

Effective Factors in Commercialization of Traditional Arts in Isfahan from the Perspective of Activists in this Field

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Abstract: Art economy is the newborn scientific scope trying to prepare a field for art to enter to business market in order to create an income source for artist and to create a strategy for development countries through improving economic indices. Importance role of traditional arts in this scope as well as social and cultural scopes is obvious. This study aims to identify effective factors in commercialization of traditional arts to help involved persons for development of these arts. This study is applied with descriptive method in which researcher-made questionnaire including 5-point Likert scale and 73 items were used to analyze effective factors in commercialization of traditional arts. Face and content validity of questionnaire was confirmed in accordance with the pinion of advisor professor and some experts in this field and reliability of the questionnaire was gained using Cronbach's alpha equal to 0/92. Statistical population of this study includes activists in traditional art of Isfahan, Iran. To determine effective factors in commercialization of traditional arts based on Jolly Model some factors were studied. These factors comprise idea creation, equipping and approval of profits, commercial processing, mobilization of resources for display, displaying content in products and processes, equipping components of market, promoting acceptance level, equipped with complementary assets to deliver the goods, retaining commercialization status and achieving long-term profits of commercialization.

Key words: Commercialization, traditional arts, Jolly Model, market, good

INTRODUCTION

It is essential to prepare the context to identify and commercialization of Iranian traditional arts because every country tries to introduce its identity to the world even there are some countries that create fake identity while Iran is a country full of art in view of experts of the world. In Heritage Dictionary, commercialization has been defined as the application of business methods to obtain profit and act of benefitting. Some other definitions including (introducing a product or service in market to obtain profit) and (process of changing something to a commercial activity) are the synonym definitions used for commercialization (Fakoor, 2006). According to Skeete and Mobin (2015), commercialization is the process to transmit and change generated knowledge in research centers to different types of commercial activities (Hashemnia *et al.*, 2009). Technology commercialization is a process in which an industry or profession would find a way to use simple scientific and engineering advancements of technology in order to get close to market demand. In other words, technology commercialization means the transmission of the idea and plan to market through a rapid and optimal method within current commercial environment. This

process is continued through some steps including idea designing, design, development, increasing production, marketing and efforts to progress the product (Kumar and Jain, 2003). Therefore, commercialization comprises activities than can gain ideas for technology commercialization, develop these technologies, develop realized research technology, construct the initial sample using developed technologies, develop new process of development, optimize existing processes of deliver product to market and create sale situation and new infrastructures (Naseri, 2006).

Although development of traditional arts can create the most occupation with lowest investment but there is not an accurate identification from its situation in Iran so that its effect on economy is not properly determined. Isfahan has been an origin for art and majority of artists in Iran are performing in this city dealing with crises through severe technologic and cultural changes in this field. Interaction and coordination between activists of traditional arts arena and creation of an appropriate field for relevant preferences to commercialization by artists of this city would lead to infrastructural activities to gain developed traditional arts. Unfortunately, there has not conducted enough studies about commercialization of

traditional arts despite the importance of this matter. This study, tends to respond this question that what are the effective factors in commercialization of traditional arts. Successful marketing and commercialization of traditional arts requires a complete identification of behavioral methods of involved persons in commercialization process including manufacturers and consumers.

Theoretical bases: Commercialization is the process of entering products and services into economic business cycle (State Statistics Committee of Science, Research and Technology, 2008). Hagglade *et al.* (2012) has defined technology commercialization as the transmission of knowledge and technology from an individual or group in order to use it to a system, process, product and or a procedure.

Traditional arts are elegant arts and industries growing and passing their formation steps through centuries along with their roots and traditions. One of the features of traditional arts is symbolic and allegorical aspects. A traditional artistic work is beautiful and this beauty is in nature of traditional art. Those arts such as painting, sculpturing, tiling, graphics, photography and some performing arts like cinema, theater and arts combined with industry are created by magic fingers of human that are expandable in all cultures and nations without any limitation. World races, international awards, encouraging organizations for artistic works indicated internationality of the art language. For this reason, Auguste Comte believed that all of children should learn painting and music considering the international language of art (Molaei *et al.*, 2013).

