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MANAGEMENT ISSUES IN SERVICE SECTOR

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The nature of services, their organizational features and specificities of the service market make this sector difficult to manage and pose a number of problems for managers of enterprises in the sector and require a differentiated management approach.

The scientific article discusses a number of problems of the management of enterprises in the service sector, such as management of demand and supply, inventory management and service quality management. Completing the available theoretical information on the above-mentioned problems, we have presented the correlations between them and our views on the solution of these problems. We have presented our conclusions regarding the requirements for the management system of service sector enterprises. Also, our approaches to solving the described problems were presented. The article was summarized with appropriate conclusions, completing the options for possible solutions to the problems we have studied.

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Introduction. Services are considered as goods that do not have a material form, cannot be stored, the moments of their production and sale coincide, and the presence of a consumer in this process is generally mandatory [1].

Due to these and other peculiarities of services, the management of this sector also requires unique approaches that are different from the traditional management approaches, which also implies certain complications, poses unique problems related to the management of this sector.

In particular, the highly variable and difficult-to-predict nature of demand for services, the inflexibility of service supply create problems in managing and matching service demand and supply. Due to the same reason, complications arise in relation to inventory management in service enterprises. The intangible nature of services and the role of human factor in the process of service implementation determine the problems of service quality management.

In the article, the theoretical approaches to the above-mentioned problems and their solutions were discussed and our conclusions were presented.

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Problem Setting. Management issues of service sector enterprises are still understudied, and information about them in the professional literature is scarce.

The scientific article is a step towards developing the theory of service science as an interdisciplinary science that is still in its development stage. Different authors have addressed different aspects of service management, identifying the existing problems and trying to outline ways to solve these problems. We have tried to combine the approaches of these authors and present a comprehensive approach to the above problems and their solutions, revealing the interconnections between these problems, as well as presenting our point of view on the solution of these problems.

Results and Discussion. Let's present the existing theoretical approaches to the problems of management of service enterprises being studied by us in order.

The Problem of Demand and Supply Management in the Service Industry. One of the important tasks of business planning is predicting the demand and, based on it, defining the volumes of required resources or matching demand and supply.

The problem lies in the fact that when the demand for services exceeds the volume of activity of the organizations or the supply, the organization loses the opportunity to earn additional income by increasing the volume of sales. On the contrary, when the supply exceeds the demand, organizations make expenses for paying employees' salaries, maintaining offices, and other purposes, but these expenses are not compensated by additional income.

In the service sector this problem is much more complex than in the manufacturing sector. Manufacturing managers can use a number of tools to solve this problem: production inventory, overtime, extra shifts, etc. But in a service, this problem is more complicated due to the intangible nature of services and the impossibility of storage.

Difficulties in matching supply and demand for service industry managers are due to [2]:

- 1) for most services, their production and consumption times coincide;
- 2) the marginal capabilities of some service systems are not flexible and in the event of a sudden increase in demand, it is not possible to match the supply and demand, for example in the case of hotels;
- 3) demand for services is difficult to predict;
- 4) the variability of the service period. Which means that even if the number of expected customers is specified, determining the time and resources needed to serve them remains a difficult task;
- 5) most services are location-specific. This also limits the possibilities of increasing the supply.

The first step of matching supply and demand is *demand management*.

Demand management usually refers to marketing. However, since the most important part of marketing in the service sector is the service delivery process, the demand management function also applies to organizational functions.

The next important issue in matching supply and demand is *supply management*. The first step here is to manage the volume of service activity.

The volume of activity is usually determined by the maximum level of productivity, which, as we understand, is extremely difficult to determine in the case of services. The volume of activity in the service sector consists of a number of

components [2]: human resources, buildings, equipment, tools, consumer participation, etc.

Effective strategies for supply management include: changing the number of employees and positions to respond to long-term fluctuations in demand, setting flexible work schedules to respond to shorter-term changes, ensuring multi-tasking of employees to replace each other during peak hours, increasing the number of part-time employees, increasing the participation of customers in the service delivery process, for example, introducing a self-service system in fast food outlets, banks or other services. Leasing equipment, adding or rebuilding buildings, implementing automation, extending business hours, etc. can also be effective steps [2].

