EFFICIENCY IN RETAILING: IMPLICATIONS FOR CONSUMERS

PhD-student
Trond Bottolfsen
Molde University College
Agenda

1. Introduction
2. Efficiency, effectiveness and differentiation
3. Technological Investments in Retail sector
4. Differentiation as creator of improved efficiency
5. Implications for consumers of;
   - implementing technology combined with collaboration between retailer – manufacturer on brand differentiation
   - implementing technology in general
1. Introduction

Three words in the title are of special interest: Efficiency, retailing and consumer

1. **Efficiency**, effectiveness and Differentiation, and the relation between these constructs.
2. Investments in **retailing** which seem to be of importance in order to improve efficiency performance.
3. In what way do these investments impact consumers?
Store Performance

Efficiency
Cost focus
- profitability
- productivity
- output - input

Effectiveness
Goal focus
- To deliver as expected *
- Stimulate customer to return **

Differentiation
- to differentiate towards competitors

Strategic Profit Chain =
ROA = efficiency x effectiveness

* = short term perspective  **= long term perspective
2. Efficiency, effectiveness and differentiation:

According to a recently done empirical research:

1. Pursuing effectiveness does not preclude efficiency and vice versa.
2. Instead it is likely that they reinforce each other.
3. And firm need not to choose among those three in order to formulate strategy.
5. Managers should therefore pursue all these goals concurrently.

(Fugate et al. 2010)
2. Efficiency, effectiveness and differentiation:

<table>
<thead>
<tr>
<th></th>
<th>Efficiency</th>
<th>Effectiveness</th>
<th>Differentiation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Focus</td>
<td>Economic/</td>
<td>Logistics/</td>
<td>Consumers/</td>
</tr>
<tr>
<td></td>
<td>marketing</td>
<td>marketing</td>
<td>Service marketing</td>
</tr>
<tr>
<td>Impact*</td>
<td>0,29</td>
<td>0,18</td>
<td>0,59</td>
</tr>
</tbody>
</table>

* Path weight on logistic performance from a study by Fugate et al. 2010

Differentiation by creating comparative advantage towards competitor by giving extra value to their customer. (Fugate et al. (2010))

The view of looking at efficiency, effectiveness and differentiation is in line with Resource Base View theory and R-A theory.
3. Technological investments in retail sector

The importance of Technological Investments in Retailing:

• Retailers invest in technology as ECR systems, CRM systems, Point-of-sale systems and EDI in order to improve store performance.
• It is assumed that these investments increase the firm`s efficiency.
• Although the intention seem clear, the relationship between technology investments (TI) and efficiency is unclear.
• Many researchers believe that there is a direct positive effect between technological investments and efficiency.
Based on a review of 103 articles recently done (1998 - 2012) based upon integration of Efficient Consumer Response, RFID and visibility in retail supply networks the research suggests:

• the investments ought to be considered integrated based on a common supply network design
• it ought to be integrated across the entire supply network
• It should be developed as a result of long-term collaborative relationships, since it is crucial for success
• relationship could be developed by timely communication
• since most of the articles are conceptual, more empirical studies are needed.

(Pfahl and Moxham 2013)
<table>
<thead>
<tr>
<th>Technologies:</th>
<th>Intentions:</th>
<th>Benefits:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data storing:</td>
<td></td>
<td>- information quality</td>
</tr>
<tr>
<td>Bar codes</td>
<td>Data store</td>
<td>- ordering procedures</td>
</tr>
<tr>
<td>P-O-S data</td>
<td>Point-of-sale: Replenishment</td>
<td>- ordering release</td>
</tr>
<tr>
<td>Communications:</td>
<td></td>
<td>- quantities</td>
</tr>
<tr>
<td>Intranet/ internet</td>
<td>Electronic Data Interchange</td>
<td>- order accuracy</td>
</tr>
<tr>
<td>EDI</td>
<td>Radio Frequency Identification</td>
<td>- order quality</td>
</tr>
<tr>
<td>RFID</td>
<td>Automatic Replenishment System</td>
<td>- order condition</td>
</tr>
<tr>
<td>ARS</td>
<td></td>
<td>- order discrepancy handling</td>
</tr>
<tr>
<td>Customization:</td>
<td></td>
<td>- timeliness</td>
</tr>
<tr>
<td>CRM</td>
<td>Customer Relationship Management</td>
<td></td>
</tr>
<tr>
<td>ECR</td>
<td>Efficient Consumer Response</td>
<td></td>
</tr>
<tr>
<td>ERP</td>
<td>Enterprise Resource Planning</td>
<td></td>
</tr>
</tbody>
</table>

Bar Codes, POS, EDI, RFID, ARS, CRM, ECR, ERP

Variety of CLT
• Logistics is one of the few ways to achieve competitive advantage Christopher (2005).

• Logistic Service Quality (benefits) links Logistics to Customer Satisfaction.

• There is variety in level of Collaborative Logistics Technology (CLT).

• Level of investments in technology ought be related to the firms strategy or goals.
Efficiency in retailing by combining technology with logistic benefits*: Implications for consumers.

*and thereby create differentiation towards customers
The Pyramid Model

Company

Technology

Employees

Customers

Internal Marketing

External Marketing

Interactive Marketing

«Promises are giving: Brand Advertising…»

The firm equip their employees with the necessary knowledge and information.

The employees meet their customers and try to deliver according to their expectations.

Parasuraman, 2000
4. Differentiation as a creator of improved efficiency

The Retailer`s Perspective on the Link between Logistical Resources and Perceived Customer Loyalty to Manufacturer Brands

Mert Tokman, R. Glenn Richey, George D. Deitz and Frank G. Adams

How does utilization of Collaborative Logistics Technology relate to other complementary resources that contribute to customer loyalty to the brand?

