



Delivery (time) strategies in the Independent Automotive Aftermarket

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Abstract. The Independent Aftermarket can be seen as showcase, when it comes to delivery time strategies, what attracts consumers to buy their needed products at those companies. Original equipment suppliers have seen this and try to gain more market share in this field, what leads to a higher pressure in this market. The IAM needs to react on this through more differentiated services, consider new trends, perspectives and customer behaviour and align their supply chains accordingly. This Paper aims to map out a conceptual framework as an orientation for actors within the IAM.

1 Introduction

Due to the attractiveness and importance of the aftermarket business and the market potential of vehicles beyond the warranty period, the competition between the independent aftermarket (IAM) and the Original Equipment suppliers (OES) is increasing. Logistics services become the key success factor for parts wholesaler and retail distributors. While OES companies are distributing their dealers through their established networks mainly with 24/48 hours service, IAM is known for high-speed multi-same-day delivery for their customers due to a dense network of multi-brand all-makes parts sellers.

OES and IAM distributors need to carefully develop their delivery time strategies within the framework of their overall logistics service concept. Depending on business model and market environment, delivery lead time reductions mostly correlate with cost increase [13;4]. As the IAM comes under pressure by several market forces, cost becomes an increasing issue in established, often small and medium sized, high service level businesses offering multi-same-day-delivery to workshops.

In this abstract we would like to outline:

- A short overview of the automotive aftermarket
- Selected business developments including the impact of the connected car on the industry
- The establishment of a differentiated delivery time strategy
- Several operational areas, which need to be developed under increasing competition.

2 Structure of the automotive aftermarket

The market consists of two major segments: OES (Original Equipment Service) and IAM (Independent Automotive Aftermarket) (see fig. 1) [2; 5; 9].

- OES companies are driven by Vehicle Manufacturers, so called OEMs (Original Equipment Manufacturers), delivering parts into their contracted or owned network of sales organizations, dealers and repair workshops.
- The IAM covers manufacturer-independent companies dealing with parts, accessories and services.

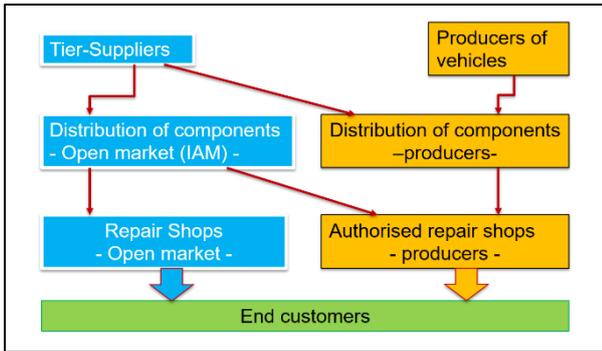


Figure 1: Basic aftermarket structure

IAM service providers can be subdivided into the following three retail segments [2]:

- Franchised companies offering a full range of services
- Automotive centers and so called fast fitters.
- Often smaller independent repair shops that offer a full range of services, while some do focus on brands or a group of brands.

3 Selected business developments

Besides other, especially three trends within the aftermarket industry can be identified:

- Companies of the OES segment push activities to increase dynamism and frequency of delivery by working together with LSPs. Together they establish scalable networks of distribution to match different markets, including building up new levels of distribution with so called “City-Hubs”. This should lead to achieve service levels comparable to the IAM in urban areas.
- As the IAM in Germany, for example, is still dominated by small and medium sized entities, their USP is an excellent service in local or regional environments including same day delivery. They now have to challenge their business models to maintain their service advantages by carving out cost and generate synergies to stay competitive.
- The connected car may have major influence on the business models in general and the management of supply chains. Through improvements of mobile phone networks, wide area networks (WLAN) and global positioning automobiles are now able to receive and send information [16; 17]. The quality of today’s remote diagnostics capabilities makes the connected car a part of the total aftermarket supply chain [10; 14]. In the future, spare part ordering is initiated by the car (in coordination with the OEMs) itself, as well as the workshop repair date. The one who receives the order for

sure has gained significant levels of control. The IAM will have certain challenges to maintain their position [15].

