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Investigating the Technology Used in Energy Production and Distribution in Iran Tractor Manufacturing Industry Group

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Abstract: Awareness of the current state of the system and its processes, the first step is to decide policy and management in order to optimize the system. This study intends atlas based on the technology of production and distribution of energy technology centers in each of the Iran Tractor Manufacturing Industry Group uses to determine. Revealing the level of technology can be decided to eliminate weaknesses. This field of research is distributed questionnaires and data collection and analyzed using descriptive statistics and inferential statistics when two out, accept or reject the hypotheses were confirmed. And the coefficient of technology, energy technology levels were determined. The study sample of Expertise and knowledge of the production and distribution of energy carrier is selected in each center. Calculated according to the number of levels of technology, it was found that:
1. Four levels of performance driven (machine tools, people, software, information, hardware, software organizations) three technologies of production and distribution center, the company uses compressed air and electricity Iran Tractor Manufacturing Industry group and the whole point of this technology is appropriate and desirable to have the level of technology topics. But to reach the desired position, the need to improve their technology topics.
2. Depending on the number of contributions (β) based on the technology of machine tools, machine tools low level of technology and technology fields are higher than others in reducing the number of machine tool technology, small changes can decreased the level of technology by The obsolescence of the technology life cycle, reducing the overall efficiency and value will be reduced. Regarding Iran's Tractor Industrial Services mission continued production and distribution of energy expenditure, so any inefficiency in the axis machine tool technology, will result in damage to the Iran Tractor Manufacturing Industry Group. To prevent damage, proper model management, production technology and energy expenditure Iran Tractor Industrial Companies were also presented.
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1. Introduction

This application in industries such as Tractor, Iran Khodro and Saipa ... The production and distribution of energy consumed by the network to transfer them to a central unit is transferred to the consumer. With rising energy prices and the depreciation of equipment, technology management, energy supply will be further affected. It seems that such activities should primarily technology has been assessed and determined to be necessary, improve or be replaced.

Explaining the importance

Industrial Services is one of the rare companies specialized in the field of energy development and job generation, transmission and distribution of energy companies in the industry group is responsible Tractor. Continuous and steady supply of energy consumption by industry group in Iran Tractor Manufacturing Company Iran Tractor Industrial Services is one of the fundamental missions of the energy produced by the network for use in central Iran Tractor Industrial Group companies to be taken. The following factors are present to ensure continuity of service placed under the management is faced with a challenge.

Energy price increases as technology inputs, Energy dissipation of assets and the need for reinvestment, Proprietary technology with low energy

intensive, High costs of network losses in transmission and Due to the fact that I am the president of Iran Tractor Industrial Services strategic planning and program design in assessing the appropriate level of technology employed, I am responsible for energy production and distribution of the technology to know based on the For better or be replaced.

The main objective of the project: Evaluation of production technology and energy distribution Complexes of the Tractor Industry Group:

- Knowledge of Performance (human, software, data, software, machine tools, the software) technology, manufacturing and distribution costs Iran Tractor Industrial Companies
- Knowledge of Performance (human, software, data, software, machine tools, and the software) technology uses compressed air generation and distribution companies in Iran Tractor Manufacturing Industry Group
- Knowledge of Performance (human, software, data, software, machine tools, and the software) technology uses electricity generation and distribution companies in Iran Tractor Manufacturing Industry Group

Hypotheses

The main hypotheses: the level of technology used in energy production and distribution companies in Iran Tractor Manufacturing Industry group is appropriate.

Sub-hypotheses:

Machine tool technology, production and distribution of steam for heating purposes is Iran Tractor Manufacturing Industry Group.

Level of technology, software production and distribution of steam for heating purposes is Iran Tractor Manufacturing Industry Group.

Information technology, software production and distribution of steam for heating purposes is Iran Tractor Industrial Group.

Level of technology, software production and distribution of steam for heating purposes is Iran Tractor Manufacturing Industry Group.

Compressed air technology used in the production and distribution companies, industry groups Tractor is appropriate?

Machine tool technology, production, distribution and consumption of compressed air is Iran Tractor Manufacturing Industry Group.

Production and distribution of the software technology industry Compressed air consumption Tractor Group of companies is appropriate.

