potential for direct or indirect value to the organization, either in the short or long-term” (Shalley et al., 2004).

According to Castiglione (2008) creativity is based on a person’s ability to produce new and effective: thoughts; insights; actions; restructurings; and objects considered to be of – high – social; economic; and scientific utility (Castiglione, 2008). This is in contrast to the psychometric intelligence, which means finding the unique predetermined solution of the problem (Sternberg, 2007).

In considering the definition of creativity, the important matter is distinction between creativity in the context of truly novel ideas and creativity in the context of problem solving. Although both types of creativity are important to most organizations, creative problem solving is a more common type of creativity that can be more accessible to most people and more widely applicable in organizational settings.

As Reiter-Palmon and Illies (2004) mentioned, creative problem solving can play a key role in maintaining an organization’s competitive advantage by helping its members to effectively address the unique and poorly defined problems they commonly encounter (Reiter, 2004). Creative problem solving techniques is used by both individuals and groups expressive paradigm-breaking techniques such as guided fantasy (McFadzean, 1998).

Creativity thinking and problem solving is based on an individual cognitive process which is influenced by the nature and rate of change that an individual is experiencing at any given time (Castiglione, 2008).

There are three creativity levels which are exercised: individual, team and organizational. In this article we focus on organizational creativity and it is explained in the next part (Sarri et al., 2011).

2.2. Creative organization

Recently, the issue of creativity can gain increasing interest as an important organizational resource (Sundgren et al., 2007). Innovation and creativity are generally known to be critical competencies for improving organizational staying power (e.g. Amabile, 1998; Woodman et al., 1993).

In fact, to remain competitive, firms would like their employees to be creative at work by generating novel and appropriate ideas for products, processes, and approaches (Shalley and Gilson, 2004). The use and development of creative ideas allow firms to respond to opportunities and, adapt, grow and compete in this changing world (Amabile, 1997). Considering that customer needs have been become more diverse and require more
customized solutions, creative solutions may gratify customers and increases their satisfaction (Sousa et al., 2011). Contemporary studies into innovation and creativity suggested that successful firms are effective at exploiting existing competencies to create gradually improved exploitative innovations while at the same time successfully exploring new competencies and technologies to create explorative breakthrough innovations (DiLiello, 2006; Binnewies, 2008).

An important step in understanding creativity in an organizational context is to investigate the concept of organizational creativity (Sundgren et al., 2007).

The term creativity, used in a workplace context, defines diversely. Researchers, instructors, and consultants often explain it by referring to one or more of a variety of factors, including attributes, conceptual skills, behaviors, abilities, technologies, empowerment, the process of experience, or external influences. This lack of consensus can lead to conclude if organisations want to encourage creativity, they must explore the range of identifying factors. These let managers to focus on the manifestations of creativity they believe are appropriate to their specific problems or situations (Mostafa, 2005).

In context of organisational creativity, Zhou and Woodman (2003) mentioned that creativity requires taking into account the factor of individuals working together via “the creation of a valuable, useful new product, service, idea, procedure, or process by individuals working together in a complex social system”. Pierson (1983) highlighted that “creative organisations differ in that their product is creativity”.

Organizational creativity focuses on social and group creative processes. In the other hand, organizational creativity can also relate to the extent to which the organization has hold formal approaches and tools and utilized resources to encourage meaningful novel behavior in the organization (Sundgren et al., 2007).

Creativity in the workplace has often been related to the generation of novel ideas, the development of innovative products and services and as such with organisational performance, competitive advantage and growth (Kanter, 1983, Woodman et al., 1993, Oldham and Cummings, 1996). In fact creativity is an important concept both from the perspective of organisational theory and from the viewpoint of management practitioners interested in fostering creativity of employees to achieve their organizations’ goals (Sailer, 2011).

Since it is proved that employees’ creativity can make an important contribution to organisational innovation, effectiveness and survival (Amabile, 1996; Kanter, 1983), it is vital for organisations to create the organisational contexts which are most supportive to idea generation and creative thinking (Amabile, 1998). In other words, for employees to be creative there should be an appropriate work environment that supports the process of creativity. Moreover, the literature indicates that organisational support and evaluation of ideas are necessary in order to support creativity (Kanter, 1983) and that rewards and encouragement
are necessary to encourage creativity and support the creative work environment (Amabile, 1996).