Commercialization of traditional arts: The scope of traditional arts is not like an ordinary trading organization. Private sector is not willing to accept the risk of investment in traditional art sector and human source

does not consider this sector as the main priority of job due the low budget of this sector, income instability in this industry and lack of a determined trustee organization for relevant affairs to traditional arts. Therefore, Jolly Model is the most appropriate trend to cover management of the whole process of commercialization from vision and idea to final commercialization of products. Technology commercialization process by Jolly (1997) (according to Fig. 1) includes five main parts (1, 3, 5, 7, 9) indicating main elements of innovation process. Any input needs different types of performance and foreign resources. Each of these parts indicates an independent process of value creation presenting a conscious path for input, output and coordination with performances and financial resources. The steps 2, 4, 6, 8 are practical phases preparing financial sources and supports in order to pass each stage. Therefore, commercialization of traditional arts is a conscious path and fundamental program to access to various markets for idea and products of this scope.

Realization of idea: this step is along with a view of technique-market in which there is a connection between market opportunities and technology. The main goal in this step is to identify commercialization potential of the idea. The main resource providers of this phase include universities, research institutes, direct and indirect governmental supports. Private sector is not tended to invest in this step due to the high technical and commercial risks (Pakzad Bonab and Taghavi, 2009).

Equipping and approval of profits: There is not enough financial support but sufficient support in this step to change the idea to a value creator process.

Commercial process to define commercialization potential: This step includes some activities such as identification of technical features and product performance, validation of technical abilities, market and

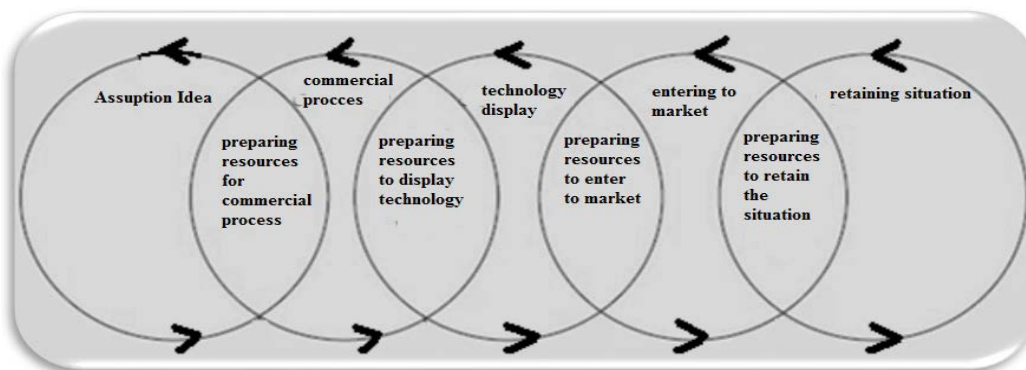


Fig. 1: Commercialization of technologies, from mind to market (Jolly, 1997)

commercial plan evaluation. This step has a high risk due to lack of technical and market confidence so that private sector rarely accepts such risk. Resource providers for activities of this step include R and D university centers, R and D companies and entrepreneurs.

Equipping resources for display: Identification of the real opportunities of product and knowledge related to displaying method of something is an important step of commercialization process. These abilities are related to research infrastructures and required skills.

Showing content in products and processes (displaying and stabilization of technology): The purpose of this step is to depict technology in products. The steps of this display are as follows:

- Evaluation of strengthening current abilities of technology and possible paths
- Initial ideas to concentrate on a special category of products
- Following parallel developments in complementary technologies
- Determining and definition of real ideas of products
- Product development

In other words, this step is related to product development. This process comprises a set of activities to prepare product and introduce it to market. This continuous process includes, initial design of production system, construction of the initial sample, test and analyzing feasibility of product, completing the product and production system, experimental marketing and validation, creating production requirements and transporting product to market.

Equipping components of market: It is required to identify components of market in this step. For this purpose, it is essential to find important effects and identify an appropriate strategy to attract them within technology delivery and demand creation. Promoting acceptance level: the acceptance level of technology can be increased using some methods including market discovery (pulling) and market creation (pressure). In market discovery, relevant rights to market are reviewed and opportunities that create pressure on technology are discovered. Effective steps to create demand and reduce resistances are identified in market creation.