Information technology, software production, distribution and consumption of compressed air is Iran Tractor Manufacturing Industry Group?

Production and distribution of the software technology industry Compressed air consumption Tractor Group of companies is appropriate.

The technology used in power generation and distribution companies, industry groups Tractor appropriate.

Lifecycle technology

Another feature is that technology as a commodity or crop production, purchase, sale, distribution, transmission, etc., with Life cycle the following figure shows the evolution of the technology.

phase	Incubation	Introduction	Growth	Saturation	Decline
		First use			
Number of plans	More plans	Successful plan			

Given the above characteristics of each period can be summarized as such:

Incubation phase: Select and technology transfer that follows this course is followed.

- Case study for understanding technology
- Research on theoretical and technological issues
- Participation in the establishment of new or expansion of existing facilities, including preliminary investigations, plan feasibility, technical consulting, management, selection of appropriate operational or production processes, machinery or equipment, materials, installation and commissioning
- Learning the technical specifications of the new technology of experts and specialists seller

Introduction and Growth: Adaptation and absorption of the technology in this phase of the work is done.

- Helping to resolve technical issues and problems caused by the use of new technology
- Scientific and technical capabilities to enhance the technical staff in the use of new technology to better
- Increase efficiency and expand the use of technology into a variety of products or services produced
- Efforts to increase the efficiency and reduce costs through improved product or service

- Provide training for new technologies and specific aspects of the public to use it
- Simulation of some systems, machinery and equipment to develop new technologies and upgrading some of its manufacturing expertise
- Simulation of the materials or components used in the new technology

Saturation phase: Improvement of the conditions under which it is governed.

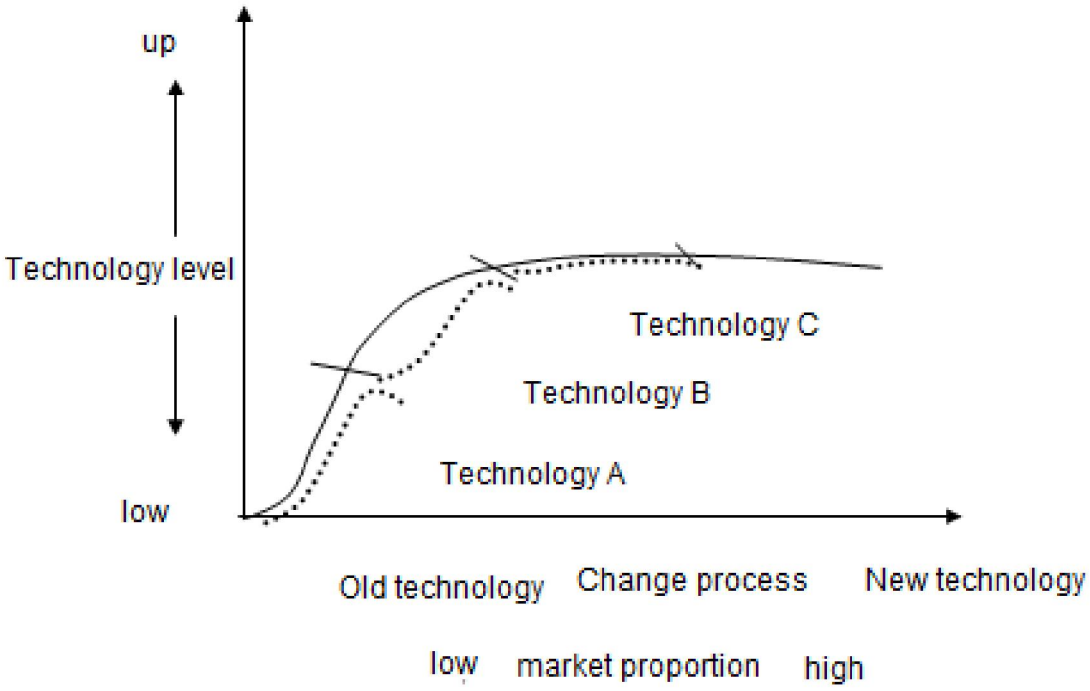
- Modify the Products or Services
- Improve production processes or operations
- Computerization of systems, machinery and equipment purchases, and enter through the integration of the design and construction of the
- Parts, materials and methods inside instead of parts, materials and methods imported
- Increase the percentage of locally manufactured by any means possible
- Reducing the cost of products or services in any way possible

