

LOGISTICS SERVICE DELIVERY SYSTEMS

Marta Kadlubek

Czestochowa University of Technology

Abstract: The notion of logistics customer service goes beyond the questions related to delivery performance and includes many other elements before, during and after the transaction. Hence to understand unique managerial issues associated with different types of services or to identify commonalities among different firms, close attention should be paid to the underlying features of services and their delivery systems.

Keywords: Logistics, service, customer, delivery

Customer service for a distributor is a crucial source of added value. It aims at satisfying the customer requirements and expectations in a global way. It is the space where logistics and marketing are linked: products and services take value when they are delivered from the manufacturer to the consumer in the proper quantity at the time and the location specified. Thus, customer service includes a set of factors that affect the process of delivering a product or service according to the customer's individual requirements [9].

1. Logistics customer service

1.1. Definition

The term of "logistics customer service" can be defined in various ways. Bowersox and Closs [2], Christopher [4], European Logistics Association [6] agree that "*customer service is the general term used to describe the ability of an organisation to address the needs of the customers at the time, at the place and in the way required by them*".

In the logistics sense, it is a service organised to provide a continuing link between the time that the order is requested and the goods are received with the objective of satisfying present customer needs and criteria and anticipating and satisfying expectations.

Customer service can be viewed in one of several ways. Sometimes customer service is seen as an activity; that is, something that the organization provides. A customer service department that handles complaints, special orders, billing, etc. often evidences this aspect of customer service. Similarly, customer service can be viewed as a measure of performance. For example, if the firm can ship completed orders within 24 hours of receipt 95 percent of the time, it is providing good customer service. Unfortunately, both of these views are very narrow. In the former case, customer service activities seem to focus on resolving problems rather proactively meeting customer needs. In many retail stores, for example, the customer service department is hidden away in a far corner of the building where it serves as a place for customers to take their grievances. In the latter instance, attaining some desired level of

functional performance can lead management to focus on the tasks required to meet some standard rather than the needs of the customer.

Visionary firms view customer service as a corporate philosophy that defines the way the business is conducted [12]. Certainly, this type of organization may also have a customer service department or utilize performance standards, but the focus in this case is on the customer, not the process. In other words, the logistics system is managed so as to provide customers the level of service they desire which, in turn, leads to customer satisfaction, repeat business, and profit [8, 18].

The “seven R’s rule” offers a simple description of how integrated logistics creates customer service [14]. The seven R’s mean having the right product, in the right quantity, in the right condition, at the right place, at the right time, for the right customer, and at the right cost. Any breakdown in the seven R’s disrupts the flow of product and leads to poor customer service. Firms that routinely deliver the seven R’s add value for customers and create a competitive advantage for themselves.

1.2. Service mix

Basic service consists of providing the customer with what he ordered at the place he specified at the time he wanted. This means that to be able to process an order, pick the items from the warehouse, pack them and deliver them on time to the customer. However, because of the different expectations of the customers, the service should be provided in various forms. Ideally offered service should be cheap, fast and highly reliable. In practice, however, this is not possible and enterprises propose for the customers a *service mix*, which is a set of possible services that differ in their characteristics and aim to cover all the different needs or expectations of customers [9].

The notion of logistics customer service goes beyond the questions related to delivery performance and includes many other elements before (written customer service policy and strategy, accessibility, organisation structure, system flexibility), during (order fill rate, order status information) and after the transaction (after-sales support and call-out time, product tracing and warranty, customer complaints, non-conforming product). Although each element in the customer service equation will relate to one of these stages, it is the identification of the most important in a given commercial situation which is crucial to a successful customer service policy. Firmly establishing which combination of these factors will create the required degree of satisfaction – and planning and organising their implementation in managing the supply chain – will create the added value, and justify the position of logistics and distribution management as a prime business function. Table 1 shows the most important elements and characteristics of the logistics service [9].

Table 1. Main characteristics of logistics service

Time aspects	<ul style="list-style-type: none"> - length of the order cycle, - frequency of delivery, - delivery reliability and consistency,
Quality aspects	<ul style="list-style-type: none"> - order completeness, - damaged shipments, - accuracy of shipments and invoices,
Other services aspects	<ul style="list-style-type: none"> - availability of information on order status, - after-sales support,
Product aspects	<ul style="list-style-type: none"> - palette of distributed product, - competitive pricing of distributed products,
Cost aspects	<ul style="list-style-type: none"> - cost of providing the service.

