

## **A SURVEY ON THE MANPOWER CHANGES IN AUTOMOTIVE INDUSTRY; (CASE STUDY: KERMAN MOTOR)**

**Amin Fatahi<sup>1</sup>, Dr.Ali Darijani<sup>2</sup>, Dr.Hamid Taboli<sup>3</sup>**

*<sup>1</sup>Department of Industrial Engineering, Islamic Azad University, Science and Research of Kerman Branch, Kerman, Iran*

*<sup>2</sup>FacultyMember, Ph.D. of Economics and Management, Payame-Noor University of Kerman, Kerman, Iran*

*<sup>3</sup>Faculty Member, Ph.D of Public Administration, Payame-Noor University of Kerman, Kerman, Iran*

### **Abstract**

Without doubt, manpower is the most valuable factor for production by which the organization's needs and goals, i.e. producing products (goods or services) come to realize by means of financial tools and facilities. If manpower removes from the organization, what remains, e.g. elements and facilities such as buildings, equipment, materials, etc. would be useless, without any value. Human is the biggest asset within the organization non influencing corporate balance sheets and profit and loss statements, while profitability within organization comes to realize with human. As the automotive industry is one of the major industries in the areas of employment and investment, and has a significant share in production and employment, has been continuously one of the most important powers resulting in economic growth. This paper aims to investigate manpower changes as the most important factor which leads to production, the survey conducted in 2012 in Kerman factor. Statistics and data gathered from documentary studies, interviews and organizing meetings with experts. After data collected and equivalent non-homogeneous data provided, the results showed that there is no accurate planning for this so that suggestions to improve the situation for beneficiaries proposed.

**Keywords:** Manpower, Automotive, Industry, Production

### **Introduction**

The most critical asset of any organization is its human resource. The quality and capability of human resources is the most important factor in survival and life of the organization. Human resource taken as a major competitive advantage and scarce resource in today's knowledge-based economy. Providing products and services with different quality, reducing costs, increasing competitiveness, innovation and creativity mentioned as qualitative and knowledge-oriented human resources benefits. Hence, business strategy in today's organization has been mainly required to human resources [1]. Nowadays, all the signs and symptoms refer to role of human and human resources in opening bottlenecks, creation of technologies and various products production. Indeed, the infrastructure within any organization consists of manpower, or, in a plain language, human resources[2]. Anyhow, development and production to become an important source of capital, that is, both physical and human capitals take place. It is found the main production capital within the human resources and his physical and intellectual tasks. The human can bring about the changes in financial capital with his physical and intellectual tasks to provide better and more productivity. Hence, what received in recent years a huge attention in developed countries is the

very notion of human resources. Human resources play a major role in both production and economic growth.

- Job as a primary factor of production;
- Human as a factor beyond labor and other production factors

Today, job not anymore accounted as a factor in production and development, but drawing attention to quality and efficiency of manpower and increase of productivity due to useful effects and consequences is increased [3]. Automotive industry in our country is the locomotive of growth in other industries, in a way that 60 industrial fields associate to automotive industry so that automotive industry assigned with 22% contribution across industry in Iran.

On the other hand, according to the studies conducted to date, roughly 700 thousands individuals work in this industry, where automotive industry with a turnover of 22 billion dollars has been drawn into attention politicians across the country. Indeed, this is not only for Iran, but, this situation goes true in other countries with the pioneer automotive industry. Further, current value of this industry reported equivalent to 2.1% of the total capital market across the country, the automotive industry returns reported from the early 2009 to date equivalent to 59.7%[4]. Since manpower accounted as one of important factors in production, this paper aims to investigate the changes appeared in automotive industry, regarded although several decades have passed ever since the automotive industry emergence, a case study on production unit of automotive Kerman factory in 2012 has been taken.

### **Problem statement**

Without doubt, the vital source in Economic production and processing of products and goods is the human resources. The human by utilizing what called financial resources, capital and wealth can bring about changes in financial resources improving the production and processing. There is no production process not being in need of human resources where no production is possible without human and human resources. On factor which affects organization's success is the very human resources[5]. Hence, the way to select the enabled manpower in a systematic guideline which proposes an academic mechanism to attract manpower within the organizations is of importance; this causes the least changes of manpower appear within the organization because so many changes in manpower bring about lack of job security by observing such changes. This feeling, i.e. lack of job security in manpower would bring about the difficulty appear within the organization[6]. In this regards, it is aimed to the Manpower changes in Kerman automotive industry (case study).

### **Research importance**

All the organizations have perceived that customer satisfaction results in increasing trend in quality of goods and services, accounted as one of the most important advantages to achieve customer satisfaction and meet the customer needs and providing the goods and services with high quality. There is no doubt on the fact that manpower plays a major role in production with high quality at products. manpower has specific needs where needing to job security is one of the fundamental needs among employees without it in normal conditions access to higher levels of human needs would be impossible. An accurate planning helps to avoid the negative effects acting on body and mind occurring in compensable Losses [7].

