NTUC FairPrice is the largest supermarket chain in Singapore with a market share of over 50%. It was founded in 1973 by the labour movement with a social mission to moderate the cost of living in Singapore. At the time of the study, it had over 240 retail outlets.

**Company name:** NTUC FairPrice  
**Country:** Singapore  
**Industry:** Food retail/food logistics  
**No. of employees:** Over 7,000  
**Revenues/profits:** SGD 2 billion/over SGD 120 million (USD 1.4 billion/USD 85.3 million) (in 2010)*

**Main products/services:**  
All types of foods

**The assessment focused in particular on the processing of:**  
• Frozen pork  
• Milk and dairy products  
• Fresh vegetables

**Main use of standards:**  
• Procurement  
• Storage (including an automated sorting system) and transport  
• Delivery to, and support of, retail outlets

**Most important standards used:**  
• SS CP 95:2002, Cold chain management – Milk and dairy products  
• SS CP 552:2009, Cold chain management – Chilled pork  
• ISO 6780:2003 and SS 334:2010, Flat pallet for material handling  
• EAN 13; ISO/IEC 16390:2007; ITF-14 etc., Bar-code standards

NTUC is certified against HACCP and ISO 9001.

**Economic benefits generated by standards:**  
SGD 4.5 million (USD 3.2 million) annually
What were the major benefits for NTUC of using standards?

Using standards allowed NTUC to:

- Double the volume of goods handled while retaining the number of employees, leading to a revenue increase
- Improve process efficiency
- Extend the supplier network
- Raise and maintain the level of product quality
- Increase the level of customer confidence and loyalty

These benefits translated into annual savings of approximately SGD 4.5 million (USD 3.2 million) in addition to nurturing a culture of continuous improvement in the company.

How did standards lead to these benefits?

The main classes of standards investigated in this study were pallet standards, barcode standards and cold chain standards for chilled pork, milk and dairy products. Standardized pallets helped the company systemize their handling of goods, making optimal use of storage and warehouse space, reducing delivery costs and facilitating the automation of warehouse operations.

In addition, standardized carton bar codes, which were introduced in 2000, helped improve operational efficiency, the accuracy of information and the delivery of products from their distribution centres. Before the use of carton bar codes, the company manually recorded product information, which was both time-consuming and a source of error. These measures meant the company could handle more goods (leading to a doubling of the number of retail outlets and growing sales of fresh fruit) without significantly increasing its manpower.

The use of cold chain standards for both pork and milk and dairy products helped the company to ensure the proper management of pork, milk and dairy products during production, storage, transportation, manufacturing, distribution, handling and at the point of sale. This guaranteed good product quality, decreased wastage, enhanced customer confidence, and gave NTUC FairPrice the possibility to sell higher-value goods, thus increasing revenue further.

Total impact of standards from 1999 to 2009: SGD 13.6 million (USD 9.7 million)
Key qualitative benefits: Nurturing a culture of continuous improvement.

* SGD 1 = USD 0.71153 (2009-12-31)