2. Service sector

2.1. Characteristics

The service sector comprises a wide range of industries, such as entertainment, food service, healthcare, financial services, transportation and distribution services, professional services. This diversity makes it difficult to make useful generalizations concerning the management of all service organizations. However, many underlying characteristics are similar across services and are often very different from those in other sectors of the economy [5].

A service firm creates value for its customers without or with relatively little transformation of materials. Customers are rarely involved in the production process of the majority of manufactured goods, but are very likely to become an essential part of the service-delivery process. The majority of services cannot be inventoried, as can products in manufacturing. Some of the above other commonly accepted characteristics of services are [5]:

- services are intangible;
- the customer is a participant in the service-delivery process;
- generally services are produced and consumed simultaneously;
- services have a relatively higher variability in operational inputs and outputs;
- services generally have time-perishable capacity;
- site selection in services is directed by the location of customers;
- services in general are very labour intensive;
- it is relatively difficult to identify appropriate measures of service outputs.

2.1. Delivery systems dimensions

The above dimensions of services are fairly general and a lot of variability exists among different service firms, even within the same industry [17]. Hence to understand unique managerial issues associated with different types of services or to identify commonalities among different firms, close attention should be paid to the underlying features of services. Some of the commonly associated dimensions are described below [19].

- Customer contact.

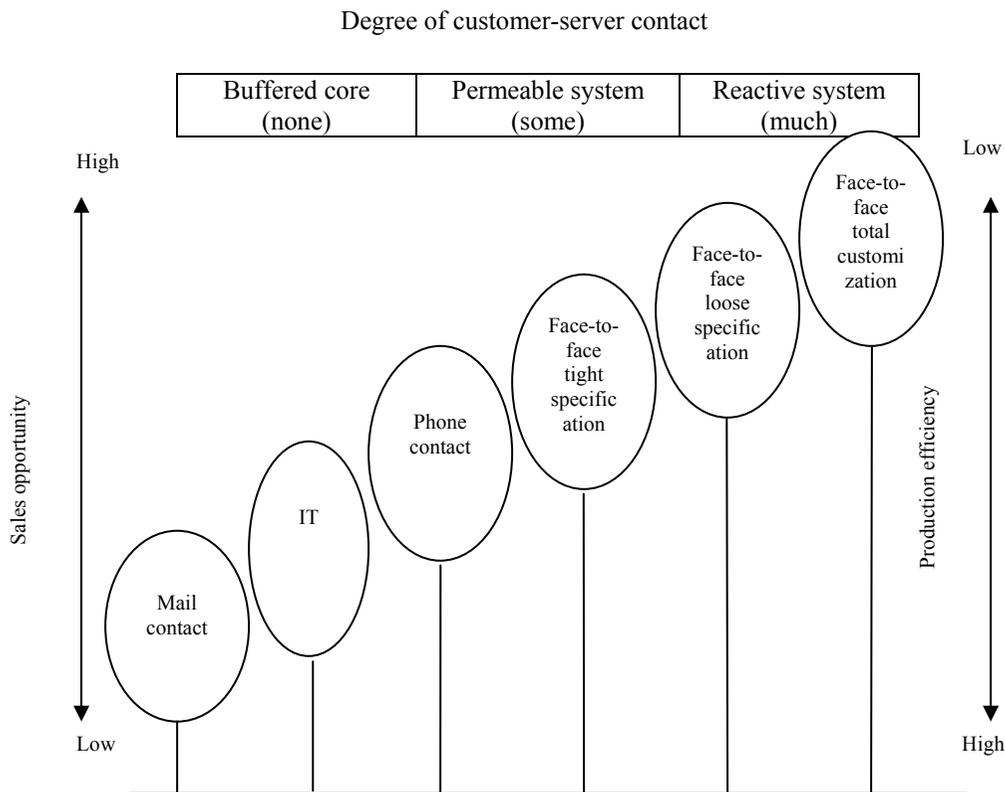
The term “customer contact” refers to the physical presence of customer in the service system. According to Chase R. B. and Hayes R.H., the customer contact determines the sales opportunity, production efficiency, and design of service delivery system as Figure 1 presents [3].

Low-contact services (e.g. a package delivery company) are designed around efficiency consideration such as speed and utilization. High-contact services, on the other hand, have a relatively lower level of production efficiency, because the physical presence of the customer increases the variation in the service delivery process. On the positive side, high-contact services have more opportunity to sell additional services to their customers than do low-contact services.

- Tangibility.