In recent decade, least communities can be found at which controlling various affairs without planning in partial or general comes to realize. Meet the Goals of an organization needs a comprehensive planning at which the entire needs and resources would be in partial forecasted. It is obvious that planning in each task would not result in success without forecasting human the human resources needed and the way to provide, breed and distribute them. By being provided with planning in manpower, forecasting the upcoming needs of personnel, optimal use of manpower and accurate selection of employees would be used as infrastructure at future for an organization. Planning in manpower in each of its facets has an effective contribution in developing it where correct use of employees is drawn into attention. It is a fact that any economic advancement requires an accurate planning in manpower throughout the organization levels [8].

### **Research questions**

- 1- How is the trend of manpower changes in the organization?
- 2- Is there any rule to attract and hire manpower in this organization?

### **Literature review**

Yanhua, lieu conducted a study entitled training, experience and productivity of labor within rural and urban industry of china. The statistical population of this study includes 140 industrial units in 2011. The Cobb–Douglas production function has been used in this study and then it has been compared with Translog production function. The results of this study show that unspecialized labor with low education level and labor with low experience had the more added-value in their industry [9].

Alimrdany Omran conducted a study entitled human capital and economic growth. The effect of human capital on economic growth within 93 countries using combined data studied where the results showed the combined data rather than sectional data with the significant effect on economic growth. Further, effect of higher education levels on economic growth mentioned in massive[10].

Kang, Jung Mo in a study entitled "An estimation of growth model for South Korea uses human capital", examined the Non-decreasing returns to human and physical capital ratio. He used the index of education system costs as human capital, concluded that Non-decreasing returns to human and physical capital ratio cannot be determined in South Korea [11].

Narayan &.Symath in a study entitled the relationship between human capital and real revenue within China using VAR model, concluded that there is a significant relationship between these two so that long term human capital results in real revenue. This is in a way that short term human capital has the relation with real revenue [12].

Aluaro& Miguel conducted a study compared the economic returns on human capital and physical capital in Portugal. They used the Cobb–Douglas production function and Method for long-term convergence within Portugal regarding three types of governmental, private and human capitals. The results showed the governmental, private and human capitals respectively with the return rate equivalent to 26.7%, 18.5% and 16%[13].

Salimi far and Shabani in a study entitled role of human capital in production in industry sectors within Khorasan Shomali, concluded that human capital affects positively the added-value within this province[14].

Labaf and Shamiri conducted a study entitled an investigation into the factors affecting human resource effectiveness, concluded that effects of personal, occupational, organizational and environmental factors in human resource effectiveness have not the same so that the organizational and personal factors had the most effect in increasing effectiveness[15].

### **Theoretical framework**

The literature review associated to the role of human in production turns back to Adam Smith's view. According to Theories of the classical economists, human has been accounted as one of the factors vital in production within production cycle of goods and services where on Capital accumulation has been fundamental in production. Previously, the human was completely forgotten in production lines and its difference in nature with capital was forgotten as well. According to this view, the superiority of capital came as tools and variables available to employers to use them in order to utilize the same levels of production in a way that the employer managed to use it as an alternative to access a specific extent of production. The followers of such theories had the same view to manpower called the human particularly assigned to work and labor. At that time, the human's position as manpower accounted as a creature without soul obeyed the employers. Gradually, the human's role in working or labor within framework of manpower replaced with manpower. Marx's theory of labor value arising from the accumulation of additional work accounted in a way conveyed as earning, interest and/or extra interest for the investors. Marx paid attention to the importance of manpower and job due to their specific role in accumulation of physical capital where developing capital accumulation derived from increasing work hours and production rate in improving efficiency and productivity of manpower.

Subsequently, Schumpeter paid a particular attention to the role of innovators and inventors who had assumed undertaking conducting and regulating capital where the interest acquired of innovation and creativity mentioned as vital factor to develop physical capital. He believed this interest so far the innovation sustains on would exist. Improvement in productivity and efficiency in labor was just increase in human skills.

Schumpeter further pointed out the role of entrepreneurs, i.e. the humans with specific abilities for entrepreneurship whereby the fundamentals to equalize manpower with capital accounted. An overview of the views mentioned on the role of human in economic growth and production process, it can perceive regarding all these views the financial and physical capitals essential in economic growth and production. According to these views, the human as production factor to intertwine the physical capital has been accounted. In the 1950s decade, Theodore William Schultz introduced the importance of human capital as production factor equivalent to the importance of natural capital and physical capital. This new but simple outlook in recent decades found importance where the economists addressed reviewing the concept of capital and investment. Hence, new resources can increase the production extent, productivity of manpower and welfare level so that these would be recognized clearly. According to the outlooks mentioned to date, like Comment by Arthur Lewis, supply manpower accounted without limit but emphasis on the human's academic and technical abilities and the thought that more skill and training lead to increase of capital caused human found in a position equivalent with capital.

