

## Research Article

### A Comparison of Quality Management and Industrial Criteria between Iran and Developed Countries (Case Study: Japan)

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**Abstract:** Nowadays, Consumer's expectation has soared which brought about a gap between the discerned quality and actual quality of some American-made merchandises. On the other hand, considerable domestic and international market shares of Japanese products derived from the narrowed gap in quality of firms. In some industries, Japanese fine quality products have now replaced the United States as "number one" in such industries. For several years, Total Quality Management (TQM) has been implemented in Western Europe since its earlier origin in Japan. In fact, the influence of TQM on a number of notable successful manufacturing organizations is inevitable, together with some less revealed failures. This research describes the details of management in Iran and compare its criteria's with developed countries such as Japan. To some extent, this study is destined to present some solutions to improve the management and quality in industrial productions.

**Keywords:** Development, industrial criteria, Iran, Japan, total quality management

## INTRODUCTION

Growth and development of any society is in the sequel of development schematization and sustainable development strategies (Ebrahimpour, 1985). Development in a qualitative concept means transition from one period to another, needs an expanded alteration in all aspects such as economical, political, cultural and social and so on (Reed *et al.*, 2000; Rezaei *et al.*, 2011). Development is a process with economical, political, cultural and social dimensions to achieve improvement of the government and increase qualitative and quantitative abilities of the society. But unlike revolution that happen sudden, development is a process during a period of time (Detert *et al.*, 2003; Rezaei *et al.*, 2011).

## COMPARES BETWEEN IRAN AND JAPAN

In 1950 Iran and Japan have the same position in the industrializing direction, but three decades later Iran dropped behind (Kull and Wacker, 2010) to understand the reason of Japans' success we have to have a look at half 20<sup>th</sup> century. In 1950 Japan and Iran were two of the most important countries in Asia. Japan as a defeated power in Second World War and Iran as a country entrapped by colonialism. Both countries have followed powerful industrial policies with the participation of government. Although aims were the

same, but also chosen path by governances were different so Japan were able to improve anarchies and reached to a suitable economical circumstances. This country consociated to advanced countries and its GDP became second biggest all over the world after USA. On the other hand Iran attained fewer advantages and its economy acted less than its potential level so remained as a third world country.

It is obvious that Japan achieved the objectives before 70's when transformed to an advanced economy. The main motive of this success is industrializing policies which adopted during prosperity period (Reed *et al.*, 2000; Kull and Wacker, 2010). From the point of view basic cause of fewer economical success of Iran refers to high interference of government in industry which delimitates free competitions (Lei Zhang *et al.*, 2009).

## Criteria of industrializing policies in Japan:

Strategies of industrializing policies in Japan were different in every decade as it called industry reconstruction in 1950s, rapid growth in 1960s and since 1970 thenceforth as era of protection of industries with high technology and environmental protections (Park *et al.*, 2001). Powerful government and deficient organizations would indicate reconstruction levels. Since 1945 until 1960 reconstruction levels were performed as follow:

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- Direct controls disappeared in 1949
- Government interference transformed to an indirect tools
- Competitions increased among organizations
- Government supported industries to promote them for foreign competitions
- Emphasized policies to produce industries such as coal, steel, Ammonium sulphate, electricity, shipping, shipbuilding
- Some subsidies were ordained to keep the prices unchangeable
- Foreign exchanges allocated and new technologies and industries such as composite fibers imports were supported
- Heavy industries and exports were attended
- Steel industry and the other sources made modern
- Mass production of autos and consumption goods

Rapid growth in economy of Japan was 1960s. In this period free trade and free enterprise became a phenomenon in economy of Japan (Kull and Wacker, 2010).

The most important policies in this period are as follow:

- Free trade postponed in particular industries such as automobile and computer as long as these industries were able to compete with foreign countries.
- Some tariffs were determined to support industries.
- Number of companies increased by industry reconstructions.
- In 1963 the modernization of Associated Companies law was ratified.
- Direct foreign investments were persuaded.

