IBM provides the foundation for supply chain management by arvato

Overview

■ **Challenge**

Real-time, detailed reporting from movement of goods to tactical and strategic analyses.

■ **Why IBM?**

Arvato has been working successfully with IBM® Cognos® since 2001 and has had positive experiences with the innovative and comprehensive IBM Cognos solutions.

■ **Solution**

IBM Cognos 8 BI provides decision-makers at arvato with information consolidated across different source systems, as well as a wide range of analysis and evaluation tools.

■ **Key Benefits**

Higher sales and lower inventory costs, thanks to the rapid availability of reliable and detailed point of sale (PoS) data, fast responses to shifts in the market; as also flexible analyses provides a solid foundation for tactical and strategic decision-making.

arvato services, a subsidiary of arvato Bertelsmann AG, handles all inventory management flows on behalf of its customers. With around 5,000 employees, where required, arvato logistics specialists can cover a company's entire supply chain all over the world. Its service spectrum encompasses order processing, procurement, warehousing, distribution, communication and financial aspects. Companies ranging from medium-sized firms to large global groups call on arvato's logistics services. Located at various sites throughout Europe, the Entertainment Services

"Our leading position in the logistics services market is based to a great extent on the reporting support provided by IBM Cognos solutions."

Jochen Bremshey,
Vice President IS & T
Entertainment Services,
arvato services

Cognos software

division manages the distribution of entertainment media, mainly audio CDs, DVDs and video games. Major players such as Sony Music, Warner Music and Paramount rely on arvato systems and services to ensure that their products are available in sales outlets in line with demand. arvato departments ensure that supplies of the required entertainment media reach these outlets – including 300 Media Market, 185 Saturn, 300 Carrefour, 370 ASDA, 70 Kaufhof and more than 200 Karstadt stores, as well as over 3,700 Esso filling stations in Western and Southern Europe – in good time and according to their individual requirements.

How can I manage my supply chain to ensure that all goods are delivered to the right place, in the right quantities and at the right time? This is the key question facing every Supply Chain Manager. To plan flows of goods efficiently and reduce risk, rapid reactions and the ability to anticipate are essential. In cooperation with IBM Cognos, arvato services has developed a supply chain management solution called r.i.m. It offers automated management of entertainment product supplies, as well as comprehensive reporting and a range of flexible analyses.

Challenges Faced

The entertainment media market is extremely fast moving. Today's tops are tomorrow's flops, while unknowns are suddenly thrust into the limelight.

At the same time, customers want everything immediately, even items from the back catalogue. This represents a complex challenge for supply chain management.

 "On the one hand, every product needs to be available at each outlet, but on the other hand, business logic calls for lean and efficient stockholding, including minimum returns," explains Jochen Bremshey, Vice President IS & T Entertainment Services at arvato services.

The key to addressing both of these requirements is a very responsive supply chain system – a system that is capable of capturing all movement of goods while automatically ensuring appropriate replenishments according to predefined parameters. An overview of all products and sales must be available at all times to identify any peaks or falls in demand as they occur and take appropriate countermeasures. What was sold at which PoS? How long will current stocks last there? What replenishments need to be sent, and in what volumes? The ability to answer these questions rapidly is the basis of successful supply chain management. However, this involves processing and disseminating huge volumes of data within very tight timeframes – information about the current status of each item, from production through to sale. Every day, arvato receives around 3.6 million

electronic data records from different source systems. This information needs to be standardised and automatically transmitted to the replenishment scheduling systems. Product and supply chain managers also need an accurate database to support their tactical and strategic analyses and decision-making.