Equipping complementary assets for product delivery: It is required to equip complementary assets to deliver product to market. These assets include financial assets, technical and management personnel, technical/product knowledge, the market/product concept, the right of access to raw materials and elements, equipment and

technical knowledge process, capacity generation for intermediate products, preliminary assembly, marginal product and access to market.

Sustaining of commercialization and realization of long-term value: Creation of long-term value is related to technology use and retaining of its results. Sustaining of commercialization to realize long-term value is done through investments to present technology to market. Expansion of use means the change in relevant features to products that have combined technology or created new sectors of market and used modern technologies. Retaining of results of domination on critical aspects of technology is related to concept of use expansion. The main key of value added created by new technology is long-term durability of product or process of technology creation as a valuable product. The main part of created value should return to developer. There are some special methods to realize this matter including retaining technology applications, increasing consumption and monopolization of technology to gain long-term profits for created the company and technology (Matin and Mohammadzade, 2013).

Study background: Abbasi Esfanjani and Forouzande Dehkordi (2015) identified commercialization process within eight steps as follows:

- Ideation, screening the idea based on the need of market and industry
- Conducting scientific, technical and economic studies, market and business studies
- Development of new knowledge in frame of findings and innovations, record and preserve intellectual asset, constructing of experimental sample of product
- Evaluation of the results of R and D based on commercialization ability, assessment of the market potential and commercial future of study results (analysis of demand and supply sides study results)
- Introducing, establishment and disclosure study results
- Determining commercialization strategy (method of study results, assignment and formation of generating companies) and implementation of this strategy
- Refinement of commercialization activities and evaluation of commercialization performance
- Benefitting from the results of study

According to the opinions of experts about triple effective factors in commercialization, field factors have had the first rank and content factors and structural factors have had second and third rank. Bandarian *et al.* (2014) conducted a study under the title of "Assessment of the Technology Commercialization

Models and Presenting a Domestic Model to Support Technology Commercialization in Iran” and mentioned that wealth generation from research and technologic activities is related to commercialization of obtained achievements. According to the mentioned points and tendency of Iran toward knowledge-based economic development, it would be required to prepare infrastructures and requirements of commercialization of technologic achievements that are results of scientific development and knowledge-based economy. Bandarian has introduced key factors of success of technology commercialization at national level as having a national and comprehensive view toward idea to market cycle, supportive and facilitating context of technology commercialization, institutional system of technology commercialization management, creating networks at national and international levels for technology commercialization. Shayestefar and Khazaei (2014) has conducted a study under the title of “pathology of packing and supplying handicraft product” expressing that modern and matched packing style with production structure is the most considerable point in world markets. Investors can create a specific group to be proper intermediate between workshops and sales market. In other words, packing should be specialized and each of investors should focus on a special goal because of various branches of handicrafts. The other step is optimization of export based on the identification of target markets. Molaee *et al.* (2013) proposed a pattern for advancement of traditional arts in frame Iranian-Islamic pattern. Strategies were divided into macro strategies and executive strategies in this study. Macro strategies include management correction, tourism development, centralization of all traditional art activities in a coherent and responsible institute, culture making, increasing the diversity of traditional art works, increasing practical fields of traditional art works, increasing quality, quality control and supervision, standardization, increasing society trust, creating attraction for private investment and increasing the role of private management in traditional arts. Executive strategies comprise establishment of universities for traditional arts, creating a world sign (brand) in cooperation with UNESCO and other international cultural institutes, presenting national standard sign to traditional arts, presenting tax exemptions for activists and investors in scope of traditional arts, deregulation within management of traditional arts, replacement of advanced rules and regulations within management of traditional arts, presenting financial facilities for investors in this scope, providing insurance facilities for investors in scope of traditional arts and establishment of research and specialized centers in scope of different types of traditional arts. Rahim *et al.* (2015) studies the role of academic entrepreneurship in commercialization of