We find that in modern conditions, partial or complete automation of the service process and the use of artificial intelligence can be a solution to the problem of service demand and supply management. For example, in the field of banking sector, over time, a greater number of services are shifting to the self-service sector; currently, you can make money transfers or pay loans by yourself, and even get online loans without visiting a bank or credit company.

Online order registration in the food service industry enables to transfer the orders to chefs without leaving the service hall while the waiter registers the customer's order, resulting in a reduction in order fulfillment and receipt time, enabling the waiter to serve a larger number of customers in a given period of time.

Such examples are numerous. Today, in the process of providing some online services, robotic systems working with artificial intelligence are also used, which can provide full customer service without the participation of an employee.

Online order registration platforms are not only a way to accept orders quickly and clearly, but also provide the enterprise with certain information about the dynamics of orders or demand for services in a certain period of time. As a result of which the prediction of a demand becomes more efficient.

These and other similar modern technologies enable service organizations to be more flexible in matching demand and supply and partially solve this problem.

The Problem of Inventory Management in the Service Industry. One of the issues of effective service management is inventory management. This issue is related to the previous issue of demand and supply management, because inventory is an important component of service supply.

The frequency of inventory updates and the volume of purchases are closely related. The more frequently purchases are made, the smaller the volume of inventory purchased. It is also necessary to decide whether to make purchases of different volumes at equal time intervals, or to make purchases of equal volume at unequal time intervals [1].

Irregular fluctuations in demand and the lead time required to supply materials complicate the task of determining the periodicity and volume of orders, which can lead to negative consequences such as shortages of materials or their becoming unusable due to their obsolescence.

It should also be taken into account that inventory holding costs are also significant and the task of managers is to optimize inventory purchase and inventory holding costs by reducing them to a minimum [1]. It can be said that the problem boils down to determining demand for inventory based on predicting demand for

services. In this case, it is possible to avoid inventory shortages, high costs for inventory holding, as well as unjustified costs for purchasing inventory, which may not be used, losing useful properties. Inventory management in any enterprise is associated with complex economic calculations and the use of methods developed for this purpose. It should be noted that the personal experience and skills of managers do not play the last role here.

Let's illustrate the calculation of the optimal quantity of inventory purchase with an example.

The annual demand for cooking oil in the restaurant complex is 6000 L, the order is made 6 times a year (every two months), ordering 1000 L of oil each time. The cost of each order is 20 000 AMD (Armenian Dram). The cost of inventory holding of 1 L of oil is 400 AMD per year. As a result of oil inventory write-offs, the inventory balance becomes zero at the end of every second month. The average annual inventory balance is 500 L (1000 : 2). Oil costs are calculated for 6000 L per year, for 1000 L per order. If the cost of each order is 20 000 AMD, then the annual cost of orders will be 120 000 AMD. The average annual cost of oil inventory holding is 400 AMD for 1 L. Since the annual average balance of inventories is 500 L, the cost of inventory holding will be 200 000 AMD.

Thus, the annual general costs for supplies are:

Order costs: $(6000 : 1000) \times 20\,000 = 120\,000$ AMD.

Inventory holding costs: $(1000 : 2) \times 400 = 200\,000$ AMD.

Total expenditure on supplies: 320 000 AMD.

The above calculations were made in the case of making an order 6 times per year. Let's compare these costs with the costs of ordering 4, 8, 10, 12, and 15 times per year. The calculation is shown in the Table below.

Calculation of the total cost of inventory in the case of carrying out orders of different quantities

A	B	C	D	E	F
Annual number of orders	Annual cost of the orders, A×20	Order volume, 6 000 : A	Average inventory balance, C : 2	Annual inventory holding cost, D×400	Total cost of supplies, B+E
	thousand AMD	L	L	thousand AMD	thousand AMD
4	80	1500	750	300	380
6	120	1000	500	200	320
8	160	750	375	150	310
10	200	600	300	120	320
12	240	500	250	100	340
15	300	400	200	80	380

Note: calculation done by the author using presented example provided by [1], 114–117.