Strategy Followed

No more empty shelves: Meeting the Challenge of Retail Inventory Management

arvato services and Cognos developed 2001 a Vendor Managed Inventory (VMI) system which they have continuously upgraded and is currently running on the basis of IBM Cognos 8 BI. A VMI system allows a manufacturer to schedule its goods in sales outlets either directly and under its own responsibility, or by calling on the services of an external service provider such as arvato. The system marketed by arvato is called Retail Inventory Management (r.i.m). It responds rapidly, automatically and according to demand, managing replenishments based on sales variations in stores. Top titles are identified and sufficient stocks ensured to meet demand, while a lower priority is placed on slower moving titles. It also offers specific functions for special placements, charts, and promotional items.

A constant overview

On arrival at the supplier's central warehouse, every article is recorded in the r.i.m. system by means of a barcode scan. Subsequent steps, including transport ("stock in transit") to the outlet warehouse, to the shelf, and finally to the customer, are tracked each day.

"If an electronics retailer sells 80 new AC/DC albums in a day instead of the expected 20, r.i.m. compares this demand with on-site stocks and automatically ensures that the required replenishments are in place within 48 hours," explains Bremshey.

Since r.i.m. also considers financial parameters, the system can also ensure theretail outlet has not exceeded its credit limit. Supply chain planning encompasses other factors, such as marketing campaigns that may affect additional sales areas, or the expected lifecycle of a product. Digital capture of all goods, and networking of all systems involved ensures end-to-end monitoring of the supply chain. The risk of error is also reduced. And thanks to r.i.m., piles of CDs gathering dust in a corner of the warehouse are now a thing of the past. The r.i.m. system handles all master data maintenance, as well as the composition of sales assortments (products on each shelf). arvato uses a Sybase relational database to record and integrate all PoS data every night from the different ERP systems used at connected retail outlets.

Well-founded analyses, intelligent decision-making

Another r.i.m. component offers arvato customers a range of flexible analysis options. Multidimensional OLAP (Online Analytical Processing) data cubes are generated on the basis of PoS data and reports are created using IBM Cognos 8 BI.

"Each decision-maker can access a range of analyses online, which can be used to generate a picture of the current situation in detail or as an overview. This helps to optimise inventory management at sales outlets and reduce volumes of returns," said Bremshey.

Variable statistics and ad-hoc analyses are used to map demand and inventory planning trends, overall, at sales outlet level, by region, division, artist, or according to any required keyword. Different presentation options such as graphs and diagrams ensure clear and transparent results, even for inexperienced users. This ensures that product and supply chain managers have access to the required information to support their tactical and strategic decision-making, answering questionns like "Were sales of Christmas music higher than expected in December?" and respond appropriately.

As well as automatic replenishments, ranges can easily be expanded, for instance in combination with marketing campaigns and restricted to the most

popular regions. So managers can determine, for example, if the new Star Trek DVD is selling well in Bavaria, but not quite so fast in Lower Saxony. They can then take action by extending or shortening product cycles as required. Sales prices can also be included in analyses, allowing pricing to be flexibly adapted to each individual demand situation. This helps to tailor the sales assortment far more closely to customer demand, which means increased turnover in the same sales area.

"PoS data is therefore used in the complete solution for both operational business aspects and to analyse commercial success," explains Bremshey.

Benefits Realized
Smart Supply Chain

IBM Cognos technology and expertise is creating a comprehensive approach to supply chain management, in line with the IBM vision of smart planning: completely digitised, networked from end to end, and controlled intelligently. This results in a win-win situation. Manufacturers and sales outlets benefit from automated, targeted, and therefore more cost-effective supplies with low return volumes, as well as from well-founded and responsive planning of sales assortments. Customers can find exactly what they're looking for at their sales outlet, guaranteeing good entertainment for all.

About IBM Cognos BI and Performance Management

IBM Cognos business intelligence (BI) and performance management solutions deliver world-leading enterprise planning, consolidation and BI software, support and services to help companies plan, understand and manage financial and operational performance. IBM Cognos solutions bring together technology, analytical applications, best practices, and a broad network of partners to give customers an open, adaptive and complete performance solution. Over 23,000 customers in more than 135 countries around the world choose IBM Cognos solutions.

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