newborn creative technologies with emphasize on Nanotechnology. Their analyses indicated that entrepreneurship competence would be vital for successful entrepreneurs, if it included risk taking, fearlessness, knowledge, value and self-confidence. Moreover, the effect of other complementary infrastructures including university support from academic entrepreneurs was studied in this paper to fulfill the entrepreneurship program of technology. It was observed that appropriate entrepreneurship and infrastructures of participant society was important in strengthening academic researcher to produce innovations. The two mentioned elements are cost effective within practical technology and commercialization. Borzouei *et al.* (2011) indicated in a paper under the title of “Effective Factors in Nanotechnology Commercialization Within Agriculture Sector” that about 65/75% of variance of effective factors in nanotechnology commercialization within agriculture sector would explain five infrastructural, economic, political, cultural and financial support factors. Bandarian (2007) studied commercialization potential of new technologies in preliminary steps of development with fuzzy logic. He stated that initial proposed plans of primitive evaluation of commercialization potential before implementation is one of the solutions to eliminate the problem of commercialization and the important point is related to estimation method of commercial potential of research achievements. Therefore, determining the commercial potential of a new technology is a required condition for definition of a successful commercialization strategy. Bandarian measured commercial potential of research plans in Oil Industry Research Institute and concluded that commercialization is a complicated process comprising some skills such as development of product, market estimation, market strategies, management of financial sources, production and financial sources management. Holmgren studied technology commercialization in Cheris Gas project that is a large project of development of biologic energies in Europe in accordance with the pilot scale of majority of technology projects of European Union that their results have not been commercialized. The fact is that obstacles in front of profits of industry and private investments for reconstruction exists when private sector (industries) are not ready for collaborating in applied programs. However, this project would launch a commercial-oriented structure such as management of launch and start up industry. To invest in this project and commercialization of it, it is required to create a clearer situation in development to design the structure and leadership of ideas.

Hypotheses:

- Idea creation is an effective factor in commercialization of traditional arts

- Equipping and approval of profits is an effective factor in commercialization of traditional arts
- Commercial process is an effective factor in commercialization of traditional arts
- Mobilization of resources for display is an effective factor in commercialization of traditional arts
- Showing content of product and process is an effective factor in commercialization of traditional arts
- Equipping of market components is an effective factor in commercialization of traditional arts
- Promotion of acceptance level (entering to market) is an effective factor in commercialization of traditional arts
- Equipping complementary assets to deliver product is an effective factor in commercialization of traditional arts
- Retaining the situation of commercialization and realization of long-term benefits is an effective factor in commercialization of traditional arts
- Demographic features (gender, age, education) have different effects on commercialization of traditional arts. There is difference between effective factors in commercialization of traditional arts

MATERIALS AND METHODS

This study is a descriptive-survey study. Simple random sampling was the sampling method of this study. Required data and information were collected through library and field method. Extraction of required matters (such as dimensions, features, principles, models, theories and conducted studies inside and outside of Iran and theoretical bases) were gained from library and digital sources to design the tool of study.

Statistical population and sample: Statistical population of this study includes all activists in traditional art sectors such as specialized and experienced experts (professors of art university, experts, artists and art students of traditional arts) in Isfahan, Iran. The number of these people was equal to 50000 members based on the obtained information from Cultural Heritage, Handicrafts and Tourism Organization. Sample size was obtained to 384 members based on the Cochran formula.

Measurement tool: Researcher-made questionnaire has been applied in this study for data collection. This measurement tool is a questionnaire with two parts that first part is related to assessment of demographic information and second part includes examining the effective factors in commercialization of traditional arts based on the frame of commercialization model of Jolly proposed in 1997. This questionnaire comprises 73 questions within five-point Likert scale.

