not efficient promotion - lack of information.

Loyalty programmes are one of the techniques used in modern, relationship marketing. They help to establish and sustain relations with organisation's customers. However it is worth mentioning that this kind of actions are not prepared for large groups of clients. They are adjusted to needs and expectations of selected groups of customers - the most valuable ones. The reason for that is following - loyalty programmes are very expensive and their introduction needs to produce solid revenues. Of course it is also necessary to recognise them as long form of term commitment and involvement with customer.

The other thing worth mentioning and consideration is the fact that some organisation and their activities do not require RM introduction and it could be just useless cost for them, what was also discussed in the paper.

Bibliography

- Buttle F. , Relationship Marketing. Theory and Practice", Paul Chapman Publitions, Londyn 1996.
- Egan J. 'Relationship Marketing: Across the Retail Spectrum', Middlesex Discussion Papers, 1999
- 3. Furlak R, "Marketing partnerski na rynku usług" PWE Warszawa 2003
- Gardela A., Programy lojalnościowe-moda czy realne korzyści?*, Marketing w praktyce 7/2003
- Mazurek-Lopacińska K., Zachowania nabywców jako podstawa strategii marketingowej, PWE, Wrocław 1997
- 6. Otto J., Marketing relacii", C.H.Beck, Warszawa 2001
- 7. Otto J. Programy lojalnościowe z perspektywy polskiego przedsiębiorstwa in: Marketing doświadczenia i perspektywy M.Daszkowska (red.), parl 2
- я Payne A. , Marketing ushig' PWE Warszawa 1996
- Siemieniako D., Urban W., Definiowania kojainości klientów' in: "Markeling-doświadczenia i perspektywy' M.Daszkowska (red.), pert2
 Styś A., Markeling usług', PWE, Warszawa 2003

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CUSTOMER SUPPORT SERVICE TRADE-OFF MODELS

Abstract: While cost efficiency will always be a target, logisticians must include the objective of customized logistics service to their brief. The logistics challenge, then, is to provide tailored logistics services cost effectively to customers. Somewhere, therefore, there must lie a trade-off between the level of service offered and the total system costs that will result in an optimal profit situation. The article presents the conditions and examples of customer service trade-off models.

Key words: logistics customer service, trade-off model, distribution

Recently the logistics has translated its functions, concentrated on physical flows, connected with the enterprises, into complex management conception orientated on the final consumers' needs². The primary value of logistics is to accommodate customer requirements in a cost-effective manner. Although most senior managers agree that customer service is important, they sometimes find it extremely difficult to explain what it is and what it does. While common expressions of customer service include "easy to do business with" and "responsive to customers", to develop a full understanding of customer service, a more through framework is required.

Philosophically, customer service represents logistics' role in fulfilling the marketing concept. A customer service program must identify and prioritize all activities required to accommodate

¹ research conducted by A.Śledziński in: J.Otto "Programy lojalnościowe...", p.154

² S. Brzeziński, Rola wybranych elementów logistycznych w dziedzinie wykorzystania gazu ziemnego w polskiej gospodarce narodowej, [w:] Prace Wydziału Zarządzania Politechniki Częstochowskiej, Seminaria i Konferencje nr 6, V Międzynarodowa Konferencja Naukowa Ustroń 2001, Czestochowa 2001, p. 65

customers' logistical requirements as well as competitors. In establishing a customer service program, it is imperative to identify clear standards of performance for each of the activities and measurements relative to those standards¹. In basic customer service programs, the focus is typically on the operational aspects of logistics and ensuring that the organization is capable of providing the seven rights to its customer: the right amount of the right product at the right time at the right place in the right condition at the right price with the right information².

The provision of logistics services represents area for providing increased value added to the purchase transaction. When customers purchase, they buy more than the product. They also buy the bundle of services around the product provided by the supplier. This bundle includes components such as pricing flexibility, promotions/deals/discounts, credit payment terms, merchandising support, after-sales support and delivery or logistics service. Because the logistics service is manifested in every transaction with the customer, it has the most significant impact on customers' internal operations³.

There is an extensive range of customer service items which include4:

- frequency of delivery,
- order cycle time,
- reliability of delivery,
- flexibility in replenishment,
- order fulfillment accuracy.
- accuracy of documentation,
- conformance of documentation to organizational requirements.
- continuity of supply.
- advice on supply problems.
- quality of company sales, technical and service representation.