Customers’ preferences and their evaluation of a service also depend on the relative tangibility of the product or service package purchased. As the degree of tangibility decreases, customers’ ability to be able to see, touch or feel the purchased product or service bundle decreases. For example the services provided by a passenger airline can be considered more tangible than the services provided by an international logistics consulting firm. Customers, in general, rely more on the brand name when selecting intangible services

[7]. The degree of tangibility not only shapes the nature of the service delivery, but also affects the role of employees and the design of the service system.



- Nature of demand and supply.

Some services face a steady and predictable demand for their services, whereas others encounter significant fluctuations. Similarly, in some services it is possible to alter capacity at short notice, whereas in other cases pricing mechanism must be used to deal with the unpredictable nature of demand. The interrelationships between demand, capacity-constrained supply, and pricing mechanisms can be easily observed e.g. in the passenger airline, where yield management (or revenue management) is practiced widely [11]. The service provider, such as an international airline, constantly evaluates demand patterns, available capacity, and the past trends in cancellations and overbooking when determining prices for various seat categories. Although airlines were the first to develop yield management concepts, the practice is now being implemented in many other services. According to Kimes, yield management can be a very appropriate tool for services [11]:

- 1) which contain relatively fixed and perishable capacity,
- 2) which operate in multiple market segments,
- 3) which can sell services in advance,
- 4) which operate in fluctuating-demand environments, and
- 5) when the marginal sales costs are much lower than the marginal capacity change costs.

- Mode of service delivery.

When designing delivery systems, there is a need to decide if the customers will visit the service provider or whether the service provider needs to visit the customer. At the same time, due to recent advances in IT, it is also possible that certain types or components of a service be delivered through mail or electronic channels. Also the transportation industry plays the role of key enabler when customers desire more such services [16].

- Type of service processes.

Because customers are involved in the production and delivery of services, there is a need to understand the nature of the processes to which their customers are exposed. Services processes range from simple procedures involving only a few steps, to highly complex activities such as transporting passengers on an international flight. Because of multifunctional nature of services, many different approaches to classifying service processes have been developed. For example Schmenner [15] classified service processes in four categories (service factory, service shops, mass service, professional services) based on the relative labor intensity, customer contact and customization. Lovelock and Wright [13] also classified service processes in four categories: people processing, possession processing, mental stimulus processing, and information processing. Other researches, such as Bowen [1], Kellogg and Nie [10], have also attempted to link service-products with attributes of back-end service processes. As a result, each classification scheme provides insights into the operations related to different types of service processes.