Figure 1: Change Process Technology

Decline phase: Innovation and new technologies should be given at this stage to consider the following:

- Identification and evaluation of new technologies and proposed worldwide
- Introduction and diffusion of new technologies
- The effects of industry, economic, and environmental.... New Technology
- Study the feasibility of new technologies to replace existing technologies and select the best alternative

After passing briefly Technology Incubation phase Walks to the market supply and demand. At Incubation phase Utilizing the technology develops very slowly and gradually entering the market of technology, Growth phase started to employ technology and its application. In this case, introducing new products and decreased phase Saturation Technology is coming. Technology prior to haze Decline Obsolete and may refer to the following figure shows the process of changing a particular technology.



The unit has since 1960 continued to be responsible for the production, supply and distribution of compressed air requirements, equipment, systems and facilities, including the Iran Tractor Manufacturing Complex buildings, production halls, warehouses, and similar factors are responsible. Iran Tractor Manufacturing Complex in the air as a product of strategic energy and has many diverse applications. We have a total capacity of compressed air near m3/hr 42000 is one of the largest centers for the production of compressed air is a country in the North West. In the range of 2002 to 2006, eighty percent of the older generation of compressed air and a hundred percent of the initial central cooling compressed air due to the

amortization of long-term operation (establishment and operations of the Iran Tractor Manufacturing Complex) which are renewal and replacement of the roughly production capacity and product quality to avoid frequent disconnections due to compressed air generator is disabled. In terms of consumer demand at different times of day and different days of the year are variable and compressed air produced by the extensive network of canals, and underground concrete production halls thermic the Adam, structures warehouses sport other consumers cultural collection is sent. Currently eight compact air compressor, four cooling towers, as well as the capacity and type of companies are working under the Central are:

- Six units of Turbo Rotary (Oil free) and the nominal capacity of each m3/hr 6000 South Korea
- Two sets of screw type (Oil free) and the nominal capacity of each m3/hr 6000 Manufacturing Belgium
- Seven Sets of heating steam dryer absorption (Adsorption) and the nominal capacity of each m3/hr 6000 Manufacturing Belgium
- Four cooling towers of glass fiber capacity ton Construction of 220 cold

Method of project

Research, technical services and energy sectors of Iran Tractor Industrial Services main mission of providing carrier the energy consumption Iran Tractor Manufacturing Industry group conducted.

2. Methodology and Data

The application of this method to measure the level of every four people, organizations, software, data, software, machinery manufacturing and distribution centers energy, compressed air and electricity and then developed using a sample of each center of production and distribution of energy carriers, distributed as follows After collecting their responses, their data were analyzed.

Population: The population of this study was to evaluate the performance of each technology generation and distribution of energy carriers in the facility's staff. Given that this issue relates to the production and distribution of energy carriers used by all companies in the group of industries Tractor Industrial Services is the production and distribution of energy and the number of 7 cases of water liquor industrial water, gas, compressed air, water, raw water industry is so diverse because of the limitations of time and energy, the number of carriers in the present study 3 technology, heating steam, compressed air and electricity was limited.

Sample: Based on the research, and technical expertise to select the sample size and the use of qualified personnel.

Table 2: statistical population and sample

	statistical population		Morgan's table	Sample volume		
Raw	Productive unit	N	n	Selected	N	
1	Heated steam producer	15	14	Manager, planner, responsible	2+5	5
2	Compact air producer	20	19	Manager, planner, responsible	2+8	6
3	Power production	15	14	Manager, planner, responsible	2+5	5

Data Analysis

Given that the relevant information for the purposes of quantitative analysis was performed as follows.

Data were collected through questionnaires collected Likert scale interval. To compare the data obtained from this study, the data that was disconnected when the test for significant differences between the two when both are calculated when both table with 4 degrees of freedom and a confidence level of 99.5% was used for the rejection or Each of the hypotheses were accepted out Azamar description. If the hypothesis is accepted and if the average is greater than the number 3 out of 3 smaller number of hypothesis is rejected. With this method it was found. Which technology-driven manufacturing and distribution center for energy carriers or inappropriate (at the reception) is.