Validity and reliability of questionnaire: In accordance with researcher-made questionnaire of this study, after creation of primary tool and final correction its validity was searched by researcher. First, the questionnaire was given to expert people to ask them propose their opinions in relation with content, grammar, use of appropriate phrases and right place of items. In this step, some changes such as omission or revising of items were done and finally, it was confirmed by several professionals and professors. After this step, the tool was examined by some respondents to determine the hardness, ambiguity and coordination between items and main goal of questionnaire dimensions and perception of items then opinions of expert people were studied in order to improve face validity of questionnaire. Cronbach's alpha coefficient was applied in this study to determine reliability of questionnaire. This method is used to calculate internal consistency of measurement tools such as questionnaire. Reliability of questionnaire of effective factors in commercialization of traditional arts was obtained to 0/92 using Cronbach's alpha. Reliability of sub-scales of questionnaire of effective factors in traditional arts commercialization is described in Table 1. Implementation method and analysis: the questionnaire of this study was responded by sample members in summer 2015; questionnaires were gathered within a 10-days interval and 370 questionnaires were collected and statistically analyzed.

Statistical analysis method: Analysis of this study was done through SPSS-19 Software at two descriptive and inferential statistics. At descriptive statistic part, statistical features such as frequency, percent, mean and standard deviation were used:

- Univariate t-test: To compare each question with criterion score, Univariate t-test was applied questions 1-9 were analyzed using this method
- Friedman test was used to rank the effective factors in commercialization of traditional arts

Table 1: Reliability

Dimensions	Cronbach's alpha
Equipping complementary assets	0/90
Acceptance level	0/85
Equipping components of market	0/94
Retaining commercialization situation and realizing long-term benefits	0/93
showing content of product and process	0/92
Mobilization of resources for display	0/95
Commercial process to define commercialization ability	0/92
Equipping benefits	0/87
Idea creation	0/88

- Multi-way ANOVA test was used to test significant difference between several means when independent variable has more than two levels. The eleventh question was analyzed through this method

RESULTS

Data analysis

Hypothesis 1: Idea creation is an effective factor in commercialization of traditional arts. According to findings of Table 2, the effectiveness of idea creation on commercialization of traditional arts has been equal to 3/94. Since, the calculated t is more than table t, the effectiveness level of idea creation on commercialization is more than average level.

Hypothesis 2: Equipping and approval of profits is an effective factor in commercialization of traditional arts. According to findings of Table 2, the effectiveness of equipping and approval of profits on commercialization of traditional arts has been equal to 3/97. Since, the calculated t is more than table t, the effectiveness level of equipping and approval of profits on commercialization is more than average level.

Hypothesis 3: Commercial process is an effective factor in commercialization of traditional arts. According to findings of Table 2, the effectiveness of commercial process on definition of commercialization ability of traditional arts has been equal to 3/99. Since, the calculated t is more than table t, the effectiveness level of commercial process on commercialization is more than average level.

Hypothesis 4: Mobilization of resources for display is an effective factor in commercialization of traditional arts. According to findings of Table 2, the effectiveness of mobilization of resources for display on commercialization of traditional arts has been equal to 4/18. Since, the calculated t is more than table t, the effectiveness level of mobilization of resources for display on commercialization is more than average level.

Hypothesis 5: Showing content of product and process is an effective factor in commercialization of traditional arts. According to findings of Table 2, the effectiveness of showing content of product and process on commercialization of traditional arts has been equal to 4/08. Since, the calculated t is more than table t, the effectiveness level of showing content of product and process on commercialization is more than average level.

Hypothesis 6: Equipping of market components is an effective factor in commercialization of traditional arts. According to findings of Table 2, the effectiveness of equipping of market components on commercialization of traditional arts has been equal to 3/99. Since, the calculated t is more than table t, the effectiveness level of equipping of market components on commercialization is more than average level.

Hypothesis 7: Promotion of acceptance level (entering to market) is an effective factor in commercialization of traditional arts. According to findings of Table 2, the effectiveness of promotion of acceptance level on commercialization of traditional arts has been equal to 3/98. Since, the calculated t is more than table t, the effectiveness level of promotion of acceptance level on commercialization is more than average level.

Hypothesis 8: Equipping complementary assets to deliver product is an effective factor in commercialization of traditional arts. According to findings of Table 2, the effectiveness of equipping complementary assets to deliver product on commercialization of traditional arts has been equal to 4/45. Since, the calculated t is more than table t, the effectiveness level of equipping complementary assets to deliver product on commercialization is more than average level.

