

## Features of the System of Digital Information and Communication Technologies in the Management of Companies

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**Abstract:** This article developed the improvement of information and communication technologies in the management of modern companies; the basic concepts of information and communication technologies in the management of modern companies are revealed; the information and communication technologies of the Chirchik Transformer Plant (ChTP) were analyzed; practical proposals have been developed to improve the management of the Chirchik Transformer Plant (ChTP) based on the use of information and communication technologies.

**Key Words:** Information technology, communication, management efficiency, management methods, production process efficiency, reproduction, sales markets.

**Introduction.** The rapidly developing digital technologies in the world lead to a qualitative and technological change in the socio-economic activity, economic policy and government of countries. In particular, the introduction of digital technologies and the wide range of rates of their application in economic and social life have led to a widening of the development gap between countries. The growth rate of the "digital economy" in the world is almost 20 percent. In developed countries, the share of the "digital economy" in GDP has reached 7%. They are already benefiting greatly from the implementation of the "digital economy". As part of the comprehensive reforms carried out in Uzbekistan in recent years to radically modernize the national economy, a number of measures have been taken to introduce digital information and communication technologies into the socio-economic life of the country and public administration.

The active use of ICT (information and communication technologies) is based on a wide network infrastructure equipped with the latest equipment and technologies, a high human resource. At the heart of this work is the desire to improve the living standards of people, make their daily life easier, and effectively use the most advanced technologies in public administration.

Many problems in the development of information and communication technologies in companies today are related to the fact that decision makers (including managers of ICT companies) often have a very limited outlook. Many executives run their companies based on personal experience, perspective, intuition, and an unsystematic awareness of its dynamics and status. In general, managers responsible for

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the activities of the organization should have a broader understanding of the prospects and problems associated with the introduction of information and communication technologies in various areas of activity, and be able to manage the long-term development of the company. information and communication systems in the company.

These tasks served to determine the target areas of research on the chosen topic of the dissertation. It is also important to develop a national concept of the "digital economy", which provides for the modernization of all sectors of the economy based on digital information and communication, to conduct research on additional GDP growth through the development of the digital economy.

**Methods.** In the process of preparing this article, such methods as general scientific, logical, the method of scientific abstraction, the method of correlation and regression analysis, the statistical method, the method of horizontal and vertical analysis were used.

**Results** Based on the analysis of costs for 2021, the development of projected costs for 2022 for utilities, work to maintain fixed assets in working condition, staff salaries, etc., planned activities for the development of new types of products, taking into account forecast prices for raw materials and materials, a forecast estimate of the Company's costs for 2022 was drawn up.

Since its foundation, the Chirchik Transformer Plant has been a city-forming enterprise. About 1.4 thousand people work at the plant. One of the most important components of the Company's management is the improvement of personnel policy.

Recruitment of personnel of the Chirchik Transformer Plant is carried out on a competitive basis: preference is given to specialists with an appropriate level of education and extensive work experience. A system of personnel rotation has been put into practice, and advanced training of production workers is being carried out in a timely manner. The system of professional training, retraining and advanced training of personnel is continuous.

A set of measures has been developed to form a factory reserve of personnel. A database of capable, energetic, promising specialists who are ready to join the workforce of the plant has been formed.

One of the key activities of the personnel service is work with youth. A large number of industrial, sports, cultural and leisure events are held annually. Every young worker has an opportunity for self-realization. Particular attention is being paid to the professional growth and development of young people. It is planned to optimize the headcount in 2022, bringing the average number of employees to 1,280 people.

The business plan provides for the purchase of 11 units of technological equipment in the amount of \$1,227 thousand (or 13,254 billion soums).

In order to improve working conditions and fair regulation social and labor relations between the Employer and Employees, in 2021, the Employer amended and approved the Company's Collective Agreement in a new edition.

For the implementation of a set of measures for labor protection, safety and environmental protection, an allocation 1557904 thousand soums It is planned to allocate 300500 thousand soums for personnel training.

