

A SURVEY STUDY ON AGE, EDUCATION AND PROFIT ROLE ON TECHNOLOGY-BASED ENTREPRENEURSHIP IN IRAN (CASE STUDY: FORTY SMALL AND MEDIUM TECHNOLOGY-BASED ENTREPRENEURSHIP UNITS)

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ABSTRACT

Much of the research into new firm formation focuses upon the entrepreneur and their characteristics or motivations or the external economic environment. This study revolves around the socio-economic structure of Technology-Based entrepreneurship in Iran and factors affecting the growth and development of enterprises and problems faced by them. For the purpose of data collection a sample of forty small and medium scale units was taken and a common schedule of structure questionnaire containing questions of various aspect of Technology-Based entrepreneurship was administered personally to the managing director of each of the units as the case may be. The research method in this study is basically exploratory and data collection is based on two methods, library and documents and questionnaires. The result shows that age is not a static phenomenon for Technology-Based entrepreneurship in Iran. Also the result shows peoples that have high education and more practical experience and training, enter into the industry early. Also, those who have less education but have more practical experience and training, enter into the industry slightly later than the previous. However, in such cases less education restricts the growth and development of the enterprise. The paper finds shows there are two reasons for Technology-Based entrepreneurship in Iran: earn high profits and prosperity. In the end, we have a number of suggestions for promoting Technology-Based entrepreneurship in Iran.

Keywords: Iran, Technology-Based entrepreneurship, age, education, high profit, small and medium units

INTRODUCTION:

The prosperity and progress of a nation depends on the quality of its people. If they are enterprising, ambitious and courageous enough to bear the risk, the community/society will develop quickly. Such people are identified as entrepreneurs and their character reflects Technology-Based entrepreneurship. Technology-Based entrepreneurship is no monopoly of any

religion or community, entrepreneurial potential can be found and developed anywhere irrespective of age, qualification, experience or socio-economic background, and only efforts are required in the right direction. Technology-Based entrepreneurship may not be regarded as a sufficient condition for growth activity but is surely a necessary condition. Entrepreneurs are persistent, passionate, adaptable and able to take risks. As a result entrepreneurship can occur in a range of environments. However, at the core of entrepreneurship lies the creation of new business ventures by individuals or teams.

Entrepreneurship is the lifeblood of the Iranian economy. It is the cradle of job and wealth creation in the most innovative ways. It is therefore imperative that we recognised an contribution that the entrepreneur makes to our economy and development.

Small and medium business units, are, thus an enterprise, its owner, an entrepreneur and his activities are the Technology-Based entrepreneurship. Technology-Based entrepreneurship is a human activity development. It indicates to the spirit of enterprise such as spirit transforms the man from a nomad to a settled agriculturist, to a trader and an industrialist.

Technology-Based entrepreneurship must be given top priority in the national programs of Iran. It is widely acknowledged in Technology-Based entrepreneurship literature that Technology-Based entrepreneurship is about people who realize new opportunities.

Small and Medium Enterprises

Small and medium enterprises or small and medium-sized enterprises are companies whose personnel numbers fall below certain limits. The abbreviation "SME" is used in the European Union and by international organizations such as the World Bank, the United Nations and the World Trade Organization (WTO). Small enterprises outnumber large companies by a wide margin and also employ many more people. SMEs are also said to be responsible for driving innovation and competition in many economic sectors.

The role of Small and medium scale industries has been emphasized from time to time, keeping in view the over all plan objectives of the economic growth coupled with social justice. The Small and medium sector has distinct advantage of low investment with high potential for

employment generation. It is also brings out dispersal of industries in rural and semi-urban areas with definite advantage of equitable distribution of national income. This sector has been identified in all the National development plans of Islamic Republic of Iran.

As a result, Iran, like other similar developed Nations of the world, has initiated a number of sector reforms on SMEs aimed at transforming the Iranian Economy from its present prostrative statue to a highly industrialized one, as achieved by some Asian countries in the second half of the last century.

These reforms aimed at creating employment, reducing poverty and improving the welfare of people, are in agreement with the goals of industrialized countries of the world. Figure 1 show types of Technology-Based entrepreneurship methods in Iran.

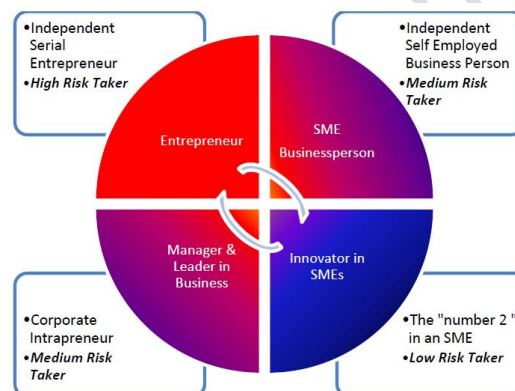


Fig.1 Demonstrate all Methods in Technology -Based entrepreneurship and Risks of each method

Based on our researches, high impact entrepreneurs in Iran include: education and training, mentoring, experiential learning, experience exchange, and equity empowerment. Figure 2 show the high impact entrepreneurs in Iran.

