Improvement of management mechanism for procurement activities of high-tech enterprises

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Abstract. The article studies the issues of procurement management in order to improve the efficiency of enterprises, as the procurement sector is one of the main factors of market regulation and support of economic stability of the state. Many Russian organisations (especially large businesses and state corporations) do not carry out competitive procurement procedures in full and such practice cannot properly increase the economic attractiveness of the organisation. In this connection, the issues of a new understanding of procurement as a strategic process are considered. Two main approaches to procurement activities are discussed - traditional and integrated. It is suggested to regulate procurement procedures by developing relevant documents at the enterprise: regulations, instructions. As an important task in this case, the order of supplier selection is disclosed, allowing in practice to reduce the time of any purchase and, as a consequence, without loss of quality, to ensure uninterrupted supply of the enterprise with all the necessary, that is, to achieve the results set to target values. Thus, we can say that improving the management of procurement activities of enterprises, especially high-tech ones, leads to an increase in their efficiency.

1 Introduction

The relevance of research into the issues of improving the procurement management mechanism of high-tech enterprises in the Russian Federation is explained by the fact that many Russian organisations (especially large businesses and high-tech state corporations), do not conduct competitive procurement procedures to the proper extent. As a rule, they favour such processes as simplified small purchases from a narrow circle of suppliers, or from a single supplier at all, which negatively affects not only the irrational consumption of enterprise resources, but also other economic indicators. Many managers consider procurement only from the point of view of enterprise expenditures and do not see the possibility of positive impact of procurement management mechanism on economic performance. In this regard, it should be noted that Russian enterprises have started to think about optimisation of procurement activities relatively recently. Therefore, it can be said that Russian managers have relatively little experience in the procurement management process.

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2 Materials and methods


However, it should be noted that the peculiarity of foreign and domestic practice on the topic of procurement activity is to define the activity of providing material stocks and improving the system of inventory management.

And if inventory management is considered in the context of the procurement management system, as an important element of procurement management, which can get a better result in improving this area.

In this regard, as the study of scientific literature shows, the issues of analysis of elements of the procurement management system, the issues of increasing competitiveness through the optimisation of procurement procedures, logistics analysis, as well as minimising costs in procurement procedures remain relevant.

Thus, it is possible to emphasise the relevance of the issue of management of procurement activities of organisations and especially high-tech enterprises.

Procurement activities of organisations are mainly regulated by the Federal Law No. 223-FZ dated 18.07.2011 “On procurement of goods, works, services by certain types of legal entities” [1]. It is aimed at creating a competitive environment in the market of goods, works and services. In our opinion, management of procurement activities of the enterprise, regardless of the specifics and scale of its activities, can be considered one of the key processes, the efficiency and quality of which determines the competitiveness of the organisation.

In the planned economy, in particular the USSR, the process of production and provision of production was carried out by the State Committee for Material and Technical Supply (Gossnab) through the implementation of Gosplan. Gossnab and Gosplan actually replaced competitive market mechanisms. They determined the production plan for the producer enterprise and the production plan for the consumer enterprise. Obviously, in such an economy there is actually no procurement function. For the consumer enterprise there is no alternative in choosing a supplier, because the plan provides for supply from a particular supplier and it does not matter that another enterprise can supply a better-quality resource at a lower cost.

The enterprise had a logistics service, which was of a service nature, i.e., it served the supply process.

Thus, it is obvious that the planned approach, although it had advantages, could not fully realise its potential due to the fact that at such an approach the supplier did not need to get into the process of procurement activities.

The main trends in the development of procurement management continue in the Russian practice. The turning point in the organisation of procurement activities falls on the time when enterprises started to move away from the planned economy and to engage in procurement independently (i.e., independently search for suppliers, negotiate product characteristics, price and terms of delivery, etc.).

In general, it can be said that in recent years a new understanding of procurement as a strategic process is being formed. In this regard, we can distinguish two main approaches to procurement activities: traditional and integrated approaches (Fig. 1).
Main approaches to procurement activities.

The traditional approach defines: procurement is equated to a separate activity; the main factor is price, and we purchase what we cannot produce ourselves; procurement has a certain periodicity; quality criteria are clearly stated in the specification; the final product (work/service) is in the foreground; short-term relations prevail in relations with suppliers; there are certain tasks and procedures.

The integrated approach: procurement is seen here as an integrated supply chain, oriented towards the overall enterprise strategy; the main factor is to reduce supply chain production costs in the long term; if the choice is between "produce" and "purchase", the enterprise will choose "purchase"; inventory planning and forecasting system is introduced, on the basis of which procurement is optimised; joint development of quality criteria with the supplier; widespread use of digital technologies and the use of the "buy" and "sell" approach.

There is a realisation that the procurement management process is taking on a key role in the overall strategic objective of any enterprise, closely linked to vital processes in the management of the enterprise as a whole.

