

CONCEPT OF SERVICE LOGISTICS

Tomáš Jurik

Jobelsa Slovensko, s.r.o., Rozvojová 2, 040 11, Košice, tomas.jurik2426@gmail.com

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Abstract: The article deals with the design of service logistics, its definition, intersections and classification. It is meant to define the objects and subjects, which create the service logistics that would be used as a base for the subject, which is oriented to the particular area. The aim of the article is to set a complete and transparent source of information to formulate the areas of service logistics for the scientific-technical materials from the particular area. To meet the objectives, it is necessary to work the analysis of the theoretical knowledge in the area of services. The particular aim is to analyse the current state of the information-giving area, concerning the services and service logistics in general. This analysis will be transformed into the third particular aim, which is the synthesis of the service logistics itself and its defined content.

1 Introduction

Everyone meets with the services daily, whether actively or unconsciously. Buying, selling, setting a meeting, or a basic help with dealing with a certain situation. Everything among us is mutually connected according to the services. Logistic services are based on the same principle, however, from a different point of view. They record the relations between the provider and the user of the particular service, also from the point of view of the ownership and also the interpersonal relations, which occur during these services. Each part of the work focuses on the actual events in the particular area of the services. From the methods that are used, the main is the comparative analysis for the mutual comparison of the chosen educative institutions, that are in a certain way used within the schooling of the service logistics and their quality level. The article shows a complete overview about logistic services, their functionality, connection and the profit-delivery, not only for the public, but also in the business sector.

2 Service, its definition and basic features

According to Kotler, a service is an activity, which is offer by one side to the other side, while this activity is completely untouchable and does not create any material ownership. The word “service” comes from a latin word “servicum,” which basically represents the slavery. Within its distribution, there may to occur some problems, which are necessary to be realised, if the provider wants to be successful in the current competitive environment. These problems are based in the main features of the service. Therefore their solution is always slightly different from another, even by comparatively same situations [1].

For better understanding of the notion service, it is useful to define the features that divide a service from a product:

- Untouchability-incorporeality

Services cannot be tasted, smelled, seen or touched before their purchase. This character is often used to separate the services from the products, which you can clearly touch. The customer can lower the uncertainty of the service’s quality by searching for the evidence of its quality. If the customer wants to us accommodation services, he can firstly create an overview of the place where the service will be fulfilled. Usually, there are some propagation materials that will inform him about the prizes and information that relay to the service.

- Unstorability,

This feature is based in the previous one. That means that the customer only perceives the service in the moment of its provision. It is impossible to store empty hotel rooms or empty airplane seats in order to offer them during the season. This feature determines an exact harmony between the supplies and the demand.

- Inseparability,

A service is marked by the impossibility to be consumed elsewhere as it was produced. A product is produced on one place and used on the other. A product is made, sold and used. A service is sold on the first place then it can be provided and then used. Services have to be provided in one piece, it cannot be divided in time, it has to be used “now and here”. Both sides, the customer and the provider, affect the quality and point of view considering the particular service.

- Variability,

is a feature that is affected by a lot of co-factors (provider, customer, environment, ...), which take part within the service. Everyone sees the same service differently. For example, the supplying of the product in March and June seem to be the same things, but there are some significant differences, which follow the prize politics.

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- Complexity, relates to a complex seeing of the product and assortment throughout the area of services. Therefore, it is possible to divide the services into basic and additional.
- Uniqueness, is the aspect, which is closely linked to its variability. This feature affects all the requirements, in which the service is located. It represents the uniqueness from the point of view of the provider, but also the customer, according to time and place of provision [1].

2.1 Evaluating of the services

It is necessary to measure the services, in order to set their desired level (Figure 1). The evaluation consists of:

Availability of the products – percentage of the orders, which can be completed from the existing stock,

Percentage of the completed orders – per some time unit (week, month, year ...) is defined as the ration between the completed and imported orders (1).

$$X = \frac{\text{Number of completed orders}}{\text{Number of all the imported orders}} \times 100 \quad (1)$$

The disadvantage of this parameter is, that each item affects the profit differently.