As we can see from the presented Table, the total inventory costs are at a minimum when ordering 8 times a year and ordering 750 L of oil each time. In this case, the annual cost of the order is 160 000 AMD, and the annual inventory holding cost is 150 000 AMD. The total costs of supplies are 310 000 AMD, which is the minimum. The reason is that as the frequency of orders increases, the order costs increase, but the amount of inventory to be ordered decreases, as well as the average inventory balance in the warehouse and inventory holding costs are also reduced.

In fact, with 8 orders per year, we reach the optimal point, when order fulfillment and warehouse inventory holding costs are distributed optimally, and total costs are minimal.

Therefore, for effective inventory management, it is necessary to first predict the expected volume of demand in the upcoming period as accurately as possible, then match the service offer to it, forming the optimal amount of inventory, and then find the optimal option from the point of view of minimizing inventory purchase and inventory holding costs.

The Problem of Quality Management in the Service Industry. If in the past quality was considered an important competitive advantage, today quality is considered a necessary prerequisite for survival in business [2].

There are different definitions of quality.

According to the most formal definition, developed by the American National Standards Institute (ANSI) and the American Society for Quality (ASQ), quality is the totality of features or characteristics of a product or service that bear on its ability to satisfy stated or implied needs.

According to the International Organization for Standardization (ISO), quality is defined as the “degree to which a set of inherent characteristics of an object fulfils requirements”.

There is no generally accepted definition of service quality, but there are various models of service quality evaluation, the most famous of which is perhaps a multi-item scale SERVQUAL developed by Indian-American professor of the University of Miami A. Parasuraman. It includes the quality standards of service delivery tools, materials, physical environment, the benevolent attitude of the service provider to the customers, the mutual expectations of the customer and the service provider from each other and other important standards.

Service quality can be characterized as an assessment of how well a delivered service conforms to the client’s expectations [3].

Everyone talks about quality, but it is quite difficult to give a clear definition. And here the problem is not at all in the definition, but it is more important that customers, service organizations and suppliers, when talking about quality, mean the same phenomenon, so that their understanding of quality coincides [2].

The problems of service quality management are mainly due to their intangible nature, which complicates the process of defining service quality standards. Services do not have a material form, therefore they also do not have technical or measurable parameters, the quality of services undergoes certain changes in time and space. The service is a process that is characterized with the uncertainty of the result. The human factor is of great importance here. Moreover, the quality of services depends on the professional qualities and personal characteristics of the service provider, as well as on the client’s willingness to receive the given service and his subjective perception of these services.

That is why the psychological preparation of the service provider and his ability to create a favorable psychological atmosphere and reaching mutual understanding with the client are of great importance in ensuring the quality of service. An important task for managers of a service enterprise is to motivate and create a

positive attitude among enterprise employees, especially contact zone employees, which must ultimately be transferred to the customer.

Often, even a standard and technically correct service provided is not enough to achieve customer satisfaction, if the communication between the service provider and the customer is of low quality, or the customer have other expectations from the service delivery. That is why it is important to provide the customer with detailed information about the expected outcome of the service.

Service quality assessment and management is still a complex problem. In any case, specialists also distinguish the following criteria for evaluating the quality of services [2]:

1. *Reliability*. Reliability is primarily related to the complete and accurate performance of the service within the promised time frame.

2. *Willingness*. It is related to the willingness of employees to provide the service. For example, timely delivery of urgent services, quick response to calls, immediate mailing of important documents, etc.

3. *Security*. This criterion is related to employees possessing the necessary knowledge and skills, having a friendly and trusting attitude.

4. *Understanding with the customer*.

5. *Appearance*. Appearance includes the physical part of the service, service delivery tools, equipment, halls, as well as the appearance of employees, etc.

6. *Duration of service*.

7. *Perception of the product*. A consumer's perception of a product is formed based on product advertising, brand promotion, verbal information, or personal experience.

Of course, it can be noted that the quality standards of service may differ for different services, depending on the specifics of the service.