3 Literature review
Thus, procurement is a rather complex process, which includes the process of purchase or trade transaction; the work of the enterprise to acquire resources, as well as analysing the market of suppliers; selection of requirements for suppliers, criteria for their evaluation, and finally, the selection of suppliers and coordination of prices with them.

Procurement is a more complex process that involves determining the stock of resources and their orderly purchase to ensure uninterrupted production with reduced costs in the long run.

A significant obstacle in the field of supply logistics is the definition of criteria in the selection of suppliers, as well as the lack of appropriate documents that would regulate these procedures [13]. The existence of internal regulations allows levelling such problems, or at least minimising them [14]. The package of documents for process optimisation, according to the authors, may include the regulations themselves and a list of instructions describing actions during specific procedures.

Sharing the point of view of Khvalynsky D. S. we believe that the regulations can include the following sections:

- the principle of formation of requirements and criteria for the evaluation of procurement;
- description of the process of selecting the method and form of procurement;
- requirements to products and description of the object of purchase;
- the procedure for conducting procurement;
- a mechanism for working with suppliers and internal departments of the own enterprise to conclude long-term contractual relations;
- methodology for calculating initial prices of contracts in procurement;
- methodology of setting requirements and criteria for evaluation of bids in the procurement documentation, consideration of bids of participants at the selection and evaluation stages [13].

4 Discussion

It should be said that formalisations require that procurement procedures are conducted on electronic trading platforms (ETP), which is a digital software or service that allows competitive procurement procedures to be conducted in a digital environment, providing an opportunity for a potential supplier to submit an application for participation in the procurement and documents stipulated by the procurement documentation in electronic form, which greatly facilitates the procedure for selecting a supplier and concluding a contract with him. Note that the main difference between ETP and digital capital or digital board is that in this case the price is not fixed and is set during the procurement procedure. All suppliers see the initial price of the contract and can submit their offer and use the whole arsenal of discounts. Also when conducting an auction in electronic form, at the bidding stage, all participants of the procurement procedure see the price reduced by one of the participants, thus stimulating all participants of the procurement procedure to play for the reduction of the cost of goods, in full compliance with the requirements of the terms of reference. Thus, when conducting ETP the enterprise has a choice: to develop its own platform or to use the existing specialised ones. In our opinion, if the enterprise does not have a qualified programmer, it is better to use the existing specialised platform.

The main difficulty in implementing ETP, in our opinion, is the lack of regulated processes (i.e. procedures) of the procurement management system of high-tech enterprises, i.e. the absence of special Regulations. Therefore, the first stage of ETP development should be the following: development and implementation of the Regulation of procurement, which would define and prescribe the mechanisms of interaction between internal divisions of the enterprise;
Absence or non-compliance with the requirements of the Regulations often leads to the fact that e-procurement does not take root in enterprises. In our opinion, such Regulations should regulate the following issues:

- the procedure for inviting potential suppliers to participate in the procurement;
- list of supplier selection procedures approved for participation in the ETP;
- the procedure and terms of the supplier selection procedure under different conditions;
- the procedure for agreeing and concluding a contract with the selected supplier;
- powers and actions of procurement specialists at ETP in non-standard situations, etc.

Thus, it is obvious that an important and significant task is also the choice of supplier. And the question is not about the variety of supplier selection, but about the availability of the necessary service during further cooperation, i.e. it is the timeliness of goods delivery, the quality of provided inventories, optimal costs during transportation and what is very important - an acceptable (favourable) price policy. In the opinion of practitioners associated with the procedures of procurement activities of the enterprise - for the most correct procurement process requires a comparison of at least three sources of price. But in the procurement process there are many more sources for such analysis.

Necessary information about the companies-suppliers can be presented in a common base, which is called by specialists at the enterprise "Database of potential suppliers" [14, 15]. The use of this database in practice of individual enterprises allows to select all supplier companies with up-to-date contacts and pre-prepared questions. By way of example, developing such a database, enterprise procurement specialists can enter the following questions into the database:

- name and specialisation of the supplier's company;
- e-mail address;
- website;
- contact;
- telephone number;
- note;
- date of update, etc.

The data also allow to get the most complete information about the potential counterparty-supplier, which is very important in practice to reduce the time to search for the necessary data and, as a result, the time of any purchase is reduced without loss of quality and in accordance with the technical specifications in force at the enterprise. And also it should be noted that the reduction of time for each purchase, study and subsequent improvement of procurement elements allows to ensure uninterrupted supply of the enterprise with everything necessary, which is very important in conditions of sanctions, crises, epidemics [16] and other constraints.

**5 Conclusion**
In other words, efficiency in this case is the degree of compliance of the results achieved with the set target values (benchmarks). It can be said that improving the management of procurement activities of enterprises, especially high-tech ones, leads to an increase in their efficiency.

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