The percentage of orders that are completed in time – this parameter reflects the fact, that each order can consist of several items (2).

$$Y = \frac{\text{Number of completed items within the order}}{\text{number of all the items within the order}} \times 100 \quad (2)$$

Ability to provide services – shows the time of completing of an order in days, the time from its importing, through its completing and delivery of the goods. A lot of customers prefer the meeting of the deadline to the short delivery times. With the security of the in-time delivery, there is no need for a large storage.

Order season without the shortage of the storages – time length, in which there was no deficit within any order.

Quality of the services – activities is before and after the transaction (availability of the spare parts, guidance ...) [2].

Besides the value of the services, it is necessary to evaluate their range. There are many parameters, usually in some physical units, which apply to a certain moment or time length:

- volume of the selling in the natural and financial units,
- number of orders,
- sales, profit,
- usage of the storages,

- incomplete orders.

The range and quality of the services have to respect the dynamics of the market throughout the existence of the product.

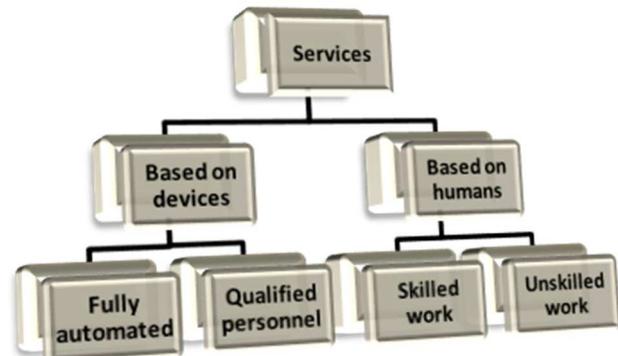


Figure 1 Classification of the services [3]

3 Service logistics conception

The creation of a systematic, transparent and understandable structure of the logistics (which applies the areas of services public and business) depends on several areas. The service logistics consists of different areas of services (Figure 2). The basic pillars include logistic services in:

- industry,
- banking and financial area,
- welfare services,
- telecommunications and post offices,
- army,
- culture,
- transport.

All the areas come from and are regulated by the legislation of the state and this work aims to show the flows and links in the individual sectors, their connection the logistics and also to understand their significance and importance.

At the first glance, it might seem, that logistics has nothing to do with the individual areas. Logistics if currently one of the youngest directions of philosophy, therefore it is understandable that it is constantly evolving. At first, it was only applied in the production connected to the automatization and direction of the flows within the factories. But it is necessary to realise, that logistics has been here from time immemorial. Mostly, the logistics is connected to automotive transport and logics, but it is necessary to point out the important aspects of service logistics and its usage in the everyday life.

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Figure 2 Areas of the service logistics

4 Definition of the notion within the service logistics

Logistics becomes the most evolving segment and offers an open space for innovation and continuous improvement of its processes, not only within the company, but also for the society and companies within the supply chain management. Currently, we divide several sub-categories of logistics and each of them is based on its own issues and its own solution of different problems and on its own search of optimal level of a certain situation. The most expanded part of the logistics is the industrial logistics, which takes the basic flows (material, informational and financial) into account and deals with the problems with various heuristic and systematic accesses with the aim to find the optimal solution for the particular problem, whether to minimize the costs or to maximize the profit.

The service logistics is less known and sometimes people do not realise that they are a part of some logistic flow in some area of services, which they use regularly or can also depend on. Within the logistics, there are defined the categories of logistics - Party Logistics. Every PL segment focuses on different activities within logistics. Service logistics is on the third level of Party Logistics (Figure 3) and fulfils various functions.

Within the service logistics, it is necessary to define and point out the difference between the service, service process and maintenance.