Many researchers now recognize that employee creativity is a necessary ingredient to achieve competitive advantage (Amabile, 1996; Shalley et al., 2004).

Further, creative ideas can be generated by employees in any job and at any level of the organization, and not be limited to jobs traditionally viewed as necessitating creativity (Sousa et al., 2011).

Mott’s (1972) comparative research found that effective organisations are simultaneously efficient and creative. Efficiency referred to optimizing, stabilizing, and polishing current methods and routines for highest quantity, quality, and customer satisfaction at the lowest cost possible. In this way, Organisational creativity can define as deliberately changing current methods to make new levels of quantity, quality, cost, and customer satisfaction possible. Both new methods and new products result from creativity (Sailer, 2011).

Basadur et al. (2002) showed that creativity can be developed, increased, and managed by organisations. Specific results from increasing organisational creativity can be included new products and methods, increased efficiency, greater motivation, job satisfaction, teamwork, a focus on customer satisfaction, and more strategic thinking at all levels (Mostafa, 2005). Many studies point to a clear positive association between training and creativity (Azadegan, 2008).

Accordingly, researchers and organizations are highly interested in identifying the factors that foster employees’ creativity in order to directly stimulate an organization’s effectiveness and promote employee’s active mental health (Binnewies et al., 2008).

Another requirement of creative organization except creative employees is work environment. Creativity theory mentions that when a working environment facilitates idea generation, knowledge sharing and creative problem solving, individuals in that environment are more likely to generate creative ideas that involve unique concepts or new applications of existing concepts (DiLiello et al., 2006)

Some believed that creativity within any organizational context may be conceived as an outcome of a cognitive process that begins with, for example, a perceived need to respond to change by:

- Solving an important business problem;
- Developing an innovative process or service; and
- Thinking about the world in new and useful ways (Castiglione, 2008).

But it should be considered that for being able to acknowledge the context-specific aspects of creativity in organizations, it must be articulated in terms of the organization’s mission and cannot only represent novel acts. It must produce value relative to an organization’s mission
and market. This means that creativity in organizations is valuable only if it is implemented in such a way that it is adapted to the organization’s culture, values, and processes or if it turns company values and processes upside down (Sundgren et al., 2007).

Thus organizational creativity can be seen as a phenomenon that is structurally embedded in the organization rather than as some innate quality of a few extraordinary individuals, emphasizing that organizational creativity is something more than a collection of creative individuals (Sundgren et al., 2007).

2.3. Creativity techniques

According to McFadzean (2000) and Clapham (2000), creativity can be strengthened by changing a person’s mindset or paradigm. There are numerous types of creative problem-solving techniques. McFadzean (2000) classified these into techniques that are used by individuals and those that are utilized by groups. She also divided them into techniques that use related stimuli and those that use unrelated stimuli (Sadi et al., 2008).

The most important problem solving technique is brainstorming. In this training course, the trainer used this technique as the main one, together with others such as: SCAPMTER technique. In the following part these techniques are explained.

2.3.1. Brainstorming

Technique of Brainstorming was originally developed in the discipline of marketing, by Alex Osborn, an advertising executive, in the 1940s. It was utilized as a way of quickly generating multiple creative ideas (Martens, 2011).

Brainstorming allows people with multiple areas of expertise to come together with the effect that the whole is greater than the sum of the individual parts. Solutions may present themselves in such an environment that would not be evident to individuals working alone on the same problems (McFadzean, 1998).

Brainstorming has at its centre four key assertions. These assertions are first, that those involved in the Brainstorming are not to criticize emerging ideas so as not to stifle their generation. Second, Brainstorming group members are told to verbalize all their ideas as they think of them, without fear of criticism. Third, Brainstorming group members are told to try and generate as many ideas as possible without any self-censorship along the lines of the perceived quality or worthiness of the ideas. Finally, Brainstorming group members are encouraged to combine other ideas into their own and to build on the ideas of others and develop those ideas further (Boddy, 2008).