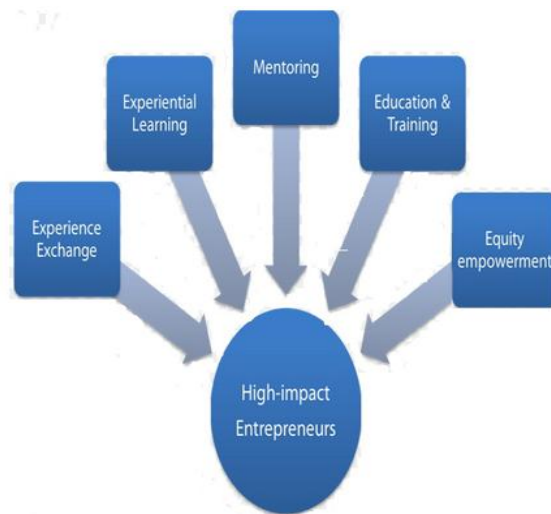


Fig.2 Demonstrate high impact entrepreneurs in Iran

There is differences definition for SMEs in different countries. various indicies such as number of employees, invested capital, asset employed, sales volume, production capability and a combination of these variables are ued by various countries to classify a business under the SME sector.

Some researchers like Essien defines a small and medium scale enterprise as an enterprise with a total capital employed of over R50m but not more than R200million, including working capital but excluding cost of land or a labour size of 11-100 workers.

Our researches show that majority of small and medium business in Iran might not be able to boast of capital employed of R100m due to low per capital income of the citizens. small and medium business is defined as a business which is independently owned and operated with close control over operations and decisions held by the owners.

Business equity is not publicly traded and business financing is personally guranteed by the owners. The business will have less than fifteen employees. This paper align with this definition as it tries to capture small and medium business in terms of ownership and operations.

The Government of republic Islamic of Iran since 1991 has put in place different kind of institutional frame work to promote small and medium scale enterprises in the country. These

include the establishment of industrial development centers, the small scale industries credit scheme, credit guidelines to financial institution, working for yourself/Technology-Based entrepreneurship development program National Economic Reconstruction Fund.

The Government continues to protect small and medium scale enterprises vis-à-vis the large ones through its policy of reserving industries for exclusive manufacturing in small and medium scale sector.

Iranian businessmen are innovative in assessing opportunities and in the ability to nearly as effective in product innovation. They tend to concentrate on the rapid adoption and imitation of foreign innovation and know-how rather than to engage in basic research themselves. For example most manufacturers in Iran, usually make products based on foreign brand label under license.

As to technology, most of the machinery used in production is imported from developed economy and developing countries like European Union, and china respectively. This may explain the difficulty of Iranian industries to diversify away from the traditional light industry sectors.

Our researches show, in the past, Iran concentrated producing a limited range of highly labour-intensive goods such as clothes, household packing etc. it is quite true that Research and development (R & D) is not common with small and medium size firms. They prefer rapid imitation of new imported technology as a more viable and economical alternative.

During our investigations we found that, many manufacturers prefer to stay in industries where Research and development are not important.

Research Method

The research method in this study is basically exploratory and data collection is based on two methods, library and documents and questionnaires.

The research design adopted in this study attempts to uncover the various motivating and facilitating factors in Technology-Based entrepreneurship.

The data for this study have been collected both from the various sources. Among the major sources are the publications of “the ministry of industry, mine and trade”, Government of I.R.Iran, Iran industrial management center, trade journals and journals related to small and medium business.

A representative sample of 40 (forty) Entrepreneurs drawn through the convenience sampling method comprised of business owners who have stated their own businesses or taken over existing one in Tehran.

Instruments used in this study

One of the most important instruments used in this study, is questionnaire tool. The collections of data was through a structured questionnaire was prepared and administered personally to either the owner of the business unit or its managing director as the case may be. The questionnaire consisted of four parts, each containing a different set of questions dealing with demographic and personal profiles of entrepreneurs, motivational and influencing factors, effect of subsidies and facilities which promote Technology-Based entrepreneurship and small and medium business, effect of training and developmental programs for executives and entrepreneurs.

No sophisticated statistical method except analysis of variance, has been used and conclusions will be drawn primarily from descriptive data analysis. The soft wares used for data analysis in this study are MATLAB and SPSS 20.

Data analysis

Out of a sample of 40 entrepreneurs 67% were the proprietors of their own small and medium scale units and 33% were running their units under partnership. It signifies that in small and medium business in Iran, ownership is a popular concept. A trend analysis of these 40 units was carried in terms of their beginning during the period 2003 – 2013. It is noted that during 2005 – 2007 43% units started functioning whereas 27% in 2004 – 2006, 20% in 2010 – 2012, 7% till 2003 and the rest of the 3% commenced in 2013.