As we can see, the definition of quality is multifactorial and approaches to it are multifaceted. Both production standards and customer perception of service and many other factors are important here. In this regard, it is appropriate to remember the words of American theoretician and marketer Harry Beckwith: "You should always ask yourself: "Who determines the quality standards for my service: industry experts, industry standards, or customers?" From the point of view of making more profits, it is beneficial for customers to set the standards of your service" [4].

Since the main goal of the service is the customer's satisfaction with the service, we also find that when defining the quality standards, it is necessary to pay primary attention to customer-centric approaches, without neglecting the standards of the industry, the issues of compliance with safety rules and many other issues that may be ignored by the customer.

To achieve the customer's satisfaction with the quality of services, it is necessary to take into account all the criteria listed above and implement multi-factor quality management based on the characteristics of the specific type of service.

In conclusion, we can note that, due to the specifics of the service process and the service market, problems related to service demand and supply management, inventory management, and service quality management arise in the enterprises of the sector, which complicate the management process of this sector, bringing with them certain risks that are specific for the service sector.

Conclusion. Summarizing, we should note that due to the peculiarities of services, the management issues of this sector are more than we have tried to present. Let's present our conclusions regarding to the highlighted problems and their solutions.

1. Effective management of services requires managers to have a critical, flexible, modern way of thinking, the presence of personal managerial experience, multifaceted education, the ability to use the results of innovation and modern technologies. Managers in this field must constantly monitor the rapidly changing market for services and customer demands in order to be able to accurately predict expected changes in service demand, customer preferences, and other market parameters. They must show the necessary flexibility to adapt the organization's activities and production capabilities to the current situation.

2. For the effective management of enterprises in the service sector, it is important to predict the demand as accurately as possible and ensure the corresponding supply. To this end, it is necessary to develop a flexible staff structure and flexible work schedules to respond to sudden and short-term fluctuations in demand. From this point of view, the implementation of self-service systems and partial automation of the service process through the use of the innovative technologies are also important. Which will make it possible to partially or completely free the volume of service provision from dependence on the number of employees.

3. Implementation of the optimal system of inventory management, minimization of inventory purchase and holding costs, as well as monitoring of market and demand dynamics, demand forecasting make it possible to avoid unjustified inventory purchase costs. At the same time, predicting the change in demand and rational use of inventories makes it possible to avoid inventory shortages.

High quality is a prerequisite for survival in the service market. Quality management here implies high quality of personnel, service delivery process, tools, materials and environment. In any case, service quality evaluation indicators such as friendly service, quality of materials used, duration of service, duration of useful service life, customer satisfaction with the service result, etc. can be defined. Quality service implies ensuring the quality of all service parameters. We find that to ensure customer satisfaction with services, service quality standards should be defined from the customer's perspective.

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ԿԱՌԱՎԱՐՄԱՆ ՀԻՄՆԱԽՆԴԻՐՆԵՐԸ ԾԱՌԱՅՈՒԹՅՈՒՆՆԵՐԻ
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Աշխատանքում դիտարկվում են ծառայությունների կառավարման մի շարք հիմնախնդիրներ, որոնք պայմանավորված են ծառայությունների առանձնահատկություններով: Քննարկվել են ծառայությունների պահանջարկի և առաջարկի կառավարման, պաշարների կառավարման և ծառայությունների որակի կառավարման հիմնախնդիրները, ինչպես նաև դրանց լուծման հնարավոր տարբերակները: Որպես եզրակացություն ներկայացվել են ծառայությունների արդյունավետ կառավարման համար ոլորտի կառավարիչներից պահանջվող մասնագիտական և անձնային որակները, ինչպես նաև կառավարման արդյունավետությունն ապահովող անհրաժեշտ քայլերը:

Т. П. ДАВТЯН

ПРОБЛЕМЫ УПРАВЛЕНИЯ В СФЕРЕ УСЛУГ

Резюме

В статье рассматривается ряд проблем управления в сфере услуг, которые обусловлены особенностями оказания услуг. Обсуждаются проблемы управления спросом и предложением, запасами и качеством на предприятиях сферы услуг, даны причины и возможные варианты преодоления этих проблем. В качестве заключения представлены необходимые профессиональные навыки и качества менеджеров отрасли и необходимые шаги для эффективного управления предприятием сферы услуг.