4 Differentiated delivery time strategies

A differentiated delivery logistics concept and especially a differentiated delivery time strategy should be considered as a major parameter and key for future market success of IAM retailers. Strategic assessment and differentiation of service levels with precise delivery time commitments and achievements are key to success. Such services should be priced accordingly to capture profit margins and avoid non-competitive cost structures.

Same day delivery is one important option and measure to create customer enthusiasm through a value adding logistics service. However, same day delivery means getting closer to the customer and smartly allocating a selected range of articles in local distribution centers. The element of time is the major driver for designing or re-organizing the distribution footprint. So one has to evaluate the complete bandwidth of several delivery time options which should be carefully selected.

5 Developing and implementing selective delivery time strategies

Delivery time is the starting point for designing distribution footprints. From changing delivery time along with delivery frequency, new footprint designs may result. Distribution footprints have to be adapted to best serve the business needs [6; 7]. Regarding its prominent influence on the distribution network, delivery time is the major factor.

As service is the output of any logistics system, cost is the input. Both sides of the same token need to be analyzed and defined in terms of efficiency. The logistics system then needs to be set up accordingly, considering aspects of dimensions, functions, phases and action levels (cf. Fig. 2).

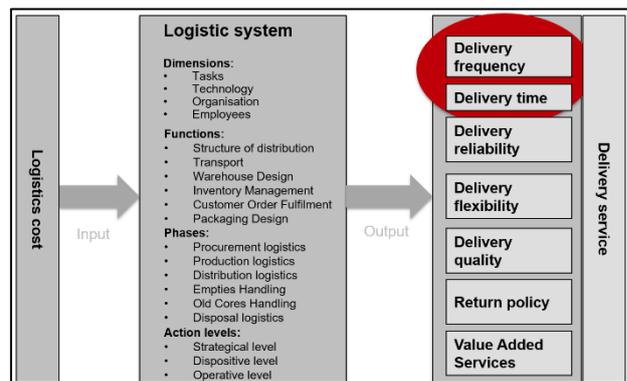


Figure 1: Developing the distribution footprint

In the following chapters, several functional aspects will be outlined, focusing on differences between

next day and same day delivery.

5.1 Structure of distribution

When setting up the distribution footprint, decisions need to be made, both in the number of distribution levels (CDC, RDC, LDC (=vertical structure)) and the number of locations on each level, which includes the geographic region of delivery from each warehouse (=horizontal structure). Due to selective stocking, the “classic way” of connecting these warehouses (CDC→RDC→LDC) has been replaced by hybrid, multi-tier processes.

Same day services in comparison to next day delivery set-ups naturally require a certain density of LDCs depending on the percentage of the targeted service coverage, which may be based upon the relevant car park in the field. This would lead to selected LDC locations in the proximity of large cities. The challenge for OES is to reach this density while considering the needs and possibilities of their dealer body. IAM players either try to form larger groups or collaborate in case they do not intend to end up as local jobbers.

5.2 Transport

Transport in the automotive aftermarket is strongly linked with common user networks. Related structures have to be taken as given in most instances. Most large common networks work during the night, resulting in next day or longer delivery time.

In the contrary, same day delivery usually based upon a structure of courier services. Smaller vehicles from different warehouses and different industries pick-up and deliver in urban areas with high density traffic. The fleets are either “own vehicles”, “third party” or latest “app-based agency

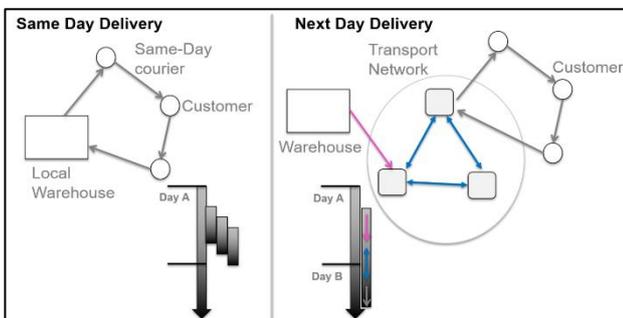


Figure 3: Same Day delivery vs. Next Day Delivery

connected”.