Service is an activity, which is offered by one side to the other, while this activity is completely untouchable and does not create any material ownership [1]. According to the point of view of the ownership, the user does not own the services. He pays for the certain service and in the moment of its provision, it is drawn out. If the customer demands the same service another time, he has to pay for it again.

The service process consists of the set of service processes, which are essential for the continuous and economic process [4]. It includes the activities that are made within the company in order to raise the effectiveness and productivity of the particular process. Here belong:

- transport,
- storage,
- manipulation,
- supplying,
- technical preparation of the production.

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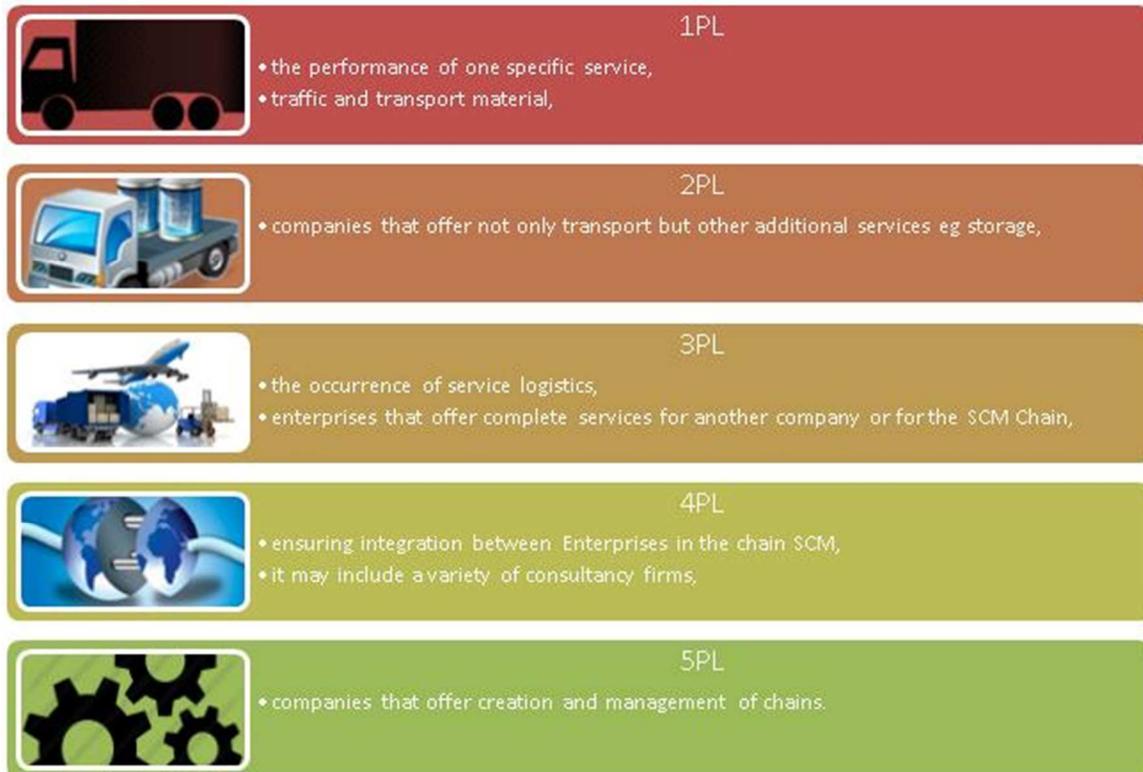


Figure 3 Division of the Party logistics into groups

Here we can see the difference between the service and the service process, where the service can be provided outside the company, the service process has to be done within the company.

Maintenance is the activity, which secures the working competence of the basic tools within the production [4]. It includes the activities, which eliminate the risks within the production and therefore minimize the losses.

