

# PERFORMANCE ENHANCEMENTS OF ENTERPRISE INFORMATION SYSTEMS BASED ON INTRANET CORPORATE NETWORK MODEL

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## Abstract

*Most companies around the world are looking to use technology and data to get ahead of their competitors. Compiler software allows solving various tasks in the area of development data but only with basic communication. They allow you to maintain and process a certain amount of information that is necessary for the normal operation of the company. The introduction of information technology allows us to offer new types of services to customers. The concept of information technology is associated with computer equipment and various supporting mechanisms. Thanks to these technologies in all fields of processing, very different information appears about the product, accumulation potential. The use of multiple methods allows increasing the efficiency of the production process and bringing the business to a completely new level. Most of the companies around the world are used to the use of technical data to instantly overtake competitors. It is one of the most popular IT objectives in business. It is worth remembering that there is a special demand for qualified personnel in this field. Information systems professionals develop their creative and technical skills to successfully develop various solutions.*

## Keywords:

*Technology, Compiler, Software, Data, Communication, Information Technology*

## 1. INTRODUCTION

The development data area allows not only compiling software to solve various tasks, but also to compile basic communications [1]. Over time, the company has become increasingly widespread. Increasingly, they save and use the information they receive. Every company management is aware of the full risk of lack of control over all data [2]. The bigger the company, the greater the risk of leaking valuable information. Information technologies are widely used in medical, banking, government and transportation sectors [3].

They allow you to maintain and process a significant amount of information necessary for the normal operation of the company [4]. The introduction of information technology allows us to offer new types of services to customers. The continuous improvement, more and more companies are entering automated information accounting systems [5].

Thanks to the introduction of information technologies, companies can successfully compete in the global market [6-7]. The faster information is received and implemented, the more success the company can achieve. Information technologies allow you to save time and reduce production costs [8].

Through centralized management, the technology focuses on the concentration of information resources in a parent company with strict restrictions on company access [9]. Along with the decentralized management, along with the concentration of information, information segments are allocated to each local computer network of a branch or division in corporate data

warehouses [10-11]. For the effective management of large enterprises with a large number of branches, a corporate computing network is built, based on communication between local computer networks of individual structural units [12]. A corporate computing network is an integrated, multifaceted, distributed system of an organization that is subject to regional fragmentation, includes local computing networks for information exchange, and communication subsystems [13].

The main task is to strengthen the legal and property status of the company. In these modules, information is processed, based on which the following activities are carried out: preparation and maintenance of regulatory and reference information that regulates the organization external activities.

Development of documents regulating the internal functioning of the company and legal expertise; Legal expertise of completed transactions and contracts, etc. legal details to the highest guidelines, are contacted first, and all interest services of the company are consumed [5].

The main operational goals of the company are the preparation of summary analytical reports to support the adoption of long-term solutions and to ensure the operational verification of the company external relations based on information from various sources [6]. The system for solving the main tasks of processing information and management of a large company or company is based on a common information space, creating a corporate automated information store, which allows managing the current activities of the company, as well as plans for the company development, creating a strategy [14]. The overall information space is the organization of software, hardware, various hardware platforms and data exchange structures at all levels of management and at various corporate units.

## 2. RELATED WORKS

E-mail security based on international standards is implemented by creating protected gateways to data networks working on RORZ, SMTP, UUCP protocols; Organization of a global catalog service for the interests of corporate computing subscribers, based on protocol x.500; provide a means of working the communication resources of a corporate computer network to implement a single user interface [1]; Integration of the corporate network of large companies with business systems of other companies, computational networks of government agencies, financial and credit systems involved in the exchange of information for owners of subscribers of the telecommunications corporate system [3]; A similar system of information links in corporate systems provides access to data of any level, not only all the necessary information, but also allows the work of structural divisions of the company at the required level [5]. A complete reflection of production processes helps to bring

automated corporate information technology to the company problems, conditions for setting up the management process on the basis of modeling and managing the economic plan [6].

In large organizations, companies, corporations, information processing processes differ depending on the needs of the solution of operational tasks [7]. This automated organizational structure is responsible for the information support of the group. The main form of work with information in these blocks is obtaining information based on the strategic direction of the company development [8]. This unit ensures the operation of the financial director and accounting of the company. The main tasks of financial services were to create a general picture of the company taxation, to improve the company taxation, to summarize the entire financial information of the company activities and to bring information to the highest guidelines of the company [10].

### 3. PROPOSED MODEL

The dimensions of such associations are caused by the desire to increase the efficiency of operations by reducing the costs of production and production, the introduction of modern technologies, the introduction of modern technologies with major costs, implemented by merging regionally divided enterprises or the allocation of branches in independent organizations to increase a specific activity in a particular enterprise (production, sales and allocation of distribution systems, etc.).