Hypothesis 9: Retaining the situation of commercialization and realization of long-term benefits is an effective factor in commercialization of traditional arts. According to findings of Table 2, the effectiveness of retaining the situation of commercialization and realization

Table 2: Comparison between means of effect level of factors adopted from Jolly Model on commercialization of traditional arts (assumed mean of 3)

variable	Mean	SD	Mean deviation	t-values	df	Sig. level
Idea creation on commercialization of traditional arts	3/94	0/91	0/054	17/225	360	0/001
Equipping and approval of profits	3/97	0/83	0/043	22/232	362	0/001
Commercial process to define commercialization ability	3/99	0/78	0/041	24/221	366	0/001
Mobilization of resources for display	4/18	0/80	0/041	28/266	368	0/001
Showing content of product and process	4/08	0/83	0/044	24/564	357	0/001
Equipping component of market	3/99	0/91	0/047	20/726	366	0/001
Acceptance level	3/98	0/79	0/041	23/726	364	0/001
Equipping complementary assets	4/06	0/84	0/044	24/027	364	0/001
Retaining commercialization situation and realizing long-term benefits	3/96	0/85	0/044	21/521	365	0/001

Table 3: Multit-Way ANOVA test of effective factors in commercialization of traditional arts in accordance with demographic variables (gender, age, education)

Sources	Sum of squares	df	Mean squares	F-values	Sig. level
Gender	0/072	1	0/072	0/141	0/708
Age	0/584	3	0/195	0/379	0/768
Education	0/492	4	0/123	0/239	0/916

Table 4: The mean of ranking of effective factors in commercialization of traditional arts

Dimensions	Ranking mean
Ida creation	4/71
Equipping and approval of profits	4/63
Commercial process to define commercialization ability	4/92
Mobilization of sources for display	6/09
Showing content of product and process	5/13
Equipping component of market	5/08
Acceptance level	4/42
Equipping complementary assets	5/42
Retaining commercialization situation and realizing long-term benefits	4/59

Table 5: Friedman test of effective factors in commercialization of traditional arts

Parameters	Values
Numbers	375
Chi-square	77/345
df	8
Sig. level	0/001

of long-term benefits on commercialization of traditional arts has been equal to 3/96. Since, the calculated its more than table t, the effectiveness level of retaining the situation of commercialization and realization of long-term benefits on commercialization is more than average level.

Hypothesis 10: Demographic features (gender, age, education) have different effects on commercialization of traditional arts. According to Table 3, there is not a significant difference between effective factors in commercialization of traditional arts based on gender, age and education.

Hypothesis 11: There is difference between effective factors in commercialization of traditional arts.

Friedman test was used to rank the components. The obtained results of this ranking are described in Table 4 and 5. According to the obtained results from Table 4, mobilization of sources for display had the highest rank and acceptance level had the lowest rank. According to the obtained results from Table 5, the mentioned results are significant between ranked effective factors in commercialization of traditional arts at significance level of $p < 0/05$ (Chi-square: 77/345); hence, the hypothesis about the significant difference between scores and ranks of effective factors in commercialization of traditional arts has been accepted.

DISCUSSION

New world structures and changes would gradually lead to many transformations at cultural and social levels;

hence, life style has been changed to a new form. Therefore, it is essential to have a correct understanding from new social structures, equations and relationships in order to identify the new structure of society and understand modern strategies with emphasize on historical and old institutes to be successful in field of handicraft productions. Hence, it seems that handicraft scope needs an appropriate development pattern considering social and world changes. According to the analysis of production and development process of handicraft industry, it can be understand that one of the main problems of this field is extensive invasion of industrial system against handicraft industry has brought so many problems for this industry during current decades. Hence, that responsibility of researchers and activists in this field is heavy to compete with other countries that are powerful in this field. On the other hand, serious concerns of present future prospect in not disappointing. If the opportunities are destroyed, the great future will be gained.

According to this matter, development of new technologies requires appropriate brain ware, software and hardware to generate wealth. Meeting a part of these needs and providing an encouraging environment to develop innovation and investment in this field is a duty that should be done by relevant institutions and government at macro level. Companies and researchers need upstream supports to commercialize their ideas so that the growth and development will not be realized only through efforts of scientists. In addition, culture as one of the most important dimensions has a considerable role in this process based on some factors such as non-acceptance of participation culture, unfamiliarity and inability of people in teamwork and presence of a distrust environment. Hence, the main duty of researchers, manufacturers and policy-makers is to create participation culture, encouraging environment for innovation, science generation, industrial and scientific collaboration between activists in this scope to meet the mentioned need.

