

СЕКЦІЯ 1. ІНФОРМАЦІЙНІ ТА УПРАВЛЯЮЧІ СИСТЕМИ

TOWARDS THE SUPPLIERS CHOICE PROBLEM FOR AFTER-SALES SERVICE CENTER OF OFFICE EQUIPMENT

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The repair of complex office equipment is the one of the most scientific intensive branches of service. The effectiveness of service centers work depends on following aspects. They are management structure, level and dynamics of economical indices, modern information technology usage.

The modern business is characterized by active usage of office equipment. Today we can't imagine any office without computers, printers, faxes, etc. However, complex equipment usage supposes availability of special service staff and technical support. For example,

- complex copy machines are needed for maintenance, i.e. works as to the cleaning, lubrication, regulation of the equipment;
- office equipment usage supposes regular delivery of consumables, e.g. paper and toner for a printer;
- the long-time usage of equipment is associated with scheduled repairs and replacement of recourse elements.

After-sales service of office equipment is associated with using of consumables, spare parts and recourse elements, i.e. we deal with material service. So we need to purchase, store and deliver material resources. The choice of reliable supplier is one of the most important problems of the successful after-sales service business.

We suggest applying the analytical hierarchical process as the method of supplier choice for after-sales service business. In order to implement this approach we need to build the hierarchy of criteria. The expert enters paired estimations of suppliers on each of the offered criteria. These paired estimations are measured in a 9-point scale. Paired comparisons matrices are formed.

According to the analytical hierarchical process, each matrix of paired comparisons is estimated on consistency and local priorities vectors are calculated. Values of local priorities of criteria and suppliers are used for calculation of global priorities which are considered as an estimation of supplier.

Specific character of after-sales service business requires more than one supplier of consumables, spare parts and recourse elements. So, we need to choose several eventual suppliers according to their estimations.

To increase the efficiency of the after-sales service process and to improve the management of after-sales service business we suggest an information system implementation.