Corporations and associations operate in industries such as transportation, commerce, and public utilities. In the economy of developed countries, the number of opportunities for small companies and enterprises to occupy a prominent place has increased significantly recently. As shown in the global practice, small businesses are compared to large ones; the advantages are many were shown in Fig.1.

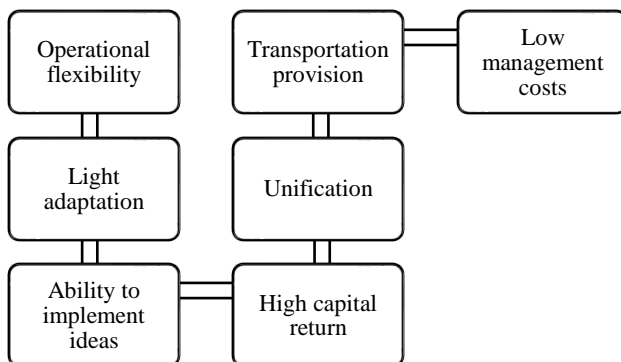


Fig.1. Global Practice of a Small Businesses

It is characterized by an automatic information management system that is very simple in information technology. Against the background of modern market relations, a large-scale business has developed, which is peculiar to the design of the company based on an association of companies, to cooperative structures of companies.

These collective sub-forms include: corporations, trade associations, concerns, stock companies, cooperatives, corporations, syndicates, financial and industrial groups, etc. Banks, insurance companies, stock exchanges, tax system, and authorities have similar organizational structure.

Organizations with centralized management are characterized by distribution of functions and powers among structural units with strict integration of production and economic activities in management systems. The diffuse form is characterized by the organization allocation of strategic business units or profit centers, whose activities have independent planning and budgeting.

- Characteristics of various divisions of large organizations Coordinating resources Coordinating resources Implementation;
- integrated centralized management, administration and information technology services and communication resources;
- Structured information access system in on-line and inline modes;
- An integrated email system and electronic document management system;

In this case, the departmental management department has a very broad authority, which is responsible for the results of production and economic activities for the competitiveness of the company products. For the highest leadership, real opportunities are used to expand long-term planning and external communications. In the first and second cases, the corporate capacity of the computer is formed by organizational, technical, informational and other relationships, integrating geographically dispersed offices built horizontally and vertically on various technological platforms. The main difference between the two types of management of large organizations is to organize information technology automatically.

### 4. RESULTS AND DISCUSSION

The proposed intranet corporate network model (ICNM) was compared with the existing Industry Chain Information System (ICIS), Network Security Information System (NSIS), Distributed Parallel Computing (DPC) and Task Scheduling Algorithm (TSA)

Corporate computing networks are the determining factor of the enterprise and the organization of communications between departments of different types of organizations, the organization of communications between LAN branches and the concentration of data in automated corporate information storage information resources.

The Fig.2 shows the Comparison of Corporate computing Management. In this regard, the client-server architecture is the basis of the current approach to technical solutions for creating information technology in corporate systems. The real distribution of client-server architecture became possible due to the development and widespread implementation of the concept of open computing. The main spirit of the open systems approach is to facilitate the process of organizing interoperability networks through international and national standardization of software interfaces.

The Fig.3 shows the Comparison of Open computing management. The main reason for the development of the concept of open systems is the ubiquitous transition to the organization of corporate computer networks and the complex problems of hardware facilities combined with the connections of various sites

of local computing networks of building units and branches. However, the introduction of the client-server architecture in client-server networks supports various data transfer protocols when creating branches and structural units that use client computing networks that use different technical solutions.