Grounded in Resource Based View literature, the study;

✓ explores collaborative technology utilization between retailer and supplier,
✓ CLT is a support for retailer`s brand differentiation (RBT) strategy,
✓ Along with manufacturer`s logistics operations quality (LOQ)

LOQ and RBT together make impact directly on
✓ retailers perception of customer loyalty to manufacturer brands
From «The Retailer`s perspective on the link between Logistical Resources and perceived customer loyalty to manufacturer» (Tokman, Richey, Deitz and Adams 2012)
# Collaborative Logistics Technology system

<table>
<thead>
<tr>
<th>Technologies:</th>
<th>Intentions:</th>
<th>LSQ: Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data storing:</td>
<td></td>
<td>- information quality</td>
</tr>
<tr>
<td>Bar codes</td>
<td>- Data store</td>
<td>- ordering procedures</td>
</tr>
<tr>
<td>P-O-S data</td>
<td>- Point-of-sale: Replenishment</td>
<td>- ordering release</td>
</tr>
<tr>
<td>Communications:</td>
<td></td>
<td>- quantities</td>
</tr>
<tr>
<td>Intranet/ internet</td>
<td>- Electronic Data Interchange</td>
<td>- order accuracy</td>
</tr>
<tr>
<td>EDI</td>
<td>- Radio Frequency Identification</td>
<td>- order quality</td>
</tr>
<tr>
<td>RFID</td>
<td>- Automatic Replenishment System</td>
<td>- order condition</td>
</tr>
<tr>
<td>ARS</td>
<td></td>
<td>- order discrepancy handling</td>
</tr>
<tr>
<td>Customization:</td>
<td></td>
<td>- timeliness</td>
</tr>
<tr>
<td>CRM</td>
<td>- Customer Relationship Management</td>
<td></td>
</tr>
<tr>
<td>ECR</td>
<td>- Efficient Consumer Response</td>
<td></td>
</tr>
<tr>
<td>ERP</td>
<td>- Enterprise Resource Planning</td>
<td></td>
</tr>
</tbody>
</table>

**Variety of CLT**

- Bar Codes
- POS
- EDI
- RFID
- ARS
- CRM
- ECR
- ERP
Logistics Service Quality

<table>
<thead>
<tr>
<th>Benefits in regards to order taking</th>
<th>Logistics operations quality</th>
<th>Fulfilment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personnel contact quality</td>
<td>Order condition</td>
<td>Timeliness</td>
</tr>
<tr>
<td>Order release quantities</td>
<td>Order quality</td>
<td></td>
</tr>
<tr>
<td>Information quality</td>
<td>Order accuracy</td>
<td></td>
</tr>
<tr>
<td>Ordering procedures</td>
<td>Order discrepancy handling</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(reflective)</td>
<td></td>
</tr>
</tbody>
</table>

More Collaborative Logistics Technologies (CLT) opportunities will expand the logistics operations quality by:

1. Improving the effectiveness of discrepancy handling by;
   Improving the order conditions, order quality and order accuracy
2. Reducing the inventory loss and ordering errors.
3. Shortening the lead time (Richey et al 2007)
Retailers Brand Differentiation (RBD)

- A large range of Collaborative Logistics Technologies are supporting a brand based differentiation strategy.
- Logistics Operational Quality and a Retailers Brand Differentiation strategy are complementary resources.
- Retailers which aim to attract customers to its store through RBD will strive to get support from their manufacturer in order to keep their shelves filled on a continuous basis.
- Example: When a retailer invest in-a-shop-in-shop for a manufacturer as Nike or Adidas.
Customer Loyalty to the Brand

• Effectiveness in technical aspects → impacts on end-customers satisfaction
• Poor execution of logistics operations will lead to empty shelves which will harm the brand and the store
• Excellent logistic execution will support the brand, differentiate this brand when compared others and promote repeat patronage from its customers
Customer Expectations:
If met: +
If not:-
If met:
- Customer Satisfaction
- Customer Loyalty
- Customer Lifetime Value
CLV - Customer Lifetime Value

- Calculates the value of each customer
- Makes it possible to evaluate how much the firms are willing to invest recruiting new customers
- Makes it possible to calculate the value of the firms total customer costs
- Customer equity is defined as the total of the discounted lifetime value summed over all the firm`s current and potential customers.

(Rust et al. 2004).
Conclusions

1. All five hypotheses are supported and the overall fit for the presented model is good. H3 is highly significant with p-value < .01. There was no significant effect between CLT and Customer loyalty to the brand.
2. The research is importance since it shows new possibilities for stores which combine one resource with on or more complementary resource and thereby create new services or products for the consumer.
3. Instead of measure retailers perceived customer loyalty a more interesting and more appropriate measure could be customer loyalty to the brand.
4. Examination of effects of investments in technology bundled with other complementary resources ought to be investigated further.
Implications for consumers based on the presented study

1. The preferred brands always available on the stores shelves.
2. The stores employees will be equipped with a good knowledge-base with regards to how consumers best can utilise the products.
3. The store becomes innovative and introduces new products or models of the brands in question.
4. Since the Logistics Operational Quality is supporting the preferred brand, the value of the brand increases and is therefore able to create “a life time relationship with their consumers.”
5. Consumers increase their “power” in the marketing channel.
Implication for consumers in general of technology investments in retailing

• Investments in technology which serves the consumer in a good way is appropriated
• When the only concern is profitability for the firm, the technology investment is likely to frighten consumers away
• Investments in technology which is not well-grounded may harm the store or the brand
• The chosen type of technology systems should fit the strategy to the store or the goal for the investment
• Stores ought to be aware of consumers technology readiness
References