The following instructions were used in this brainstorming session:
1. Preparation – the facilitator meets the problem champion to develop a statement of the problem, to select the participants and to set up the meeting.

2. Orientation – the facilitator reiterates the problem statement to the group, sets out the ground rules, instructs the group on the purpose and process of brainstorming and conducts a warm-up exercise, if necessary.

3. Idea generations – the facilitator asks the participants to generate possible solutions, without criticism, for about 30 to 45 minutes. The ideas are recorded on a flipchart by the facilitator who must also encourage the group members to continue generating ideas.

4. Evaluation – the facilitator leads the group back through the list of ideas encouraging them to combine statements and identify valuable ideas.

5. Post-session follow-up – the facilitator designates one person to receive any additional ideas that may occur to members after the meeting (McFadzean, 1998).

Another main technique which was used in this session was SCAMPTER.

2.3.2. The SCAMPER Technique

The SCAMPER technique uses a set of directed, idea-spurring questions to suggest some addition to, or modification of, something that already exists. It has also received much attention as a learning tool that fosters awareness, drive, fluency, flexibility, and originality. The stimulus comes from being asked to answer queries that one would not normally pose. The changes that SCAMPER stands for are:

- **S**: Substitute (e.g., components, materials, people)
- **C**: Combine (e.g., mix, combine with other assemblies or services, and integrate)
- **A**: Adapt (e.g., alter, change function, use part of another element)
- **M**: Magnify/Modify (e.g., increase or reduce in scale, change shape, modify attributes)
- **P**: Put to other uses
- **E**: Eliminate (e.g., remove elements, simplify, reduce to core functionality)
- **R**: Rearrange/Reverse (e.g., turn inside out or upside down) (Marrapodi, 2003).

2.4. Creativity process

A structured approach can facilitate Creative thinking. Alex Osborn, who developed brainstorming, is credited with laying the foundation of modern creative problem solving process. Osborn’s work influenced psychologist Dr. Sidney J. Parnes. Parnes made three major improvements to Osborn’s model. He added three stages into Osborn’s process, which resulted in a six-stage process (Parnes, 1992):

- Mess-finding
• Fact-finding
• Problem-finding
• Idea-finding
• Solution-finding
• Acceptance-finding

Each phase is characterized by divergent thinking to broaden the issues, followed by convergent thinking to obtain resolution (Volkema et al., 1995). For the theory framework of workshop, this process was implemented by the trainer.

3. Research Method

The purpose of holding the creativity training course and workshop and applying creativity techniques within Beautification Organization is determining creativity opportunities from its managers and experts viewpoints. By changing citizens' needs and priority, city beautification projects should change, too. Indeed, previous procedures do not satisfy citizens. In the other hand, Isfahan city as a cultural capital of Iran require special creative beautification processes.

There is a strong relationship between Beautification and creative. As a fact the beautification organization cannot gain its goal without creativity and creative employees. To achieve this aim, and develop its employees' creativity ability, creativity training course and workshop was hold by ALA consultant group. The main aim was extracting creativity opportunity to beautify the city. Then these creative ideas were ranking to be comparable and determine how important they are. AHP method, used to rank ideas, helps beautification organization to decide which creative ideas or creativity opportunity should be apply and conduct.

At the first training program, the training class was held and creativity concept, its necessity and requirements were explained. Then creativity process was mentioned and introduced as a guideline of the workshop. Then the trainer focused on the most helpful and practical techniques and described applying them in detailed for employees. They deeply recognized these techniques by simulation and short exercises.