Clearly, other topics may be added to this list. Usually these relate to specific topics that are required by specialist companies. It is also important to note that the rank ordering of customer service parameters will vary not simply between industries, but quite often between companies in the same industry. The important conclusion that can be reached is that differences in preferences exist, and that these should be identified prior to determining the content of a customer service strategy. In this way appropriate contents and levels of service packages will result – at acceptable levels of cost.

It is also important to mind that even though a service offering must be relevant, consistency is just as important because each individual encounter is evaluated subjectively and differently by each individual customer. Central to this evaluation is the difference between expectations and perceptions of customers. Figure 1 illustrates the relationship between expectations and perceptions.

Expectations are shaped by the customer's personal needs, past experience and the nature of the service on offer. Corporate image/positioning plays an important role in the development of these expectations. A problem that must be considered is that expectations tend to increase: what was considered to be an additional service benefit becomes "standard service practice" as and when it is offered by competitors. Furthermore, once a reputation is established by a company for service excellence, the expectations of customers tend to increase.

¹ D. J. Bowersox, D.J. Closs, M.B. Cooper, Supply Chain Logistics Management, Mc Graw Hill, New York 2002, p. 69

² R.D. Shapiro, J.L. Heskett, Logistics Strategy, West Publishing, St. Paul, MN 1985, p. 6

³ L. Torres, J. Milles, Aligned logistics operations, [in:] J. Gattoma, Strategic supply chain alignment. Best practice in supply chain management, GOWER Publishing Limited, USA 1999, p. 43

compare with: D. Kempny, Logistyczna obsługa klienta, PWE, Warszawa 2001, p. 19-27

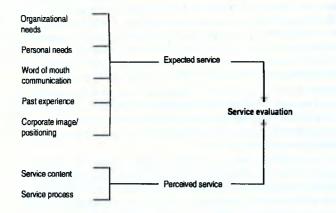


Figure 1. Expectations and perceptions in customer service evaluation.

Source: J.L. Gattoma, D.W. Walters, Managing the Supply Chain, MacMillan Press LTD, London 1996, p. 48

Perceptions are influenced not only by what the customer receives, but how the service is delivered. Add to this both companies' objectives and strategies and changing short-term operational needs and it is not surprising that consistently high perceptions of customer service are difficult to achieve. Typically it is only when service delivery fails that customers begin to make an assessment of the level of service delivery achieved against their expectations.

Clearly economies of scale are seen to exist in service delivery. However, as the earlier discussion of strategic alignment and customer logics suggested, it is unlikely that a standard or generic service package will suffice. This suggests that segmenting customers on the basis of logistics service needs is more likely to offer a successful long-term relationship with the customer.

Tendency in much of the recent thinking on distribution planning has been the almost exclusive emphasis on approaches and techniques that will produce the lowest possible distribution system cost². When the emphasis is on the total cost approach anyway, it is perhaps not surprising that this concentration on the search for cost-minimization solutions occurs. A problem arises however in the use of this approach and that is, quite simply, that cost minimization does not necessarily equal profit maximization.

Enhanced revenue is one typical result of providing an "above-average" level of service to selected customers. For example, a few customers – large retailers and mass merchandisers come to mind – are more sophisticated and demanding in the logistics support services they require, compared to other organizations. Some of these services include support for electronic data interchange (EDI) or efficient consumer response (ECR), joint forecasting and planning programmes, display – ready pallets, rainbow pallets, direct-to-store deliveries, customer case labeling and shelf-ready preparation, to name a few. "Preferred supplier" status and the potential for increased selling space or time are some examples of carrots dangled by customers to include suppliers to provide a specialized logistics service.

J.L. Gattoma, D.W. Walters, Managing the Supply Chain, MacMillan Press LTD, London 1996, p. 48-49

² M. Nowicka-Skowron, Efektywność systemów logistycznych, PWE, Warszawa 2000, p. 38

More and more retailers guarantee to its "preferred suppliers" – that is, those that accept EDI purchase orders, provide EDI advance shipping notices and supply merchandise in a shelf-ready state (already price-ticketed, barcoded and on hangers) – a 24-hour turnaround through the retailers distribution centers and on to the selling floor. The retailers prioritize the processing and movement of these suppliers' products through their internal distribution network by setting up a fast-track channel in their distribution centers. This results in an increased selling cycle for these "preferred suppliers" at the expense of those who are not ready or willing to tailor their logistics services.

