



Fig. 2. Average daily number of orders by segments

## References

- 1. Varatanova E.L. New problems and priorities of the digital epoch // Information Society, 13, 2005
  - 2. Bogdanov S. Business model for business / / Financier. 2000. № 2.
  - 3. Khutorskoy A. Distance learning and its technology // Computerra. 2002
  - 4. Koshelev A. Internet mail // Journal of ComputerPress. 2001

Sh.N. Ganiyeva

## SERVICE MANAGEMENT IN THE FIELD OF INFORMATION TECHNOLOGIES

(Tashkent University of Information Technologies Fergana branch, Uzbekistan)

In the IT sphere, it is customary to use the terms "information technology services", "information technology services" (IT services) or "information technology services" (IT services).

In general, a "service" is an act or activity performed by one subject (a person, a technical device, a system) in the interests of another entity. Synonyms of this term are "help", "support". Services are temporary by nature, they can not be "accumulated", stored, they are produced and consumed at the same time. Currently, the formation of a large-scale service sector is continuing, which is a manifestation of the processes of entering the era of a "post-industrial society", the emergence of an econ-



omy of services, the formation of scientific knowledge, which are regarded as an independent element of productive forces.

The IT service is understood as the result of the activity of IT systems, which is presented in the form of information technologies and information necessary to support the activities of the business system (enterprise, organization, individual decision-maker). In this case, the IT service can mean both a function of ICT, and a separate application or element of ICT. The main thing is that the IT service allows the user (the consumer, the customer) to effectively use ICT to support or implement business processes.

The term "IT service management", or its English name Information Technologies Service Management (ITSM), should be interpreted as a methodology for managing IT services. The reason for the emergence of ITSM was a change in the general philosophy and concept of business: instead of orienting the business to optimize and reengineer internal business processes, they moved to the concept of "business on demand", according to which the decisive factor for creating competitive advantages is the provision of reactivity or business dynamism. ICT systems should provide IT services that meet the needs of the business in terms of quality, productivity, time, cost.

The interaction of the business system and the ICT system is based on a multilevel architecture.

The effectiveness of the business system depends on the speed of bringing to the market new products, works and services, the level of customer loyalty (consumers of products, works and services), the use of modern methods and controls to solve problems in the field of strategic management, marketing, business performance management. Therefore, the upper level of the architecture is a set of interrelated business processes, each of which requires appropriate support from the ICT system. Business processes are constantly being improved, and a quality management system is being implemented. In these conditions, ICTs become a critical factor in the success of business system efficiency growth, which determines the requirements for the ICT system, the composition and parameters of IT services.

Between the business system (the customer of IT services) and the IT department (the IT service provider), relationships are established on a mutually beneficial economic basis: the business system determines the composition and operational characteristics of IT services that meet business requirements, and the IT department takes on obligations to provide them. In the financial structure of enterprises and organizations for the purposes of management accounting, "cost centers" and "profit centers" are defined. If we approach the informatization of the management system as an event financed without taking into account the real return on investment and the impact of ICT on the efficiency of the business system, the IT department is seen as a cost center that is responsible only for the expenditure of financial resources for the creation and development of the ICT system. If the IT unit is an independent business unit, it is regarded as the center of responsibility, the profit center, being the main provider of IT services for the business system. In this case, the IT department com-



petes with other IT service providers for the business system, applies various methods of managing IT services.

The second level of architecture is the presentation of IT services to meet the requirements of the business system. At this level, the notion of "price" of IT services arises, and there is a need to create an IT services management system, i.e. ITSM.

The third level of architecture is focused on the technology of the processes of "production" and "support" of IT services, represented by technological processes of data processing. At this level, there are material and labor costs for the production of IT services. The technological processes themselves must meet the requirements of both technical and economic efficiency, take into account best practices and achievements in the field of data processing.

The fourth level of architecture is connected with the IT infrastructure of the ICT system, represented in the form of tangible and intangible ICT assets (software, hardware processing, IR), labor resources (IT staff). Here, the IT infrastructure is the platform for performing the technological processes of production and support of IT services. Investments in ICT are connected, first of all, with the formation of IT infrastructure. The effectiveness of ICT depends on the correctness of decisions in this matter.

The European Foundation for Quality Management (EFQM) has developed an IT service quality management model that complies with ISO-9000 series standards. The concept of this model is the constant perfection of IT services by cyclic execution of processes that form a vicious circle.

The EFQM model can be used in several ways:

- To justify the structure of the IT services management system;
- As a tool for self-assessment of IT services by identifying your place on the road to excellence, which helps to understand the shortcomings and then encourage solutions;
- As a system for developing and implementing initiatives to improve IT services:
- As a basis for creating a single language and a way of thinking applied at all levels of the organization.

Perfection is a way out for the minimum legislative requirements within which the organization operates and the application of efforts in order to understand and respond to the expectations of society.

The process of managing the quality of IT services. This process is considered as an integral part of the quality management process of the final product of an industrial enterprise.

Service model of information technology. The IT service model is implemented through the service management system, which is inextricably linked to the company management system. The new concept of an integrated management system - the business management system is based on the close integration of management components by both business and IT services, the quality and compliance of IT services with Business Assurance requirements. The management objects in the IT services.



vice model are: the organization of IT departments, information resources and processes, IT policies and procedures.

Modern business systems have passed three stages of development. At the first stage, a quality management system is created (according to the requirements of ISO 9001), IT processes necessary to support business processes are established, requirements for information security, investment management in IT are defined. The production processes for the provision of IT services meet the requirements of ISO 20000-1.

According to the concept of the Capability Maturity Model Integration (CMMI) model of methodologies for improving processes in organizations, IT services are both a process and a product. Each separate IT service is based on a standard IT process and requires Tailoring to the needs and specificity of the client, as a result of which there is a service IT process for a particular client and a basic version (Baseline) of the officially approved configuration status. There are six main stages in the introduction of CMMI concepts into the IT service model.

## References

- 1. Chong, A.Y.L., Ooi, K.B., Lin, B.S. and Raman, M. (2009) Factors affecting the adoption level of c-commerce: An empirical study, "Journal of Computer Information Systems", Vol. 50, No. 2, pp 13-22.
- 2. Cooper, R.B. and Zmud, R.W. (1990) Information technology implementation research a technological diffusion approach, "Management Science", Vol. 36, No. 2, pp 123-139.
- 3. Davis, F.D. (1986) A technology acceptance model for empirically testing new end-user information systems: Theory and results, Sloan School of Management, Massachusetts Institute of Technology.

A.O. Komilov

## POWER OF NETWORK PHOTOELECTRIC POWER STATIONS

(Ferghana Branch of the Tashkent University of Information Technologies named after Muhammad al - Khorezmi Uzbekistan, Fergana)

The power of the UPS in such systems is selected by the capacity of the redundant load and does not depend on the power of the solar cells. The power of the network inverter can be either more or less than the power of the UPS. To ensure the recovery of the system when the batteries are depleted in the power plant circuit, a small solar battery can be provided, which is connected to the AB through the charge controller (shown in dotted lines). If the interruptions are short-lived, then these elements can not be used.

The most universal are photovoltaic systems with a network inverter at the output of the UPS. Fig.1. In this scheme, power plant construction also uses a high-