Big Data enables in-store retail analytics for increased revenue and reduced waste

To thrive in a tough market environment, Denmark’s largest grocer keeps a close eye on customer preferences and its own operational efficiencies. Harnessing Big Data for competitive success, Salling Group transformed an IT bottleneck into an engine of in-store retail analytics and business agility, resulting in increased revenues and reduced waste.
Multiple pressures eat into grocery store profits

Slow growth, increasing consumer demands challenge retail market

Retailers are essentially a link between producers and end-consumers, taking a relatively small markup on the cost of products. The resulting narrow profit margin requires retailers to pay stringent attention to cost and operational efficiencies. The Danish grocery market where Salling Group originated is characterized by slow growth, falling food prices, and a shift in volumes from supermarkets to discounters. The market for non-food items and textiles also is growing slowly, with volumes shifting toward online trade.

Consumers are also growing increasingly sophisticated in their buying habits, with a range of factors influencing their decisions. In addition to price, quality, and convenience, many consumers consider such issues as sustainability, organic production, country of origin, animal and human rights, and corporate citizenship. Therefore, the retail market is fragmenting into micro segments, each requiring a targeted value proposition. The resulting proliferation of product choices complicates inventory management, as does the rise of multiple distribution channels including supermarkets, convenience stores, discounters, and online venues.

All this challenges IT systems to collect increasing volumes of data from retail points of sale, apply predictive analytics, and generate timely reports enabling retailers to respond fast to customer demand. It’s a job for Big Data. Stocking the right products on the right shelves at the right time maximizes revenue while minimizing waste. At stake are consumer satisfaction, corporate profitability, and environmental sustainability.

Also on retailers’ minds is the need to free cash flow for investments in innovation and market opportunities. This points toward shifting technology from a capital expense to an operating expense. Retailers like Salling Group are seeking more flexible ways to architect and fund their IT infrastructures, to reduce their management burden while gaining the ability to scale capacity up and down for business agility.
Denmark’s leading retail chain

Salling Group emphasizes lean agility to compete internationally

Salling Group, Denmark’s largest retailer, runs several e-commerce businesses and four retail chains — føtex, Bilka, Netto, and Salling — with 1,467 stores in four European countries. Handling nine million shopping trips per week for groceries and non-food items, Salling Group employs 51,000 workers.

To thrive in a challenging business environment of narrow profit margins and stiff competition, Salling Group remains lean and agile while expanding internationally with new products, stores, and delivery channels managed with deep insight into diverse and changing customer demands.

9M
shopping trips a week

DKK $57.5B
2015 revenue

1,467
stores across Denmark, Sweden, Poland and Germany

“Salling Group primary goal is to run a sustainable retail business while creating convenient and inspiring shopping trips for our customers, safe working conditions for our employees, and growth opportunities for our suppliers and partners.”

Alan Jensen, CIO, Salling Group

Narrow margins, changing customer preferences, new delivery channels spur Salling Group to harness data more effectively

As a mass-market retailer, Salling Group serves 1.4 million store customers a day — yet must satisfy each one individually. When someone comes in to buy milk — or eggs or bread or flowers — that item has to be fresh and in stock to generate sales revenue, but not overstocked leading to waste. This inventory management challenge is complicated by the fragmentation of consumer demand into micro segments. How much whole, 2%, soy, or organic milk should a particular store in a particular location stock on a particular day? Will that consumer choose a supermarket, a convenience store, or a discount outlet — or order online?

The right mix of products and delivery channels is critical in a retail market where demand remains flat and profit margins hover at a razor-thin 4%. Yet amid these challenges, Salling Group thrives, through a keen eye on customer needs and a constant focus on lean operations.

“We must remain lean and agile as our business grows and the environment becomes more complex.”

Alan Jensen, CIO, Salling Group
Harnessing Big Data

Pay-as-you-go SAP HANA overcomes limitations of legacy IBM Power and DB2 platform

As Salling Group expands internationally, diversifies its delivery channels, and increases its hours of operation, store-level daily inventory management decisions depend increasingly on predictive Big Data analytics. However, the IBM Power and DB2 platform Salling Group was using to support its SAP Business Warehouse (BW) could not load data fast enough to generate timely reports. With Salling Group’s 50TB database growing by 2TB a month, that problem would continually worsen unless the company transformed its IT environment to enable real-time analytics.

Salling Group decided to migrate to the in-memory computing platform SAP HANA, and needed an SAP partner to deliver an end-to-end solution integrating hardware, software, and IT management services. What’s more, Salling Group wanted the solution delivered on a pay-as-you-go basis, for lower costs and the IT flexibility to keep pace with seasonality and changing market dynamics.

“As the market leader for the SAP HANA platform, HPE brought proven expertise that helps us avoid the complications that can occur when implementing new technology.”

Alan Jensen, CIO, Salling Group
Transforming data into insight

Salling Group partnered with HPE Pointnext to develop an end-to-end transformative solution, including deploying converged infrastructure via HPE GreenLake Flex Capacity to cost-efficiently perform predictive analytics on massive amounts of transactional data.

To remain lean and agile while building sustainable growth for the future, Salling Group brought in HPE Pointnext to help it design, build, and deploy an end-to-end solution.

Salling Group systems now take in massive amounts of transactional data 24x7 from point-of-sale systems in all its stores across Europe, analyzes it quickly, and delivers timely, information-rich reports to decision makers. This ability to derive real-time insights from data empowers Salling Group to achieve its driving goal to be the number one retailer in Denmark based on customer satisfaction, financial performance, and employee satisfaction.

Salling Group also transformed its ability to pursue international growth and market opportunities, by freeing cash through its purchase of infrastructure as a flexible service. With HPE GreenLake Flex Capacity, instead of carrying a capital expense on its books, Salling Group pays only for what it uses. As business needs change, Salling Group can securely increase or reduce capacity as needed, resulting in optimized cash flow and increased IT agility.

Ongoing operational support is provided by HPE Pointnext.

“With HPE and SAP HANA, we have faster data loading and faster reporting, providing the information and access we need for better decision making.”

Alan Jensen, CIO, Salling Group
Unleashing growth, competitive agility, customer insight

Inventory decisions based on precise, timely customer information drive improved revenues and reduced waste

Every morning before their stores open, store managers at Salling Group can review in detail exactly what customers purchased the day before. They’re not looking at guesses based on analysis of data subsets, they’re not waiting a few hours after the store opens to receive reports. They’re looking at comprehensive, personalized reports that empower them to make the best possible inventory stocking decisions to satisfy customers, increase revenue, and reduce spoilage and waste. That keeps Salling Group thriving and eases the pressure on profit margins.

At the top executive level, Salling Group is now freer to pursue its growth goals. The company is opening additional stores, introducing a new convenience-store format, and pursing e-commerce opportunities. Salling Group used HPE GreenLake Flex Capacity to shift to a variable payments infrastructure financing model, lowering its infrastructure total cost of ownership and unleashing the company’s ability to invest in innovation — the cornerstone of its competitive success.

From the tiniest detail of how many liters of milk to stock in an individual store, to the strategic challenges of international expansion, Salling Group with its HPE solutions has transformed IT from a bottleneck into an agile powerhouse.

30-40%
Faster POS reporting with new data hub, which supports better daily inventory decisions to maximize revenue and minimize waste

30%
Salling Group Netto Supermarket’s goal for reduction in food waste by 2030

200
Staff hours a day saved with faster report generation, freeing up staff to perform more valuable activities

“How do we avoid the waste and financial loss of overstocking products? When do we need to adjust prices? Faster data generation with the HPE solution supports better business decisions.”

Alan Jensen, CIO, Salling Group