For certain industries, especially those that deal with large retailers, suppliers have no choice but to tailor logistics services. Some retailers will simply not deal with suppliers who cannot provide these services. The retailers described above put a programme in place to stop dealing with suppliers who cannot provide the level of service required within 24 months; and does not accept new suppliers who cannot provide the same level of service.

Today's manufacturers need to support a more complex distribution channel mix. Most manufacturers will tend to sell through a multitude of mechanisms including distributors, selling direct to large customers, and through a variety of retail formats, from corner stores to mass merchants, warehouses and convenience stores, for which the logistics requirements will vary significantly.

At the same time, providing a "below-average" logistics service to selected customers offers an excellent way for organizations to improve the return on assets and funds employed in their logistics activity. For example, a large office equipment manufacturer used a next-day delivery service for all spare parts to service agents on the assumption that these were urgently required for emergency customer repairs. After analyzing the true nature of requirements, the manufacturer realized that some parts requirements were not urgent at all, but were used to top up the agents' inventories. A system for slower and lower-cost "standard" deliveries was established.

In addition, an increased understanding of customer profitability through better information systems and costing tools such as activity-based costing allows organizations to realize the true cost-to-serve for their customers. This insight has driven organizations either to modify service levels or develop specific cost-reduction programmes, based on the contribution a customer makes to the bottom line.

The provision of logistics services aligned to the unique requirements of the customer provides many potential benefits to an organization, including competitive advantage, revenue enhancement, margin enhancement and cost reduction. It does, however, represent a significant shift from the traditional "one-size-fits-all" logistics approach.

While cost efficiency will always be a target, logisticians must include the objective of customized logistics service to their brief. The logistics challenge, then, is to provide tailored logistics services cost effectively to customers¹.

Controversially, a policy of service maximization is unlikely to lead to an optimal profit situation. At high levels of service, even a small increase in the level of service offered can result in costs being incurred which more than absorb any extra revenue accruing. Figure 2 illustrates a frequently occurring cost situation where the total system costs are shown as a function of the level of service offered.

Somewhere, therefore, there must lie a trade-off between the level of service offered and the total system costs that will result in an optimal profit situation.

¹ compare with: L. Torres, J. Miller, Aligned...op.cit., p. 44-46

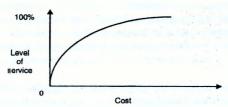
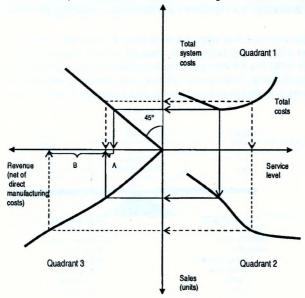


Figure 2. Service and the cost of service.

Source: M. Christopher, Total distribution, Gower Press LTD, London 1971, p. 100

It is helpful in situations such as these to bring together all the variables involved into a model which demonstrates the linkages between those factors affecting the logistics contribution of a distribution system. Even though it may be difficult to construct an operating model for decision-making purposes, it is always useful to identify a representation, however unsophisticated, of these processes and linkages.

Example of a model for the company's sales is shown in Figure 3 in the form of a quadrant diagram composed of a number of separate functions that have a bearing one to the other.



- A = Logistics contribution through a cost-minimisation solution
- B = Improved logistics contribution through improved customer service

Figure 3. Quadrant model showing cost/service trade-off for company distribution system.

Source: Own elaboration on the base of: M. Christopher, Total distribution, Gower Press LTD, London 1971, p. 101

In Quadrant 1, a total systems curve is shown which has been derived from a total cost analysis along the lines expressing costs as a function of the level of service offered. Quadrant 2 postulates

the familiar S-shaped response function with areas of diminishing returns at the low and high service range. Quadrant 3 encapsulates several sets of cost data; it does in fact suggest that sales revenue net of direct manufacturing costs is an increasing function of sales, that is, economies of scale are reflected in the costs of manufacture. Quadrant 4 merely serves to project total costs into the net revenue axis and thus provide an estimate of the logistics contribution to the profits and fixed costs of the operation.

