

В

Bullwhip Effect

"The Bullwhip Effect is essentially the phenomenon of demand variability amplification along a supply chain, from the retailers, distributors, manufacturer, and the manufacturers' suppliers, and so on. Lee et al. characterize this phenomenon as demand distortion, which can create problems for suppliers, such as grossly inaccurate demand forecasts, low capacity utilization, excessive inventory, and poor customer service." (Lee et al. 2000, p. 626)

D

DIN (Deutsches Institut für Normung)

The DIN is the independent platform for standardisation in Germany and worldwide. A standard is a document that specifies requirements for products, services or processes. It thus creates clarity about their properties, facilitates the free movement of goods and promotes exports. It supports rationalisation and quality assurance in business, technology, science and administration. It serves to ensure the safety of people and property and to improve quality in all areas of life. (DIN 2021)

Ε

Economies of Scale

"Economies of scale occur when the average cost of all units declines as the level of an activity, such as production, increases. The average cost decline can result from high fixed costs, lower input prices due to high volume purchasing, or learning economies. Economies typically apply only over a range of output rather than for all possible output levels. Beyond a certain point, diseconomies of scale can set in. Scale economies can serve as the basis for cost leadership in an industry, but large-scale investment brings the risk of holding excess capacity during a downturn. Globalization and outsourcing have eroded the importance of scale as a competitive weapon." (Linden 2016)

Η

Hub-and-Spoke (HuB)-System

A hub & spoke network is a special network with a certain number of nodes between which a flow of goods exits. A subset of centrally located nodes serves as a transhipment point (hub). The remaining nodes (end nodes) are connected in a star shape by a spoke and usually with one hub. The flow of goods between two nodes is direct if both nodes are hubs or one of the two is a hub and both are connected by a spoke. Otherwise, the flow is routed via at least one other Hub. In contrast to complete networks, in which every node is connected to every other node and direct transports take place, a hub-and-spoke network contains significantly fewer connections. The transport volume per connection is greater, so larger transport units can be selected and thus transport costs can be saved. However, the transport times between the end nodes of such a network are usually longer than in complete networks. Hub-and-Spoke networks are used in air traffic, by large freight forwarders, parcel services and the postal service as well as computer and communication networks. (Domschke et al. 2018, p. 10)

М

Milk Run

"A milk run is a concept to serve supplier relations with regular volumes. It is a fixed tour with a fixed sequence of stops serving at least one supplier and being executed cyclically or according to a fixed schedule. [...]The milk run can be – but does not have to be – a round tour starting and ending at the receiving plant in order to allow an exchange of full and empty returnable containers. A milk run might contain a transhipment." (Meyer 2017, p. 29)



Further reading

DIN (2021): DIN - kurz erklärt. Available online at https://www.din.de/de/uebernormen-und-standards/basiswissen, checked on 10/8/2021.

Domschke, Wolfgang; Drexl, Andreas; Mayer, Gabriela; Tadumadze, Giorgi (2018): Betriebliche Standortplanung. In Horst Tempelmeier (Ed.): Planung logistischer Systeme. Berlin, Heidelberg: Springer Berlin Heidelberg, pp. 1–27.

Lee, Hau L.; So, Kut C.; Tang, Christopher S. (2000): The Value of Information Sharing in a Two-Level Supply Chain. In *Management Science* 46 (5), pp. 626–643. DOI: 10.1287/mnsc.46.5.626.12047.

Linden, Greg (2016): Economies of Scale. In Mie Augier, David J. Teece (Eds.): The Palgrave Encyclopedia of Strategic Management. London: Palgrave Macmillan UK, pp. 1–3.

Meyer, Anne (2017): Milk Run Design: Definitions, Concepts and Solution Approaches.