**Analyses.** The current financial condition of the Chirchik Transformer Plant is characterized by financial analysis data, which was carried out on the basis of the latest balance sheets on the results of economic activity for 2019-2021.

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**Table 1. Financial condition of the Chirchik transformer plant for 2019-2021.**

№	Name of indicator	2019 y		2020 y		2021 y	
		million sum	%	million sum	%	million sum	%
1	Net proceeds from the sale of products (goods, works and services)	320558	178%	357 680	112%	464 031	130%
2	Cost of goods sold (goods, works and services)	255 094	245%	299 683	117%	416 336	139%
3	Gross profit (loss) from sales of products (goods, works and services)	65 464	86%	57 997	89%	47695	82%
4	Period expenses	30 466	128%	41 238	135%	49 569	120%
5	Other operating income	8 388	80%	1 424	17%	6113	429%
6	Profit (loss) from operating activities	43 386	69%	18 183	42%	4 239	23%
7	Income from financial activities	8 627	161%	21 729	3	21 684	100%
8	Financing expenses	9 795	113%	31 461	321%	17 747	56%
9	Profit (loss) before taxes (payments) from profit	42 218	71%	8 451	20%	8 175	97%
10	Profit tax and other obligatory payments from profit	7 416	87%	2 729	37%	6 255	229%
11	Net profit (loss) of the reporting period	34 802	69%	4 733	14%	1 920	41%

The sales volume for 2021 is 464,031 million soums, the growth rate is 130% by 2020. The volume of fulfillment of the export parameters amounted to 10.3 million US dollars. The estimated production capacity of marketable products at the end of 2021 amounted to about 4,100 thousand kVA. In 2021, wages increased twice. The average monthly salary per employee was 3.6 million soums, the growth rate was 154%. The forecast of labor productivity per employee is 341 million soums.

In 2021, wages at the enterprise were paid not lower than the minimum amount established by legislative acts Republic of Uzbekistan and was not limited to any maximum. Net profit for 2021 amounted to 1920 million soums. Economic indicators were negatively affected by the COVID-19 pandemic, both in our country and in partner countries (counterparties). In particular, due to quarantine measures and disruption of transport links with Europe, there was a delay in the arrival of technical specialists to carry out installation and commissioning work on new technological equipment, which had a negative impact on the timing of its commissioning.

The production site of the Company is a territorially isolated complex of production and auxiliary premises designed to carry out the production process of products. The main and auxiliary production workshops, TsVILIM, SGP and the supply warehouse are located in the production building with an area of 65 760m<sup>2</sup>, consisting of 10 spans.

The plant has experienced, qualified personnel capable of manufacturing transformers and complete transformer substations,

both in standard and in any non-standard execution for individual orders, to ensure the fulfillment of any special requirements of the customer.

One of the key roles in the production process of the Company is played by the technological equipment park, which to a large extent ensures the volume and quality of products, the renewal of its range and the improvement of the national technological environment.

The high level of automation of the equipment fleet makes it possible to compensate for the shortage of qualified personnel, and the low level of resource consumption and high reliability make it possible to reduce operating costs and production costs.

If, on the whole, the business plan defines the goals of the Company in 2022, then the portfolio of orders or the sales plan, being part of the business plan, describes the steps to achieve them. That is, it clearly indicates how much the Company plans to receive income from its core activities in 2022, and how to do it.

Responsible for the implementation of the sales plan is the service of the Marketing and Sales Director, which consists of the Internal Sales Department and the Export Department, whose functional responsibilities include drawing up supply plans and linking them with production plans in order to ensure the delivery of finished products by production units on time, according to the nomenclature, completeness and quality in accordance with the sales plan, orders and concluded contracts.

**Table 2. Forecast portfolio of orders for the Chirchik Transformer Plant in 2022**

Projected sales volume in 2022	including			
	1 quarter	2 quarter	3 quarter	4 quarter
sales, million soums	sales, million soums	sales, million soums	sales, million soums	sales, million soums
526 572	130489	130789	132629	132665

In 2022, the following foreign exchange earnings are forecasted:

Exports are projected at \$10.41 million

As calculations show, the estimated production capacity in 2022 at the end of the year will reach 5.1 MVA, while in 2022 products will be produced at 4.1 MVA. The output for 2021 is 3.9 MVA.