In 1970s and afterward called as the period of hi-tech industries support and environmental protections (Lei Zhang *et al.*, 2009). Main strategies in this era are:

- Work environment improvement, social invest, external help expansions, education reinforcement, increased investments in research sector
- Computer and aerospace industries invigoration
- Technological expansion persuasion
- Advertence to international relations
- R&D technologies support
- Iran policies since 1950 until 1991

Industrial improvements of Iran are divided to two periods:

- First period since 1950 until 1991
- Second period 1991 and afterward

Major policies for industrializing concentrates on following decisions:

- Independent imports instead of exports
- Independency process was chosen for international business
- Emphasis on public sector for production and inattention to private sector
- There was no foreign investment
- No supported competition
- Labor law had no support to private sector
- There was an enormous industrial structure in the public sector
- Private sector was limited by producing consumer's goods
- Private sector had casted away from foreign competition because of high tariffs

Second period was industry renewal and had following policies:

- Schematization played the sensitive role for saving outfits.
- Main objective for industrializing was economical growth based on science and technology.
- Primitive emphasis was on heavy industries and capital goods.
- Rural industries got protected to improve employment.
- Foreign investment as debt capital was distributed among internal employers by financial institutions.

## IRAN' S INDUSTRY

Summary of a discussion of Industrial Development Strategy for Iran with the focus on small Entrepreneur industries versus main industries shows that there are many questions and ambiguities in analysis of industrial sector in Iran. Finding answers to these questions and ambiguities can contribute in forming industrial strategy. The first relation between economy and development is whether industry is focus for development and whether government and political system have reached an agreement for industry and its role. Secondly, to make a choice of focus on industrial development geared toward small and medium industries or merging them with main industries.

Historically, industrial capitalism in Iran has faced many problems. Governmental management of big and public industries and public sector in recent years has been embroiled with bureaucracy and complexities. The process for selection and appointment of managers in these industries has not been very structured (Heidari Gorji and Farooque, 2011).

Government's immoderate focus on big industries under its own management and allocation of enormous resources from development programs for the expansion of these industries without regard to profitability and economic justifications as well as the lack of attention to small industries have been the mark of industrial development in the country. All these have produced lack of coordination and communications

among different industrial sectors, which in turn produced difficulties for planning and decision-making. The definition of small and medium industries in different countries and parts of the world varies significantly. In fact, economic and industrial circumstances in every country define small and medium industries (Farazmand, 2005).

**Criteria's define industry in Iran:** Some criteria used to define small and medium industries are:

- Number of employees
- Capital
- Total assets
- Total sales
- Production capacity

The most widely used criterion for small and medium industries is the number of employees. The differentiation between small and medium industries with big industries has been taken place with the purpose of eliminating market failure resulting from their small sizes. This division is the base for definition of "small and medium industries". Due to the fact that, the line for market failure defers in different countries and depends on economic conditions in those countries. Therefore, the definition and criterion for small and medium industries are different (Heidari Gorji and Farooque, 2011).

Technological forward movement in production in recent decades, fail to reach a certain amount or standard of mass production in big industries, tendency for production flexibility in small and medium industries have resulted increased competitiveness among small industries leading to production shift from big industries to small industries. However, this shift does not mean the elimination of big industries and substitution by small industries. The trend has been increased interrelation between the two sectors (Heidari Gorji and Farooque, 2011).

The work division between small and big industries has been such that instead of creating competition, they complement each other. World economic circumstances have lead to further growth of small and medium industries in different countries (Reed *et al.*, 2000). For example, management structure of small companies is their big advantage for innovation when compared with big companies. Bureaucracy and structure of big enterprises prevent them from accepting research programs with high risk because every innovative program passing through levels of bureaucracy in big industries faces negative prejudgments and fails to materialize in practice (Rezaei *et al.*, 2011).

However, survival of many big industrial companies depends on acquiring innovative thinking that adventurous investors use to convert thoughts into actions. Meanwhile, small industries depend on big

industries for lack of financial resources and credit facilities. Investment in most countries in the world goes toward small and medium industries that bring quick results. Experience and successes gained in East Asia from small industries are good examples. Small industries in Iran make up 93% of the industrial sector providing 45% of total employment.

The definition of small enterprises varies in different countries and depends on the size of country, economic level and more important the objectives for differentiating between small and big enterprises. Small and quick revenue generating industries are one of the most effective ways to increase employment and reduce dependence on oil industry in our country (Park *et al.*, 2001).

In recent years, the importance and role of small and medium industries have been on the rise in both developed and developing countries. Using new technologies in production and communication in the past two decades have created new changes in production and distribution methodologies as well as organizational structure in enterprises leading to increased emphasis for small and medium enterprises.

Increased competition and tendency in companies to concentrate on critical activities and functions are reasons for vertical division of companies as well as establishment of contractual relationships with suppliers of raw materials and parts. All these changes have increased importance of small industries; of course, not the very independent small industries, but rather small companies that are a part of the network and production chain capable of providing technologies, competent human resources and expert management. As learning processes in small and medium industries lead to training of capable managers and omission of these industries from competition (because of bankruptcy) produce lower losses to society, therefore, small and medium industries are good ground for creation of competitive industries.

