

CUSTOMIZATION AND LOGISTICS

Honcharuk A.M.

National Aviation University, Kyiv

Scientific Supervisor – Ovdiienko O.V., Assistan

Key words: customization, clients service, logistics

Customization is one of the most important processes in each industry in the modern world. The logistics industry uses it for the growth of business, to get profit, and customer loyalty. Customization as a way of satisfying consumer needs includes an individual approach to each group of clients by changing conditions of ordering, delivery, forward service, etc. Mass customization is a marketing and manufacturing technique that combines the flexibility and personalization of custom-made products with the low unit costs associated with mass production [1]. This technique became the key factor for each company to “grow” in the future. The quick and efficient company’s reaction to the changes rules a new frontier in business competition.

Lampel and Mintzberg suggested 5 approaches to fulfill customer needs in 1996. However, this method is actual until now. They all are based on the degree of customization and standardization available when manufacturing [2].

Table 1. Lampel and Mintzberg approaches

Approach	Description	Example
Pure Standardization	The products are designed to meet the greatest number of buyers' requirements, but consumers have no opportunity to change the design, production, or distribution.	Ford Motor Company had the strategy – any color so long as it was black.
Segment Standardization	Producers give some variations of the basic product, but consumers still cannot influence the product.	The proliferation of cereal brands and even bumper stickers are examples.
Customized Standardization	The clients have influence over the assembly and distribution but have no impact on the design and production of the products.	Hamburger chains allow customers to specify their preferences for mustard, ketchup, tomatoes, and so on.
Tailored Customization	The manufacturer still has control over the design, offering the customer various options.	A tailored suit, a rug woven to order, or a birthday cake with a name on are examples of this approach.
Pure Customization	In this method, every aspect of design, fabrication, assembly, and distribution is customized. The manufacturer and the consumer collaborate as partners.	So-called “megaprojects”, such as NASA’s Apollo project or the Olympic Games, represent major instances of pure customization.

All these methods are used in industries that are oriented to the client. Different approaches lead to competition between companies and the success of the most flexible in the field of customization [3].

Customer satisfaction presents many components that have to be accurately balanced, in particular when the level of the demand and its specialization tend to explode. In terms of logistics processes, customer satisfaction can be represented by a mix of a variety of products, lead time, availability of products, customer experience, traceability of orders, the possibility of return. Logistics managers have to take their decisions facing the environment where the network has to work, considering that any process of the redesign is limited and, at the same time, addressed by the specific context of operations. That is why, mass customization has a number of advantages:

1. A company that uses this way of clients' satisfaction has higher position in the rank of successful companies.
2. Mass customization is a profitable thing. For instance, a customer wants to get a special product, s/he will be ready to pay more for this.
3. A company that uses mass customization is more competitive among others on the global market.
4. The design and usability of the customized products are always higher than standard ones.

To summarize, customization as an approach to a company's development is the right decision. This method makes a connection between a client and a manufacturer tight and this process leads to profit rising and competitiveness of the company. Today's buyers want customized products in enormous quantities, and they want them as quickly as they receive standardized products. Due to mass customization alone cannot retain the customer base without efficient and effective logistics systems in place. With more companies entering the retail market, businesses have to invest more in processes that are cost-effective to produce results better than their competitors. Customized warehousing and logistics have allowed companies to invigorate their manufacturing process and make it more robust.

References:

1. Maya E. Dollarhide Mass Customization term URL: <https://www.investopedia.com/terms>.
2. LAMPEL, J., and MINTZBERG, H. Customizing customization. Sloan Management Review. Vol. 38, 1996, p. 21-30.
3. Guixiu Qiao, Roberto F. Lu, and Charles McLean, (2004), "Process control and logistics management for mass customization manufacturing", IIE Annual Conference and Exhibition, p 1517-1522