To increase efficiency and avoid empty trips, smarter combinations of cross-dock and re-bundling of tours need to be considered in the future. Collaboration and organization between providers is a key factor for optimized service levels and lower cost. This applies for IAM as well as OES.

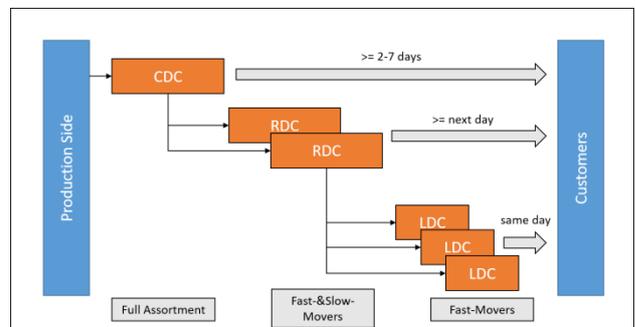
5.3 Warehouse design

Depending on the function and level of the warehouse, internal processes and design may differ significantly. While CDCs are usually designed to handle and store large volumes to supply following distribution levels, LDCs have to be able to cope with fluctuating demand during the day.

In case of hybrid footprints, where for example central warehouses also have regional or even local delivery functions, different order waves, order sizes and requirements add to the complexity of warehouse processes, IT system requirements and structures. Companies therefore have to well assess and balance the advantages and disadvantages going along with these options. Challenges apply for OES getting more into SDD or eCommerce. IAM needs to consider differentiation of warehouse processes according to service level.

5.4 Inventory Management

Regarding the influence of the two service elements delivery time and reliability/availability on the



distribution footprint design, product availability

Figure 4: Delivery time from different warehouses

certainly can't be neglected. High performance inventory management is an important factor to balance cost and capital employed with selective service levels.

Inventory management in state-of-the-art distribution networks requires state-of-the-art IT solutions, supporting the efficient management of selective stocking, safety stock bundling and flexible delivery channels. Both, IAM and OES, are faced with tremendous challenges to cope not only with the increasing proliferation of parts.

5.5 Customer Order Fulfilment

Perfectly fulfilled customer orders are the goal in the aftermarket industry and have to match today's needs, including the way of connecting all institutions within the Supply Chain. While traditional ways (phone, fax) aren't completely abolished, most companies now have sophisticated computer systems for managing customer order processing. A major capability of IT-systems is the integration of

parts availability with delivery time information are gradually able to connect availability information with delivery time information. This enables to ship orders from the best possible location to the customer available-to-promise. This is not yet standard.

Based upon a company's logistics strategy, targets and commitments for each delivery service element and order type have to be made and to be connected to exact process flows. Furthermore, information flow and flow of goods need to be connected, on the one hand for customers to track and trace their orders, on the other hand for companies to identify deviations in the supply chain and initiate corrective measures early. In order to achieve this goal standardization also regarding the identification of parts among the whole industry is needed, but still not major practice. Neither in the OES nor the IAM business.

6 Findings and outlook

Actors within the two segments of the Automotive Aftermarket, IAM und OES, are facing significant changes. Competitive pressure from either side, political pressure, and new technical developments like the connected car, drive the need to respond. Logistics strategies shall ideally be derived from market trends and requirements, leading into a logistics service policy. Delivery time in conjunction with delivery frequency is one of the major issues in designing appropriate distribution footprints for spare parts.

Room for improvement can be identified within the playgrounds of logistics. Besides adjusted delivery time, inventory may be better shared or demands forecasted more precisely, warehousing be more agile. Transport systems, like same day courier networks in conjunction with city logistics approaches have to operate in a more integrated manner, aiming to better share resources.

Future research has a broad range of open questions to be worked on. Interdisciplinary, bi- and multilateral research forums are appropriate approaches which create the environment of bringing competencies to the table and help to tackle the challenges ahead.

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