Methods

In this research, the study of the distribution and collection of questionnaires to help assess and determine the level of awareness of the four main technology production and distribution of energy used by was.

Tools for data collection

Information gathered through questionnaires and expert staff specializes in the production and

distribution of energy consumption to determine the level of technology Iran Tractor Industrial Companies. Use your knowledge and experience in the workplace and other partners specializing in energy

Methods of data analysis

Performance evaluation of component-level information technology, consider the interval Likert scale questionnaires have been collected. The study is mainly descriptive and inferential methods are used. The purpose of this method is to describe and interpret the results and explain its importance and validity. To compare the data obtained from this study, the data base is that when we test out two of the following formula is used to control the primary means.

3. Results

The researchers measured the level of technology-based TCC , Can be obtained to determine the suitability of the criterion of the number of larger numbers TCC From 0.5 The resulting number is less than 0.5, as is the inappropriate expression technology. A coefficient β Using the same sample is obtained from questionnaire surveys in the text is attached.

According to the results of the data collected from questionnaires to evaluate the ratio of the number of technology and technology components of the production and distribution of energy carriers, it was found that the contribution of the four components of machine tool technology and the highest weight, 52% It is. And also calculated based on the number of TCC Level of technology, production and distribution of energy carriers from the ideal value of 1 is 0.68 and 0.68 for the number of technologies are explained and demonstrated the proper composition and consistency of the four components of technology in the production and distribution of energy carrier Furthermore, the expression of each other and favorable conditions of work function technology components in the system of production and distribution of energy carriers is. One of the most important points about the results show that small changes in the machine tool can reduce the number decreased TCC In this case, the life cycle of technology obsolescence, inefficiency, loss of productivity and efficiency and added value will be reduced. With regard to the mission of Tractor Industrial Services based production and Distribution Company therefore continuous energy expenditure on the part of the inefficiency of any damage caused to the machine tool industry Tractor Iran will technology.

The role of compressed air energy technology and implementation priorities

According to the results of the data collected from questionnaires to evaluate the technology factor and the number of components in the technology of producing and distributing compressed air energy carrier, it was found that the contribution of the four components of machine tool technology and the highest 52 weight % respectively. And also calculated based on the number of TCC Level of technology, production and distribution of compressed air energy carrier of the ideal number is 1 x 0.69 x 0.69 and the appropriateness of the nature of the technology and represents the combination of technology and integration for production and distribution of energy carrier four Furthermore, the expression of each other and favorable conditions of work function technology components in the system of production and distribution of energy carriers is compressed air. One of the most important points about the results show that small changes in the machine tool can reduce the number decreased TCC In this case, the life cycle of technology obsolescence, inefficiency, loss of productivity and efficiency and added value will be reduced. With regard to the mission of Tractor Industrial Services based production and distribution company therefore continuous energy expenditure, any inefficiency in the machine tool technology of compressed air will cause damage to the Tractor industry.

4. Conclusion

The role and implementation of priority energy technologies

According to the results of the data collected from questionnaires to evaluate the coefficient of technology and a number of component technologies in production and distribution of carrier power, it was found that the share of machine tool in the four-component technology for the largest share, weighted 53% for are. And also calculated based on the number of TCC Level of technology, production and distribution of energy carriers from the ideal value of 1 is 0.69 and 0.69 for the number of states is a technology and represents a combination of technology and integration of the four for production and distribution of electric energy carrier Furthermore, the expression of each other and favorable conditions of work function technology components in the system of production and distribution of electricity is carried. One of the most important points about the results show that small changes in the machine tool can reduce the number decreased TCC In this case, the life cycle of technology obsolescence, inefficiency, loss of productivity and efficiency and added value will be reduced.

Results: The number of axis machine tools in the technology center, production and distribution of energy carrier the number of axes of Software as 13 percent and the number of core data app as 14 percent and the number of the roughly as much as 3 percent below shows.

Results: The number of axis machine tools in the technology center, production and distribution of energy carrier air than the number of axes of Software as 17 percent and the number of core data app as 18 percent and the number of the roughly as much as 14 percent below the shows.

Results: The number of axis machine tools in the technology center, production and distribution of carrier power ratio of the number of axes of Software as 14 percent and the number of core data app as much as 15 percent and the number of the roughly as much as 9 percent below shows.

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