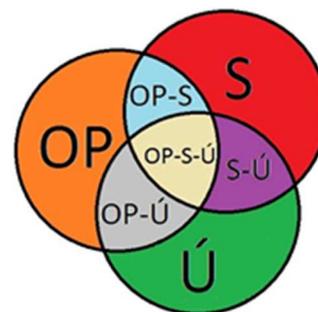
Each of the three points has its set place within the productive and unproductive companies, which allows it to perform its activities. Not every service is a service process and similarly, not every service process is the maintenance. The individual areas of operation of the three groups (Figure 4) can be defined by some limits.

Outsourcing is the external purchase of services and also a strategy of saving of the costs, if it is used properly. It is more favourable to buy the outsourcing from another company than to secure it internally. The example can be shown on the cleaning service. The company can purchase he service from another company and it does not have to take care of it anymore. It would be a much more expensive investment, if the company had to secure everything by itself, from the payments to the internal employees, to the purchase of the detergents and tools.

Conclusions

Every activity whether it is logistic activity or not, can be categorized into the one of the areas. Individual

areas (Figure 4) also color coded and they characterize concrete category. An example of how individual area can be understood is also shown in each area. This may be a concrete company, which disposes with all areas, mostly large to multinational companies, or company that connects only few areas itself and that contacts another company, which is specializing in the given area, for realization of other areas, if it is necessary for the correct running of the company.



LEGEND:
S – Service **OP – Service Process** **Ú – Maintenance**
OP – Ú => Service Process and Maintenance
S – Ú => Service and Maintenance
OP – S => Service Process and Service
OP – S – Ú => Service Process, Service and Maintenance

Figure 4 Categories of logistical activities

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Based on the shown scheme there exists seven different areas in which it is possible to incorporate individual activities. As an example, we can include some of the service areas into the created groups and then it would look like this. It is also substantial to take into account that individual inclusion is taken in terms of ownership relationship.

Service – the service itself can include the area of the culture for citizens in the form of optional excursion. In this area only area of the service is included in this area because a guide performs a lecture on historical events and thereby also ends.

Service process – under the service process we can include smaller companies that largely carry out the activity and production of the products for bigger companies or network of chains.

Maintenance – for large and multinational companies it is frequent that they also dispose with more departments. Every department aims to fulfill its obligations and we can include maintenance right below these departments.

Service process and maintenance – internal employees whose duties consist in performing the tasks within the company and, if is necessary carry out the maintenance also outside the company. One of the examples might be employees of the transportation company of the concrete place.

Service and maintenance – in this category we can include a variety of companies whose business idea is designed to help others for example different maintenances and repairs of machinery and equipment. Today we often meet with advertisements where natural person offers its services in the field of maintenance of various household appliances, masonic and safety works.

Service process and service – here we can include number of advisory and consultancy companies or personal agencies. Within the services they offer advisory for its customers and also perform its own role within the company at the same time (management of applications, arranging meetings...).

Service process and service and maintenance - are special group of companies that we can include in the middle of the diagram. There includes e.g. companies operating in the field of IT and internet. Within the services they offer to their customer's internet access and other different complementary services such as telephone, set-top boxes and sale of supplementary products. All measures for the proper operation and functioning of the activities that are offered to their customers are carried out within the service processes. In case of failure, damage or replacing a component they also offer maintenance, where workers will come directly to the customer and carry out the required task.

References

- [1] BOGDANOVSKÁ, G., PAVLÍČKOVÁ, M.: Služby ako nehmotné produkty a problémy súvisiace s ich poskytovaním. Ostrava: VŠB, [Online], Available: <http://katedry.fmfi.vsb.cz/639/qmag/mj100-cz.pdf> [29 Sept. 2014], 2014. (Original in Slovak)
- [2] VANEČEK, D.: Logistika. Jihočeská univerzita, Ekonomická fakulta, p. 178, 2008. (Original in Czech)
- [3] HALÁSEK, D.: Logistika v odvětvích služeb. Přerov: p. 335, 2013. (Original in Czech)
- [4] SPIŠÁK, J.: Logistika obslužných procesov. Košice: TU-FBERG, p. 100, 2005. (Original in Slovak)

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