Abstract

“Distribution 4.0 – a customer-oriented perspective”

Area
Distribution logistics

Keywords
Distribution, digitisation, innovation, delivery service, customer orientation, customer benefits

Study/project
Study

Starting point/project assignment/objective
Customers directly notice distribution capability as one of the final steps in the service provided by the retailer. This is increasingly important given the growing relevance of e-commerce and associated home delivery concepts. At the same time, customers are faced with a multitude of innovative distribution concepts. Companies try to differentiate themselves from their competitors through these.

This is where the study carried out at TH Ingolstadt comes in. A company can only successfully differentiate itself if the customer experiences added value through the service it provides. As customers are particularly aware of the distribution of ordered goods, a company can distinguish itself if the distribution concepts used are designed to the customer’s benefit. The objective of the study was to identify the technical delivery options which could be used to help optimise customer benefits during delivery.
Procedure

- Identification of innovative distribution concepts
- Breaking down of the service level into its elements (features)
- Transfer of these elements (features) to the individual distribution concepts
- Indication of the form of the elements (features) per distribution concept
- Determination of the importance of the features from a customer perspective (conjoint analysis)
- Comparison of the findings from the conjoint analysis with the various distribution concepts
- Calculation of the utility per distribution concept
- Creation of a ranking list of the distribution concepts with the most customer benefits
- Derivation of recommended actions

Results/findings

Breaking down the delivery service into its components showed that delivery reliability had the most benefits for customers, followed by delivery accuracy and transport costs. The delivery speed frequently focused on by customers does not have the importance from a customer perspective that it is lent by retailers. Rather, buyers are satisfied if the goods reach them within one to three days. Based on the utility determined through the conjoint analysis, a ranking was created under consideration of the respective forms of the delivery service features of the distribution concepts (extract):

<table>
<thead>
<tr>
<th>Position</th>
<th>Distribution method</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Mercedes van drones</td>
<td>3.17</td>
</tr>
<tr>
<td>2.</td>
<td>Parcel robot</td>
<td>2.94</td>
</tr>
<tr>
<td>3.</td>
<td>Amazon Prime Air</td>
<td>2.73</td>
</tr>
</tbody>
</table>

Consideration of customer perspectives/needs with regard to distribution increases customer acceptance, which considerably helps the company distinguish itself.

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