In 2022, it is planned to introduce a mechanism for determining, monitoring and tracking the implementation of the Company's technical development strategy in the short and medium term.

In the 1st quarter of 2022, the Scientific and Technical Council will be formed (NTS) of the Company, which will be entrusted with the following tasks:

- analysis of trends in the development of transformer structures in the world based on marketing research, determination of trends in the technical characteristics of transformers for the long term (3-5 years). Analysis of possible new technical requirements for transformers, including voltage, power, etc.;
- analysis of trends in the development of the market for the consumption of transformers based on marketing research, both in the world and in the domestic market for participation in projects for the construction and modernization of large energy facilities and housing and communal services with an assessment of the need for transformers;

- analysis of the Company's existing production capacities, both in terms of technological equipment and the availability of qualified personnel. Determination of the optimal number of production workers, in order to achieve maximum labor productivity;
- analysis of the effectiveness of the use of existing technological equipment. Determination of the load factor of technological equipment at all production sites;
- development of an investment program for the short and medium term with a mandatory link to a corresponding increase in production capacity and return on investment;
- development and monitoring of the implementation of measures on roadmaps for the digitalization of production, the introduction of modern CAD systems, the digitalization of the Company's technical documentation, including the digitalization of the Archive documentation and the development of technological documentation, etc.
- development of a roadmap for advanced training of technical personnel of the enterprise, including designers and technologists;
- calculation of forecast production volumes for the long term based on the implementation of investment programs;
- analysis and development of production diversification programs, by mastering the production of new non-transformer products;
- coordination of technical specifications for experimental design development. Consideration of the R&D progress, including the parameters of prototypes, qualification test protocols and the conclusion of the R&D acceptance commission, as well as the development of design and technological documentation, the passage of normative control documentation, metrological and other types of control, the assignment of letter documentation and the submission of documentation to the archive;
- fulfillment at the enterprise of all requirements and stages of standards for the development of production.

In 2020, the Company began using transformer steel 0.27 mm instead of 0.3 mm, which made it possible to significantly reduce losses during transformer operation.

A phased transition to 0.23 mm steel is planned for 2022. The replacement of steel requires the recalculation of many technical characteristics of the transformer, as well as the reconfiguration of technological lines in production shops.

In 2022, the Company plans to resume the implementation development work. From the point of view of costs, the preferences indicated in the Decree of the President of the Republic of Uzbekistan dated 02.03.2021 will be taken into account. No. PP-5011.

Decrees of the President of the Republic of Uzbekistan define target tasks for increasing production volumes and developing exports. To achieve these goals, the state provides a number of preferences, including servicing loans, compensation for transportation costs when shipping products for export, tax incentives, incentives for purchasing copper products at the UZEX, performing development work, etc.

In 2022, a significant increase in production is envisaged.

To ensure growth, additional funds are required for the purchase of materials and components, which, based on the timing of the manufacture of the product, must be purchased in advance. To ensure this growth in the 4th quarter of 2021, a loan was received from a commercial bank for the purchase of materials in the amount of 25 billion soums.

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A number of social issues are planned to be resolved in 2022, wage increases of at least by 15% of the official salary of the Company's employees. A new regulation on the amount of monthly incentive payments is being developed.

This section of the business plan summarizes the materials of all previous sections regarding the expected income and expenses for conducting the production activities of the enterprise, and is presented in the form of financial formulations and cost indicators. The section includes information on investments in production, determination of the effectiveness of the introduced technological equipment, and also describes activities related to social responsibility to the team.

In monetary terms, the volume of production for 2021 is 458.1 billion soums, and for the portfolio of orders for 2022, 526.6 billion soums, i.e., an increase of 15% is predicted.