This study was conducted to determine the effective factors in commercialization of traditional arts in Isfahan. The obtained results of study indicated that nine factors of Jolly Model could effect on commercialization of traditional arts and among them the factor of mobilization and equipping the resources for display was identified as the most effective and prior factor. Government and relevant organizations should financially support Traditional Arts Industry preparing sufficient access to low-interest loans. It would be possible to help this industry through encouraging risk-taking investors who are ware on commercialization and entrepreneurship; on the other hand, the material can be developed and improved considering quality, design issues and changes through the right of access to raw materials and long-term

relationship with providers and suppliers of raw materials. It is recommended to identify target market and demanded products in this market to supply artistic products based on the demands of market. It would be possible to mark a day of year as the day of traditional arts through symbolic cations or held some ceremonies to introduce traditional arts increasing information in field of the importance of traditional arts and their commercialization. The relevant rules can be more optimized to encourage research and commercial activities of companies in commercialization of traditional arts. Technology can be transmitted to this market through allocating sufficient resources in order to increase commercialization of this industry; moreover, long-term benefits can be realized through gaining customer satisfaction and loyalty. It would be possible to attract support of investment funds to this industry and prepare business environment for traditional arts industry. It would be possible to create competition between companies and organizations and encourage them to commercialize traditional arts with acquisition of special facilities and loans from licensing organizations. Products can be transported to market at the right time or can be corrected or refined after transporting with concentration on real needs of customer. It would be possible to display the content of products and processes with timely definition of development project. It is possible to introduce the product to market through understanding the market and its activities. It is possible to attract the attention of managers of industry sector considering market changes, tastes of customer and flexibility to react against environmental changes through increasing transparency of development project of product. It would be possible to improve the application of product for customers besides serviceability, beauty and quality of product. The resources can be equipped for display and commercialization of art can be increased through improvement of reliability and durability of product. It would be possible to encourage knowledge-based companies science and technology centers to commercialize traditional arts and inform activists in this field about the produced technologies in traditional arts. It would be possible to be effective in equipping the resources with identifying needs, priorities and issues of different scopes of industry and market and optimization of profitability of this industry compared to other markets. Government and industry should financially support the commercialization of traditional arts in order to prepare filed for idea creation in art. It would be possible to help idea creation through producing new product or progress the quality of previous products with competitive advantages. Managers can increase fields for idea creation and commercialization paying attention to R&D and innovative units and encouraging new ideas.

In terms of the research mythology, the application of Multiple Criteria Decision Making (MCDM)

approaches can be considered to rank the effective factors in commercialization of traditional arts. For example, Analytical Hierarchy Process (AHP), described by Mobin *et al.* (2015) can be applied in order to rank the factors when the experts are asked to do the pair-wise comparison among factors. In addition, the DEMATEL approach, proposed by Vafadarnikjoo *et al.* (2015a) can be used to rank the factors when there is uncertainty in the values, i.e., values can only be defined as fuzzy terms which can be converted to fuzzy numbers (as it is presented by Skeet *et al.* (2015). Furthermore, the cause and effect analysis approach can be considered to find the most significant factors in commercialization of traditional arts. The description of the cause and effect approach is provided by Vafadarnikjoo *et al.* (2015b).

CONCLUSION

The obtained results indicate that the mentioned factors can effect on commercialization of traditional arts and among them, equipping resources for display has been identified as the most effective factor.