Personal characteristics of Entrepreneurs

Table 1 and 2 show two characteristics (age and education) entrepreneurs. Table 1 show that the most popular age group for Technology-Based entrepreneurship in Iran is 24 – 34.

Table 1: demonstration age of entrepreneurs

Age	Percent (%)
Below 24	22
24-34	48
35-52	20
Above 52	10

Education wise among the 40 entrepreneurs 17 were non graduates, 10 technical license holders whereas 5 were master graduates and 8 doctoral graduates. The study reveals that the new generations of entrepreneurs in Iran, were more educated than the old. This laid credence to the fact that education has become an important requirement for entrepreneurs. In the past, many entrepreneurs had been successful without a formal degree. Table 2 shows the educations of entrepreneurs for 40 candidates.

Table 2: shows the educations of entrepreneurs

educations	Person
Non academic graduate	17
Technical license	10
Master graduate	5
Doctoral graduate	8

Some of the various factors which led to Technology-Based entrepreneurship in Iran include: increasing confidence, to make high profits, to fulfill a desire of one's life time, to make an independent living, generating wealth for society, social justice and in some cases,

Technology-Based entrepreneurship due to gain prestige and status in the society. Table 3 shows the some reasons for Technology-Based entrepreneurship in Iran.

Table 3: shows the some reasons for Technology-Based entrepreneurship

Reasons	Cluster 1	Cluster 2	Cluster 3	rating	rank
increasing confidence	3	4	4	7.8	5
to make high profits	12	9	11	32.2	1
to fulfill a desire of one's life time	11	10	9	21.7	2
to make an independent living	1	4	1	5.4	6
generating wealth for society	6	6	10	17.3	3
social justice	2	1	1	4.7	7
to gain prestige and status in the society	5	6	4	10.9	4

Table 3 shows 32 out of 40 (80%) became entrepreneurs to earn high profits 12 of these gave it top rank and 11 put it at second rank, whereas another 9 ranked it third.

The ambitions 'to fulfill desire of one's life time' stood second, 21.7% in the over all rating. It was closely (17.3%) followed by 'generating wealth for society' which got third rank.

It is clear from the table 3 that by becoming entrepreneur people certainly want to earn high profits and get rich and would also like to fulfill the desire of their life time. Results show, one of the most important goals of entrepreneurs, helping to generating wealth for society. Also, we found a large number of entrepreneurs in Iran, seeking prestige and status in the society by Technology-Based entrepreneurship. Our study show, there are many reasons for start small and medium business in Iran, but we refer to some of them in table 4.

Table 4: show many reasons for start small and medium business by a person in Iran

Reasons	Cluster 1	Cluster 2	Cluster 3	rating	rank
Dissatisfaction with earlier job	10	8	10	24.3	3
Unemployment	13	9	12	33.9	1
For loan	12	9	11	26.7	2
For interest	4	12	7	12.1	4
Other compelling reasons	1	2	-	3	5

As indicated 'Unemployment' consisted to be the major compelling reason for as many as 34 (85%) persons which made them their own ventures. Also, loans are one of the most motivating reasons (80%) for the establishment of small and medium business in Iran. According to literature review, in many countries, Dissatisfaction with earlier job is the main reason for start

small and medium business by a person, but this reason is in 3th rank in Iran. Other reasons have been detailed in the table 4.

The Problems that Entrepreneurs are faced with them in Iran

In this study we try collect data that are comprehensive and useful about Technology-Based entrepreneurship and small and medium business in Iran. During our researches we found there are some problems those obstacles for entrepreneur's progress in Iran. Some of these problems include (the most important):

- a) Competition with old small scale units
- b) Competition with old medium scale units
- c) Competition with large scale units
- d) Lack of demand for manufactured products
- e) Indolence excessive Entrepreneurs
- f) Governmental rules
- g) Unsuccessful experience

Conclusion

Based on our research and data analysis in this study, the following results are achieved:

Entrepreneurs, the central figure of economic activity and propeller of progress, play a crucial role in determining the level of development in any economy.

- ✓ Data analysis show: In the modern times the entrepreneurs are better educated than in the earlier days.
- ✓ Entrepreneurs with technical experience better success in Technology-Based entrepreneurship in Iran.
- ✓ The popular age group for going in, for Technology-Based entrepreneurship is 24-34 years.

- ✓ One of the biggest obstacles entrepreneurial developments in Iran, low demand for products produced by the entrepreneurs from the public.
- ✓ In Iran, the best model of partnership in Technology-Based entrepreneurship is family's partnership.
- ✓ Result shows that age is not a static phenomenon for Technology-Based entrepreneurship in Iran.
- ✓ The result shows peoples that have high education and more practical experience and training, enter into the industry early.
- ✓ Those who have less education but have more practical experience and training, enter into the industry slightly later than the previous.
- ✓ Previous experiences, encouragement from relatives and friends have been instrumental for entrepreneur's impetus.
- ✓ One of the most important factors in the choice of entry by entrepreneurs in the industry in Iran, the lack of competition in it.

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