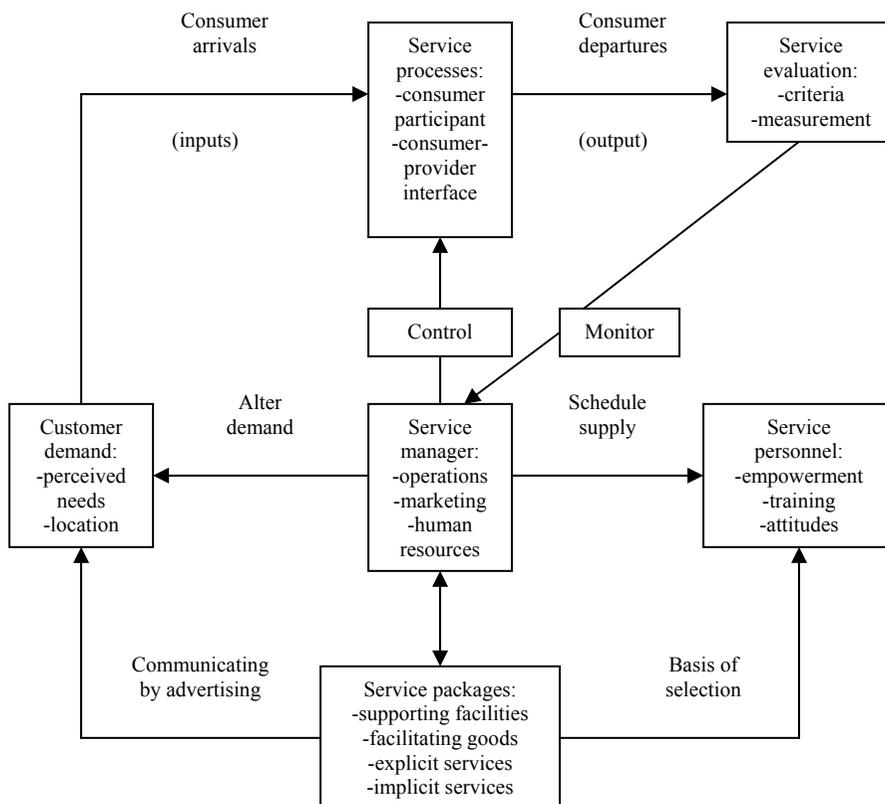


Fig. 2. The open system view of services

The multifunctional role of a service can be illustrated by recognizing that a service provider operates in an “open system” connected by customers, employees, processes, and product or service package offerings as Figure 2 presents. For example, the management of an air-transportation service company needs to consider the interrelationships between the service package offered (pricing, features), personnel, customer demand patterns (timing, volume, mix), and service processes (routes, check-in process, baggage handling process) in order to gain a good evaluation from their customers [16].

3. Summary

It can be easily appreciated from the above discussion of the underlying characteristics of service delivery systems that there is no one formula for applying logistics concepts to complex services enterprises. Therefore, innovative service providers either adapt their offerings and/or delivery process in order to better meet the needs of the customers they serve. Consequently, a number of approaches to implementing services concepts have been developed.

References

- [1] BOWEN J.: **Development of a taxonomy of services to gain strategic marketing insights.**- Journal of the Academy of Marketing Science, 18(1), 1990, p. 43-49.
- [2] BOWERSOX D. J., CLOSS D. J.: **Logistical Management – The Integrated Supply Chain Process.**- The McGraw-Hill Companies, 1996.
- [3] CHASE R. B., HAYES R. H.: **Beefing up operations in service firms.**- Sloan Management Review, Autumn, 1991, p. 15-26.
- [4] CHRISTOPHER M.: **Logistics and Supply Chain Management – Strategies for Reducing Costs and Improving Services.**- Pitman Publishing, London, 1992.
- [5] COOK D. P., GOH C., CHUNG C. H.: **Service typologies: A state of the art survey.**- Production and Operations Management, 8(3), 1999, p. 318-338.
- [6] EUROPEAN LOGISTICS ASSOCIATION: **Terminology in Logistics – Terms and Definitions.**- Brussels, 1994.
- [7] FITZSIMMONS J. A., FITZSIMMONS M. J.: **Service management: operations, strategy and information technology.**- Mc Graw-Hill, New York, 2000.
- [8] GOORDIN K. N.: **Global logistics management. A competitive advantage for the new millennium.**- Blackwell Business, Oxford 2001, p. 40-41.
- [9] HENAUX C., SEMAL P.: **Delivery service: expectation, performances and costs for a distributor.**- Springer, Berlin, 1998. p.111-139.
- [10] KELLOG D., NIE W.: **A framework for strategic service management.**- Journal of Operations Management, 13(4), 1995, p. 1734-1749.
- [11] KIMES S.: **Yield management: a tool for capacity-constrained service firms.**- Journal of Operations Management, 8(4), 1989, p. 348-363.
- [12] LA LONDE B. J., ZINSZER P. H.: **Customer Service: Meaning and Measurement, National Council of Physical Distribution Management.**- Chicago, 1976, p. 156-159.
- [13] LOVELOCK C. H., WRIGHT L.: **Principles of service marketing and management.**- Upper Saddle River, Prentice Hall, New York, 1998.
- [14] SHAPIRO R. D., HESKETT J. L.: **Logistics Strategy: Cases and Concepts.**- West Publishing Company, St. Paul MN, 1985, p.6.
- [15] SHMENNEN R. W.: **How can service business survive and prosper?** Sloan Management Review, 27(3), 1986, p. 21-32.
- [16] VERMA R.: **Services marketing.**- Pergamon, London, 2001, p. 271-291.

- [17] VERMA R., YOUNG S. T.: **Configurations of low contact services.**- Journal of Operations Management, 18, 2000, p. 643-661.
- [18] MUSIALIK A., MUSIALIK M., KURZAK L.: **Analiza finansowa jako miara efektywności zarządzania przedsiębiorstwem.** Zeszyt Naukowy, Uniwersytet Szczeciński nr 406, Pr. Inst. Ekonomiki i Organizacji Przedsiębiorstw nr 43, 2005
- [19] NOWAKOWSKA-GRUNT Joanna: Rozdz.VI. **Nowoczesne tendencje w logistyce przedsiębiorstw.** W: Informatyczne wspomaganie procesów logistycznych. Red. Janusz K. Grabara, Wyd.Nauk.-Techn Warszawa 2004