Be increasing focus on role of human in developing the concept of human development in the report by human development, the national organization development planning applied in 1990. According to this report, economists regulated it, recognized human in the center point in development plans where the fundamental goals in development plan mentioned as providing an

environment for humans at which continue their life with longer life. According to this view, the role of human in capital within the process of economic development exceeded where even found a place more superior with this view that economic development mainly comes to realize with human development. According to this view, human is not just the tool for development, but is the main aim to development, while previously it was emphasized on human capital in terms of value and importance of tools conducted in development process.

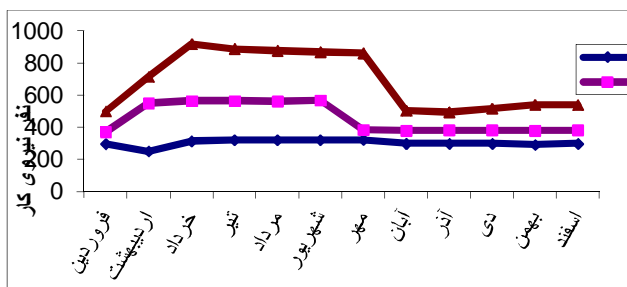
### **Research methodology**

The present paper in terms of goal is an applied type of research where the results from the findings can be used for by the managers, politicians across the country, planners in national and regional levels as well as by the experts in automotive industry. The statistical population includes Kerman automotive factory where the statistics and data of manpower during production years in three periods in 2012 proposed and analyzed.

To investigate manpower at each decision making units during the time study was conducting after meetings organized with authors and experts regarding the Heterogeneity of labor in order to consider the entire facets including skill, education status, experience and other parameters in calculating manpower. It is clearly stated that Labor groups put into four groups including experienced, skilled, semi-skilled and unskilled individuals where the value equal to 7, 5 and 3 assigned to the experienced, skilled, semi-skilled individuals, then according to the number of manpower in each time intervals in each unit, the equivalent to manpower at each unit calculated.

### **Results and findings**

The results from the manpower during the study were conducting regarding each unit can be observed in figure as following.



According to figure shown above, it can perceive that: the first unit: the manpower equivalent to this unit had the fixed trend during the period the study was conducting. As observed in this figure, just little fluctuations can be seen in this figure.

Second unit: the trend of changes for this important factor at this unit started with an increase in the early period and then proceeded with a relatively fixed trend till the sixth time interval. In following, the figure shows a decrease in the sixth time interval where this increase conveys power balanced in this unit, that is, the power balanced after the manpower attracted and applied during five months so that this seems a bit irrational. In following, a relatively fixed trend can be observed in this unit up to the period ended.

Third unit: figure one indicates an increase with sharp slope to the end of the third time interval. This means the manpower attraction seen at this time interval. In following, a relatively fixed trend till the seventh time interval can be seen.

At this stage, a decrease with sharp slope can be seen within next 3 months, indicating the power balanced in this unit. At this unit like the second unit after an increase, a decrease in manpower can be seen, where this can bring about many difficulties. In following, an increase with moderate slope till the end of period can be seen.

### **Conclusion and suggestions**

Nowadays, the role and importance of manpower in production process and supply of services within communities as the most important factor in production and economic processes have been accounted. An overview on the stages developing and leading to human civilization, it can perceive that role of manpower from the simple labor to human capital accounted as the most fundamental production factor has been developed.

The results showed that applying manpower in current conditions with a majority of educated force has not been as a systematic regulation, because as the results showed except for the first unit studied, the fixed trend perceived so that two other units in a course from the time acted to attract manpower where after a short while, a decrease in manpower in these units has been seen where this can bring about difficulties at that period. One of the factors affecting this topic of interest can depend on the number of products used and produced, where to specify this topic, the statistics of products produced in a period studied extracted from the documentary archive of factory, this showed there was not a specific relationship between these two factors. Eventually, suggestions given to the authorities to improve the current situation to come to realize the production.

1-Revise and codify a regulation to apply new manpower at this important center in order to optimize and increase performance and ability for competition and customer satisfaction

2- Hire manpower regarding their competence and need

3-to realize manpower's welfare, provisions like signing longer contracts to increase job security, grant the wages issued based on the law of labor, pay salary in accordance with liabilities, sign contract with Supplementary health insurance and appropriate Unemployment insurance, recreational facilities and etc.

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