REFERENCES

- Abbasi Esfanjani, H. and L. Forouzande Dehkordi, 2015. Design of a comprehensive model of commercialization of academic research with Delphi approach. *J. Bus. Res.*, 75: 139-170.
- Bandarian, R., 2007. Measuring commercial potential of a new technology at the early stage of development with fuzzy logic. *J. Technol. Manage. Innov.*, 2: 73-85.
- Bandarian, R., A. Heidari and M. Pourebrahimi, 2014. Study of technology commercialization models and presenting a domestic model to support the commercialization of technology in Iran. *J. Ind. Univ.*, 23-24: 5-20.
- Borzouei, H., S.M. Mirdamadi and S.J.F. Hosseini, 2011. Affective factors in commercialization of nanotechnology in Iran's agricultural sector. *Ann. Biol. Res.*, 2: 56-61.
- Fakoor, B., 2006. An overview of the theoretical concepts of commercialization of research results. *J. Rahtaft*, 37: 24-32.
- Haggblade, S., A.A. Djurfeldt, D.B. Nyirenda, J.B. Lodin and L. Brimer *et al.*, 2012. Cassava commercialization in Southeastern Africa. *J. Agribus. Dev. Emerg. Econ.*, 2: 4-40.
- Hashemnia, S., M. Emadzadeh, S. Samadi and P. Saketi, 2009. Effective factors on earmarked revenues of researches in Iranian universities of technology. *Quart. J. Res. Plann. Higher Educ.*, 15: 1-21.

- Jolly, V.K., 1997. Commercializing New Technologies: Getting from Mind to Market. Harvard Business School Press, Boston, USA., Pages: 488.
- Kumar, V. and P.K. Jain, 2003. Commercialization of new technologies in India: An empirical study of perceptions of technology institutions. *Technovation*, 23: 113-120.
- Matin, A. and S. Mohammadizade, 2013. An overview of the Linear Models of commercialization and technology growth. *J. Technol. Parks Growth Centers*, 36: 52-61.
- Mobin, M., A. Roshani, M. Saeedpoor and M.M. Mozaffari, 2015. Integrating FAHP with COPRAS-G method for supplier selection (Case study: An Iranian manufacturing company). *Proceedings of the American Society for Engineering Management International Annual Conference*, October 7-10, 2015, Indianapolis, Indiana, USA., pp: 1-10.
- Molaei, E., M. Mazaheri and M. Kafi, 2013. The proposal for the development of traditional arts within the framework of Islamic-Iranian model of progress. *J. Islamic Iran. Model Progr.*, 4: 135-155.
- Naseri, R., 2006. Commercialization of nanotechnology projects in Iran (nano-powders as example). M.A. Thesis, Allameh Tabatabai University, Tehran, Iran.
- Pakzad Bonab, M. and M. Taghavi, 2009. Study the process and models of commercialization of research findings from universities and research centers. *Proceedings of the Technology and Innovation Management Conference*, (TIM'09), Payam Noor University, Garmsar, Iran.
- Rahim, N.A., Z.B. Mohamed and A. Amrin, 2015. Commercialization of emerging technology: The role of academic entrepreneur. *Procedia-Social Behav. Sci.*, 169: 53-60.
- Shayestefar, M. and R. Khazaei, 2014. Pathology of packaging and supplying of products of handicrafts. *J. Sci. Technol.*, 20: 30-39.
- Skeete, A. and M. Mobin, 2015. Aviation technical publication content management system selection using integrated fuzzy-grey MCDM method. *Proceedings of the Industrial and Systems Engineering Research Conference*, May 30-June 2, 2015, Nashville, Tennessee, USA., pp: 1-10.
- State Statistics Committee of Science, Research and Technology, 2008. *Statistical Definitions and Concepts of Science, Research and Technology*. 1st Edn., Institution of Research and Planning in Higher Education, Iran, Pages: 112.
- Vafadarnikjoo, A., M. Mobin, C. Salmon and N. Javadian, 2015a. An integrated gray-fuzzy cause and effect approach to determine the most significant categories of project risks. *Proceedings of the Industrial and Systems Engineering Research Conference*, May 30-June 2, 2015, Nashville, Tennessee, USA., pp: 1-10.
- Vafadarnikjoo, A., M. Mobin, S. Allahi and A. Rastegari, 2015b. A hybrid approach of intuitionistic fuzzy set theory and DEMATEL method to prioritize selection criteria of bank branches locations. *Proceedings of the American Society for Engineering Management International Annual Conference*, October 7-10, 2015, Indianapolis, Indiana, USA., pp: 1-10.