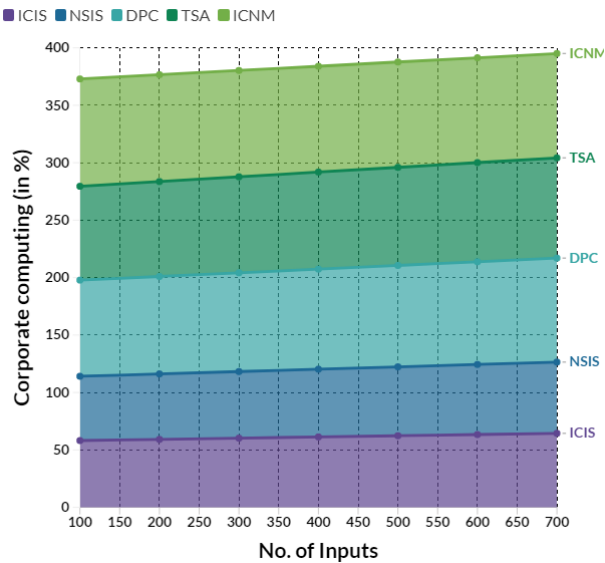


Fig.2. Comparison of Corporate computing Management

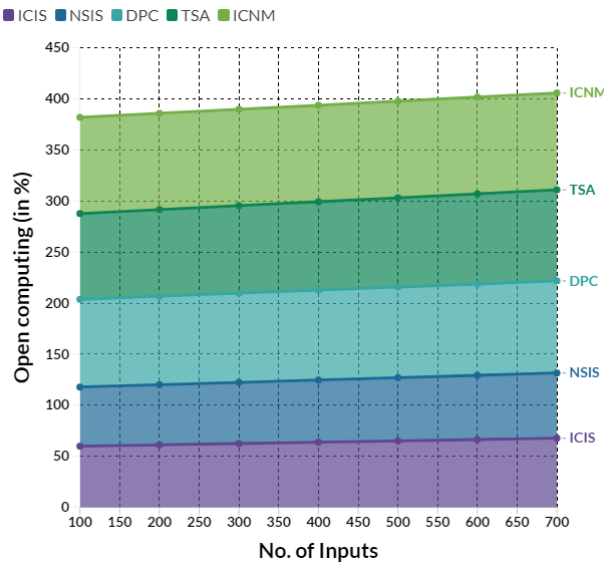


Fig.3. Comparison of Open computing management

The Fig.4 demonstrates the Comparison of Client-server Management. An even more difficult aspect of this problem relates to the possibility of using different data formats on different nodes in a LAN connected to separate local computing networks and corporate systems. High-end servers where it is used are especially essential. A common solution to the natural problem of corporate system automation based on client-server architecture is a support for software packages to implement the protocols of remote challenge procedures.

The Fig.5 shows the management of databases. when using tools like a normal procedure call a remote node accesses a server that looks like the developed strategic growth plan through telecom funding to all construction segments.

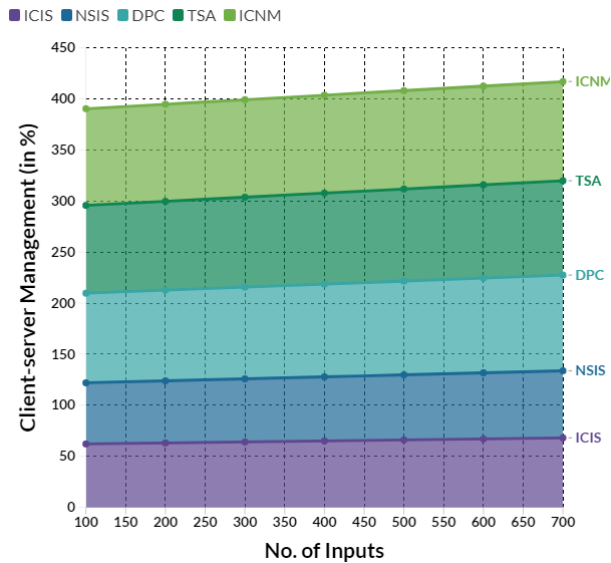


Fig.4. Comparison of Client-server Management

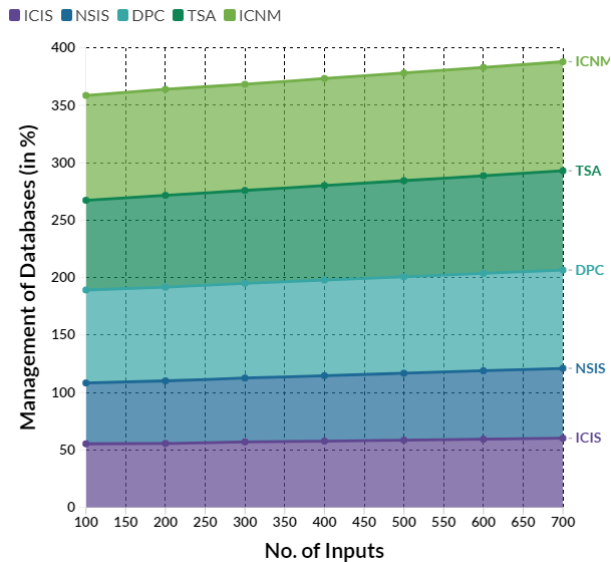


Fig.5. Management of Databases

5. CONCLUSION

A corporate computing network is a multi-generational system of a company that connects LAN units. Corporate networks are the so-called distributed networks or human (metropolitan area net). In their ideology and designation, they are close to the LAN, but the individual PCs of such a network are placed at a great distance and can communicate with special communication channels. Distributed networks are used, for example, by central offices or banks with their branches (including in other countries), etc. A specialized communication system (e-mail, fax, collaborative work on documents) is a distributed network, called micro-enterprise in soft terms. However, often under the term, the corporate network is a combination of several LANs located in various structural units of an organization, which can be built on various technical, software and information principles.

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