It is apparent in the example of the company that this contribution is not being maximized at the point where system costs are at their lowest. In fact, in this example, this point of maximization occurs where a higher level of total system costs is incurred (shown by the dotted line). The reason for this is that because of the sensitivity of this market to the distribution service offered (represented by the shape of the response function in Quadrant 2), the lowest system cost does not permit a sufficiently high level of service to be offered to take advantage of increasing returns to service.

While this analysis is grossly oversimplified, it does serve to demonstrate the possibility of falling into the cost minimization fallacy when undertaking a total cost analysis of a distribution system.

The objective of logistics system can perhaps be stated more appropriately as being to bring about that logistics system which minimizes total costs while providing a level of service consonant with customer satisfaction. The procurement of this balance can only be through a correct identification of the form of the cost/service/revenue relationships in the system. The exact shape of the service response curve, for example, is a key element and the way that costs vary with the level of service is another?

Another illustration on customer support service trade-off shows the model from Figure 4. The effective customer support organization of the future will develop strategies that will enhance the overall profitability of not only the internal service organization but the parent as well. To meet these challenges, many will attempt to balance the cost-to-serve against the quality of the service rendered. Figure 4 is an example of how many service organizations continually balance cost versus quality.



Figure 4. Customer support service trade-off.

Source: L. Torres, J. Miller, Aligned...op.cit., p. 63

¹ compare with: M. Christopher, Total...op.cit., p. 99-102.

Logistics plays a central role in the delivery of customer support and as such is a critical determinant of a firm's level of customer support performance. Ultimately, customer support is about delivering the right parts, service technicians, tools and information to the right location, at the right time, at the lowest possible cost. The extent of logistics activities in key customer support functions is shown in Table 1.

Table 1. Key customer support logistics activities.

Key customer support logistics area	Primary logistics challenge
Service parts inventory management	Maximizing parts availability with minimum inventory and costs
Service parts warehousing	Maximizing order fulfillment effectiveness while minimizing costs
Service parts transportation	Providing rapid parts delivery while minimizing costs
Service parts order processing and fulfillment	Maximizing order entry and processing while minimizing costs
Service parts sourcing	Finding and developing low-cost/high-quality sources of supply
Service parts procurement	Ensuring timely delivery of high-quality parts at minimum costs
Service technician capacity planning	Maintaining the appropriate number of technicians to support demand
Service technician scheduling	Ensuring service technician capacity is effectively utilized
Service technician dispatch	Managing deployment of service technicians on an hour-to-hour basis
End-user service requirements determination	Accurately identifying customer satisfaction needs and expectations
End-user customer service management	Managing appropriate response to customer service issues

Source: L. Torres, J. Miller, Aligned...op.cit., p. 64

Logistics-based activities can account for more than 90 per cent of the total costs of delivering customer support, according to Andersen Consulting industry analysis. It is thus critical to develop a strategic approach to logistics that will deliver logistics activities according to the needs of the customer and the requirements of the organization. These vary according to the diverse competitive and supply chain environments faced by companies operating in concrete industries¹.

References

- 1. Bowerson D.J., Class D.J., Cooper M.B., Supply Chain Logistics Management, Mc Graw Hill, New York 2002.
- Bizezińsk S., Rola wybranych elementów logistycznych w dziedzinie wykorzystania gazu ziemnego w polskiej gospodaros narodowej [w]. Piace Wydziału Zaradzania Polifechniki Częstochowskiej, Seminalia i Konferencje ni 6, V Międzynarodowa Konferencja Naukowa Ustrof. 2001. Częstochowa 2001.
- 3. Christopher M., Total distribution, Gower Press LTD, London 1971.
- 4. Gattorna J.L., Walters D.W., Managing the Supply Chain, MacMilan Press LTD, London 1996.
- 5 Kempny D., Logistyczna obsługa klienta, PWE, Warszawa 2001
- 6. Nowicka-Skowrott M., Elektywność systemów logistycznych, PWE, Warszawa 2000.
- 7. Shapiro R.D., Heskett J.L., Logistics Strategy, West Publishing, St. Paul, MN 1985.
- Torres L., Milles J., Aligned logistics operations, [in:] J. Gattorna, Strategic supply chain alignment. Best practice in supply chain management. GOWER Publishing Limited, USA 1999.

¹ L. Torres, J. Miller, Aligned...op.cit., p. 63-64