The projected profitability of sales is set at 4% of net revenue, while taking into account the costs of social guarantees for personnel and social responsibility to them.

An increase in serial production is planned. Serial production includes the production of TMG transformers, traction transformers and, after a set of works on serial development, the production of radiators using the CONVETT technology. Serial production is distinguished by a clearer organization of production, including the provision of raw materials and materials, a decrease in the number of equipment reconfigurations and replacement of technological equipment, the need for constant development of the production of new structural elements, the efficiency of mass production is much higher than the production of single products.

## **Discussion**

At the end of the paragraph, it should be noted that the introduction of information and communication technologies is one of the most controversial issues within the company. The management of the company often refuses to contact them because they do not feel qualified enough. Traditionally, decisions are made by the CIO or specialized external organizations. It is true that in recent years senior management has focused on ICT. After all, decisive initiatives should come from him to change the situation in this area.

Although most of the information technologies used for the operation of the Chirchik Transformer Plant were not originally intended for this area of management, modern market needs impose new requirements on their functionality. To date, information technology allows you to optimize and speed up the process of involving employees at almost every stage of work with employees. Therefore, modern companies need not only highly qualified employees who can work with information technology, but also employees who can form the organization's need for information technology, because information technology requires large financial investments, which is a distorted need.

## **Reference**

1. DJURABAEV O. Formation of model beekeeping facilities and modernized interindustrial communications in human bearing management //Архив научных исследований. – 2020. – №. 11.
2. Djurabaev O. Methods of the process approach in management and determination of the criterion of technological efficiency of beekeeping farms: methods of the process approach in management and determination of the criterion of technological efficiency of beekeeping farms // Archive of scientific research. - 2021. - T. 1. - No. 1.
3. Saidov M. Increasing Management Efficiency in The Electricity Sector of Uzbekistan //The 5th International Conference on Future Networks & Distributed Systems. – 2021. – C. 343-347.

<b>201</b>	ISSN 2576-5973 (online), Published by "Global Research Network LLC" under Volume: 6 Issue: 1 in Jan-2023 <a href="https://globalresearchnetwork.us/index.php/ajebm">https://globalresearchnetwork.us/index.php/ajebm</a>
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4. Saidov M. S. Analysis of the economic activities of natural monopoly organizations //Инвестиции, градостроительство, недвижимость как драйверы социально-экономического развития территории и повышения качества жизни населения. – 2022. – С. 74-79.
5. Munira A. Analysis methods of the factors influencing on consumer market //Бюллетень науки и практики. – 2018. – Т. 4. – №. 2. – С. 276-282.
6. Shanazarova G. Features of innovative management strategy of the automotive industry of Uzbekistan //Архив научных исследований. – 2019.\
7. Yaxuyaeva I. Енгил саноат корхоналарида маҳсулот рақобатбардошлигини ошириш йўналишлари //Архив научных исследований. – 2019.
8. Amanov, O. A. (2018). INNOVATIVE ACTIVITIES IN THE RURAL LABOR MARKET. *Economics and Innovative Technologies*, 2018(5), 17.
9. Yuldashev, N. K., & Saidov, M. S. (2023). The Economy of the Countries of the World is Experiencing the Need for Nuclear Power Plants. *American Journal of Economics and Business Management*, 6(1), 86-99.
10. Mashal, S. (2022, February). THE CONCEPT OF ENERGY SECURITY AND THE FACTORS AFFECTING IT. In *Archive of Conferences* (pp. 89-93).
11. Amanov, O. A. (2020). The Importance Of Digital Technologies In Ensuring Employment. *Экономика и социум*, (12-1), 302-314.
12. Йўлдошев, Н., Саидов, М., & Самиев, Ш. (2022). ВОЗМОЖНОСТИ ДЛЯ ФОРМИРОВАНИЯ РЫНКА ЭЛЕКТРОЭНЕРГИИ В УЗБЕКИСТАНЕ: SWOT-АНАЛИЗ. *Экономика и образование*, 23(1), 46-55.