At the second program, the workshop was held to help experts applying what had learned. The participants used their learned and implemented creativity process in order to produce creative ideas. In the first phase of creativity process, the trainer currently defined the problem and clarified the main aim and functional scales. In the second phase, the brain storming was utilized. The trainer normally put participants into 4 groups which were 4 participants in each one. Before running the brain storming session the trainer mentioned its rules again. The trainer directed the thoughts and ideas into city beautification context as a facilitator. Each participant first wrote his/her ideas in twenty minutes and then one of the members of each group wrote all ideas on the board to review and analysis. The trainer tried to eliminate factors which restricted novel ideas and develop areas they could pay attention to, like street beautification and coloring. After writing ideas on groups' boards, trainer tried to encourage participants to produce more creative ideas by SCAPMTER and why-why techniques. In fact,
ALA experiences showed that reviewing and analysis written ideas within the group and by creativity techniques could lead providing more and useful ideas. Some challenges which the trainer faced with listed here:

- At the beginning of the meeting, the participants thought, and wrote very slowly. They could not write their ideas well.

- When they investigated each idea on the board, some participants ridiculed others for their ideas. The trainer conducted such situations to avoid leading annoying situation.

- Group thinking was emerged among members of each group. To eliminate this factor, the trainer asked members to mention their reason to confirm or reject an idea. He encouraged them to provide more creative reasons.

- Another problem which the trainer handled well was the silence of some participants. This silence can be because of fear of being judged or ridiculed. The trainer by recognizing these participants asked them their ideas or thoughts.

- Some participants could just make or offer a few ideas. The trainer helped them to combine or modify their previous ideas.

Finally at the third phase of creativity process, assessing and evaluating ideas (which remained as the best ideas on the board) were done. Each group separately but targeted, evaluated ideas to find the best solutions. The scales to choose ideas as proper solution were: practicability of idea, adequate cost of implementing idea, usefulness of idea, beautification context and etc. these scales were determined by beautification experts in the training course.

In the next step four groups presented their chosen solutions for other groups. They discussed to achieve the most effective and efficient solutions. These final extracted solutions were the creative opportunities which were the purpose of this training course.

One of the resources of idea producing was creativity training workshop and using creativity techniques like brainstorming, but some other resources were considered to extract creative ideas for beautifying city. One of these was requests, offers and complains of municipal's experts and employees. Some of these issues modified to creative ideas and some of these proposal ideas chosen as creativity opportunity in the training workshop. Another resource of recognizing creativity opportunities were benchmarking. To gain this goal, creative operations of big cities municipals in other countries were investigated and finally some operations chosen by beautification context in the training workshop.

In conclusion, twenty creative opportunities were recognized by using creativity techniques in the workshop, suggestions of municipal's experts and benchmarking. In this step the superior manager of Beautification organization and two experts chose ten most appropriate
opportunities by considering implementation factors like: budgeting, time-tabling, urgency and necessity. Then we ranked this opportunities by applying Analytical Hierarchy Process (AHP).

3.1. Analytical hierarchy process

Illustration of the framework presented in this section is intended to establish confidence in the soundness and usefulness of the framework. The framework involves multi-criteria decision factors (creative opportunity) and consideration of several qualitative judgmental variables; analytical hierarchy process (AHP) is found most suitable to implement the framework in such a decision scenario (Wu et al., 2012).

The validation exercise is done in two stages. In the first stage, AHP is used to determine the magnitude of importance of criteria and alternatives of the proposed framework. In second stage the weights of the alternatives that were obtained in stage one.

In this paper, in order to rank and assess creative opportunities which extracted training workshop and using brainstorming, suggestions municipal’s experts and benchmarking, group AHP was applied. Ranking creative opportunities, as the main purpose placed in first level of Hierarchy Process and five criteria included: city beautification, improvement acceptance of municipal among citizen, development citizen participation, relationship with Isfahan history and tourist attraction, placed in the second level. Ten objectives as creative opportunities placed in the third level as shown in figure 1.

![AHP graph](image)

**Figure 1: AHP graph**

In order to rank, a questionnaire was conducted. The questionnaire was used for evaluating and comparing criteria and alternatives to find their importance by nine-degree scale. The questionnaire was distributed among five experts of beautification organization to discuss and answer by this group.
4. Results

The results of this study conclude creative ideas which are prioritize by AHP method. As the results show for assessing alternatives among all creative opportunities modern lightening of Naghshe-Jahan Square has the highest weight for beautifying. The Naghshe-e Jahan Square of Isfahan is one of the biggest city squares in the world and an outstanding example of Iranian and Islamic architecture. It has been designated by UNESCO as a World Heritage Site. It is called as the symbol of Isfahan. In conclusion, its importance for Isfahanian and Isfahan's tourists is obvious. The results showed in table 1.

