

## TRANSBOX SYSTEM AS A LOGISTICS SOLUTION FOR Atria Finland Ltd.

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### Case Study Assignment

Atria Finland Ltd. develops, manufactures and markets meat and poultry products. Atria's roots go back to 1903, when its oldest owner co-operative was founded. The company's main customers in Finland are retailers, supermarkets, restaurants, hotels and other food service businesses. Atria emphasizes the customer orientation and because of that Atria does not require any minimum order quantity – this is a common practice in Finnish meat processing business. This is a big advantage for smaller customers like small restaurants or kiosk owners. It is important for them to serve always fresh meat products and without the need of freezing it to storage it for a longer period of time. Atria also provides deliveries six times a week and therefore customers have always fresh high quality products available.

Finland has the lowest population density in European Union and it causes many logistic challenges because of long distances in both distribution and travelling as most of the country is inhabited and the same services and utilities ought to be provided to all citizens despite their location. And for a company like Atria, which is distributing their products to the whole country, this is a big logistic challenge.

Transboxes can be defined as transport, distribution and storage units and they are made of HDPE-plastics. The Transbox system was founded in 1994 in Finland by the distribution logistics companies and the food industry to reduce logistics costs and reduce the waste load on the environment. It is also an effective and uniform way how to transport food environmentally.



*Fig. 1. Transbox*

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Transbox Ltd coordinates the Transbox systems and rents them to the food manufacturers. The customer pays a 70 € monthly membership fee and 0,46 € for every Transbox rented. Additionally, a deposit of 4,20 € per box has to be paid. Transbox Ltd rents approximately 36 million Transboxes per year.

Transboxes are recyclable and stackable with each other, produced according to the principles of sustainable development and they are 19 times more ecological transport packages than traditional cardboard boxes. A Transbox can be used about 250 times, what makes it extremely environmental friendly. The size of a Transbox is as follows: length 600 mm, width 400 mm and height 255 mm. One Transbox weights 2,77 kg, has a volume of 42,3 litres and has a capacity of maximum 30 kg.

Transboxes are also efficient tool for automatized internal logistics and storage. Without an uniform and sturdy unit like Transbox the modern automatized materials handling in production, internal transport and storage would be almost impossible.



*Fig. 2. Automatized inventory using Transboxes [3]*

When considering the implementation of concepts like Atria's customer oriented service and/or Transbox package solution to new countries or market areas there is of course some specific challenges.

The first aspect is the Atria's very customer-oriented service. For example the German situation is completely different from the one in Finland. Germany is a much bigger country with a population density of about 229 persons per km<sup>2</sup> comparing to the

population density in Finland which is about 18 persons per km<sup>2</sup>. Because Germany is located in the Central Europe the whole market situation is much more different from the market situation in Finland. There is much more competitors fighting for the customer's favor which causes lower prices. On the other hand, the customer service is compromised because the final retail price has a great significance especially in big supermarkets and shops in bigger towns.

The second aspect are the cardboard box dominated packing, handling and distribution systems in the German and Central European food (and meat) processing industry. A sustainable package system like Transbox requires so big investments within the cycle of usage that it would be quite an economical and practical challenge to implement it in Germany – or any other big Central European country. The Transbox solution is without a doubt more sustainable than the traditional cardboard box based systems, but the implementation would be a big challenge.

## Conclusion

To summarize this work it is important to mention that not only the consumers, but also the companies have to take care of our environment, because only by doing this sustainability can be created into the European market. In the future more people will pay attention on the quality and sustainability of the product, producer's policies and activities and what the company stands for.

The Transbox system and customer oriented service is suitable for North European countries with a low population density as Finland. The second key aspect is the Transbox concept. In a highly developed big country like Germany, it is hard to implement a system such as Transbox. There are already standardized plastic boxes and containers in some industries like the postal industry, but not in the meat processing industry. Therefore, there is potential market, but a system like Transbox requires so big investments within the cycle of usage that it would be quite a challenge to implement it in Germany. But once it is implemented it would be a money spinner for a company providing packing and storage solution like Transbox.

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