Apart from the above advantages, governments always adopt special strategies and policies to promote small and medium industries and to facilitate entrepreneurship in economy in order to ensure competitiveness in free market and prevent monopoly by big companies. Experiences have shown that competitiveness of big industries depends on suitable relationships with dynamic and innovative small and medium industries. Moreover, small and medium industries can make good ground for competitive big industries.

This study reviews the relationship between main industries and small and entrepreneurship industries; compares the definitions of small industries in different countries and determines the effective factors in expansion of the role of small industries as a way to create a framework for formulation of strategies and policies for industrial development. The article later

provides an analysis of past and present situations of small industries in country. Finally, taking into account the perspective of small industries, suggests strategies and policies for strengthening industrial sector in Iran.

### **IMPLEMENTATION PROGRAMS FOR SOLUTION**

Implementation programs for increased strength and development of small industries should include: Encouragement of domestic and international investments in small industries; modification of policies to increase small industries' shares of gross domestic product; increased efforts to create jobs through development of self-employment; encouragement of entrepreneurship and group activities in rural areas; development of domestic financial resources; development of co-operative sector; ease of regulations for investment in industrial sector; tax reduction; making financial resources in currency exchange available to small industries; make more financial resources available to small industries by simplifying bank procedures in approving loans and granting financial instruments; providing tax and duties exemption for investments in less developed areas; increase level of workers' skills employed in enterprises, strengthen industrial clusters for different guilds, establishment a consulting group for setting policies for small enterprises, etc.

Considering the importance and effectiveness of small industries and entrepreneurship as well as positive experiences in industrial countries from investment in these industries and establishing constructive interfaces between big and small industries, also the need to pay attention to self-relying and independent industries in the country, we should maximize economic development and savings by adapting a non dominant growth strategy and investment in selected industries or economic sectors. In this case and with consideration of the conditions in our country, investment in those industries and economic sectors that bring about maximum social and economic benefits can act as an engine for economic development.

Using this strategy, we can identify the big industries such as auto, steel, petrol and main industries and create related small industries in less developed

areas in the form of industrial complexes and clusters and establish complementary industries. This process will create an industrial hierarchy and a kind of industrial connectivity. Small industries within industrial complexes and clusters will perform as part of objectives of big industries. Big industries have the benefit of having high technical expertise, exceptional training capabilities, advertising programs, ability to undertake industrial renovation.

### **RESULTS**

With a division of functionalities, we can establish many small and medium industries working under with connections to big industries. In order to establish relationships between small and main industries, there is no need for small industries to act as subsidiaries to big industries from the financial point of view, but, from science, technological and market points of view, they can form an industrial chain. Economy will have a gradual and sustained progress in such situation. Therefore, first step is investment in projects that have better economic justifications and then this sector will pull other sectors forward. Investment in selected strategic industries or economic sectors will lead to new investment opportunities resulting to further economic development.

Growth will accompany development, making its way from progressive sectors of economy to follower sectors, from one industry to another and from one enterprise to another. Growth of one or several economic sectors will create conditions for the growth of other sectors of economy.

In this strategy, the investment in infrastructure will go up at the first phase that facilitates investment in direct producing activities. When economy enters into sustained growth and interrelationships between industries advance to the point of becoming complementary to each other, we will experience higher employment and increased effective demand, which will result to a balance growth automatically.

### **CONCLUSION**

With regard to release Iran from present undeveloped condition, according to its geographical positions there should be more emphasis on more

Table 1: Different alternatives that can be selected by decision makers

Impact	Alternative
Financial	To give priority to more applicable technologies with less investment
	To give priority to small and rural industries instead of large industries
	To give priority to high consumption goods rather than luxury goods
Technology	To give priority to technologies require less skill
	To give priority to technologies consume local raw materials
	To give priority to less energy consumer technologies
	To give priority to handmade production instead of machinery
	To give priority to technologies that establishes mutual relation among urban industry and rural population
Sustainable development	To give priority to local energy resources such as solar energy, wind energy

applicable technologies with less investment, small and rural industries instead of large industries, technologies require less skill, technologies consume local raw materials, less energy consumer technologies and handmade production instead of machinery. Furthermore, high consumption goods have to be substituted with luxury goods. Local energy resources such as solar energy and wind energy must be taken into account, in addition, technologies that establish mutual relation among urban industry and rural population have to be considered as an alternative. As summarized in Table 1, different alternatives on the basis of their impacts has been presented that can be selected by decision makers.

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