Table 1. Prioritization of creative opportunities

<table>
<thead>
<tr>
<th>No.</th>
<th>alternatives</th>
<th>Total weight</th>
<th>priority</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>modern lightening of Naghshe-Jahan Square</td>
<td>0.215</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Beautifying the ugly place and space by three-dimensional paintings</td>
<td>0.191</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>Kites park</td>
<td>0.135</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>Birth park</td>
<td>0.134</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>Dirty park</td>
<td>0.115</td>
<td>5</td>
</tr>
<tr>
<td>6</td>
<td>leasing the green space of city to florists</td>
<td>0.072</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td>Adult toys</td>
<td>0.071</td>
<td>7</td>
</tr>
<tr>
<td>8</td>
<td>Organizing distributed advertisements</td>
<td>0.027</td>
<td>8</td>
</tr>
<tr>
<td>9</td>
<td>renting citizens' gardens</td>
<td>0.023</td>
<td>9</td>
</tr>
<tr>
<td>10</td>
<td>Integrating of the city advertisement places</td>
<td>0.015</td>
<td>10</td>
</tr>
</tbody>
</table>

As the results show for assessing criteria, tourist attraction has the highest weight. Isfahan is one of the historical cities of Iran and has a lot of important attractive places for any kinds of tourists. Isfahan municipal has a special viewpoint to tourist attraction and their strategy is aligned with this goal. The results showed in table 2.

Table 2. Prioritization of criteria

<table>
<thead>
<tr>
<th>No.</th>
<th>criteria</th>
<th>Total weight</th>
<th>priority</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>tourist attraction</td>
<td>0.501</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>development citizen participation</td>
<td>0.226</td>
<td>2</td>
</tr>
</tbody>
</table>
5. Conclusion and Discussion

This paper by empirical-reporting training approach, described training course of creativity after investigating creativity literature. The brainstorm session was run successfully by the trainer to extract creative ideas. This course was hold by ALA consultant group for Beautification Organization's experts. The outcomes of training course were some creative solutions for beautifying Isfahan city which called creative opportunities. The creativity process which applied in this training course was conducted by Alex osborn and modified by Parnes (1992). Brainstorming and SCAMPTER was the main techniques which utilized in creativity workshop. These opportunities, together with creative suggestions of municipal's experts and benchmarking of big cities' creative operations were ranked by AHP to determine which alternatives should be implemented by Beautification Organization. Ranking creative opportunities, as the main purpose placed in first level of Hierarchy Process and five criteria included: city beautification, improvement acceptance of municipal among citizen, development citizen participation, relationship with Isfahan history and tourist attraction, placed in the second level. Ten objectives as creative opportunities placed in the third level. The results showed that among all creative opportunities, modern lightening of Naghshe Jahan Square has the highest weight for beautifying. By ranking criteria, it was found that tourist attraction has the highest weight.

One of the main limitations of this study was lack of previous studies in creativity of public sector organizations. Another problem emerged in holding training class. Beautification experts' lack of knowledge about the importance and necessity of creativity, fear of changing mind, and feeling unfriendly with brainstorm session were such problems.

The results of this research can be useful for following groups: for creativity trainer and brainstorm runner, for organizations which seems have a necessary need for creativity, for creativity researchers and for who interests in creativity.

The model of this research for training course, extracting ideas, ranking solutions and assessing them can be used by other researchers to compare the results.

References


Binnewies, Carmen; Ohly, Sandra (2008). Age and creativity at work: The interplay between job resources, age and idea creativity, Journal of Managerial Psychology, Vol. 23 No. 4, pp. 438-457


271


Sailer, Kerstin (2011). Creativity as social and spatial process, Facilities, Vol. 29 No. 1/2, pp. 6-18, DOI 10.1108/02632771111101296


