Efficient replenishment of books and stationeries

Case: Suomalainen Kirjakauppa

Pekka Kuurne

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Agenda

- **Suomalainen Kirjakauppa**

- Our starting point

- Our goals in store replenishment

- What we did to meet our goals

- Results and lessons learned

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Suomalainen Kirjakauppa Oy

- Founded in 1912

- Largest chain of book stores in Finland and Estonia
  - 62 stores
  - Nation-wide coverage

- Wide and varying assortment
  - 6.000 to 40.000 products per store
  - A total of 600.000 SKU's

- Turnover 123 million Euros
  - 70 % book sales, 30 % stationery

- Personnel: 800 (2009)

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Challenges in store replenishment

- **Wide assortment**

- **Short product life cycles**
  - New books, promotions, seasonal products
  - In books, approximately 90% of the assortment is renewed annually

- **High seasonality in sales**
  - Christmas sales (three weeks) make up approximately 20 % of annual turnover

- **62 stores of different sizes, with local demand patterns**
  - Products have to be managed differently in different locations

- **Need to maintain an appealing visual shelf presentation**
  - "The most optimal inventory" may look visually unappealing

Forecasting is challenging due to highly variable demand and assortment

Replenishment control is challenging due to different goals and needs

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"Automatic" replenishment using ERP functionality (1/2)

- First steps towards automatic replenishment in the 1990s
  - "Automatic" replenishment using ERP functionality

- IT-based inventory management and automatic order proposals taking into account the stock balance
  - Order proposals checked and adjusted in stores

- Assortment and order parameters managed by 3 store size classes
  - 6000 – 7000 books
  - 1200 basic stationery products
  - xx additional stationery products at each store
  - Extra assortment formed by store

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"Automatic" replenishment using ERP functionality (2/2)

Implementing the old system had been a big step forward...

Significant increase in shelf availability

System support for store ordering
- Reduction of time spent on ordering

.. but there were still many areas that needed to be improved

Still significant amount of manual labour in ordering
- All orders had to be reviewed manually and 80 % of them were changed
- Annually, over 17 FTE of store labour

High level managed replenishment parameters not sufficiently aligned with differing store-level demand

Lost sales due to stock-outs

Pressure to increase stock turnover

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Store role

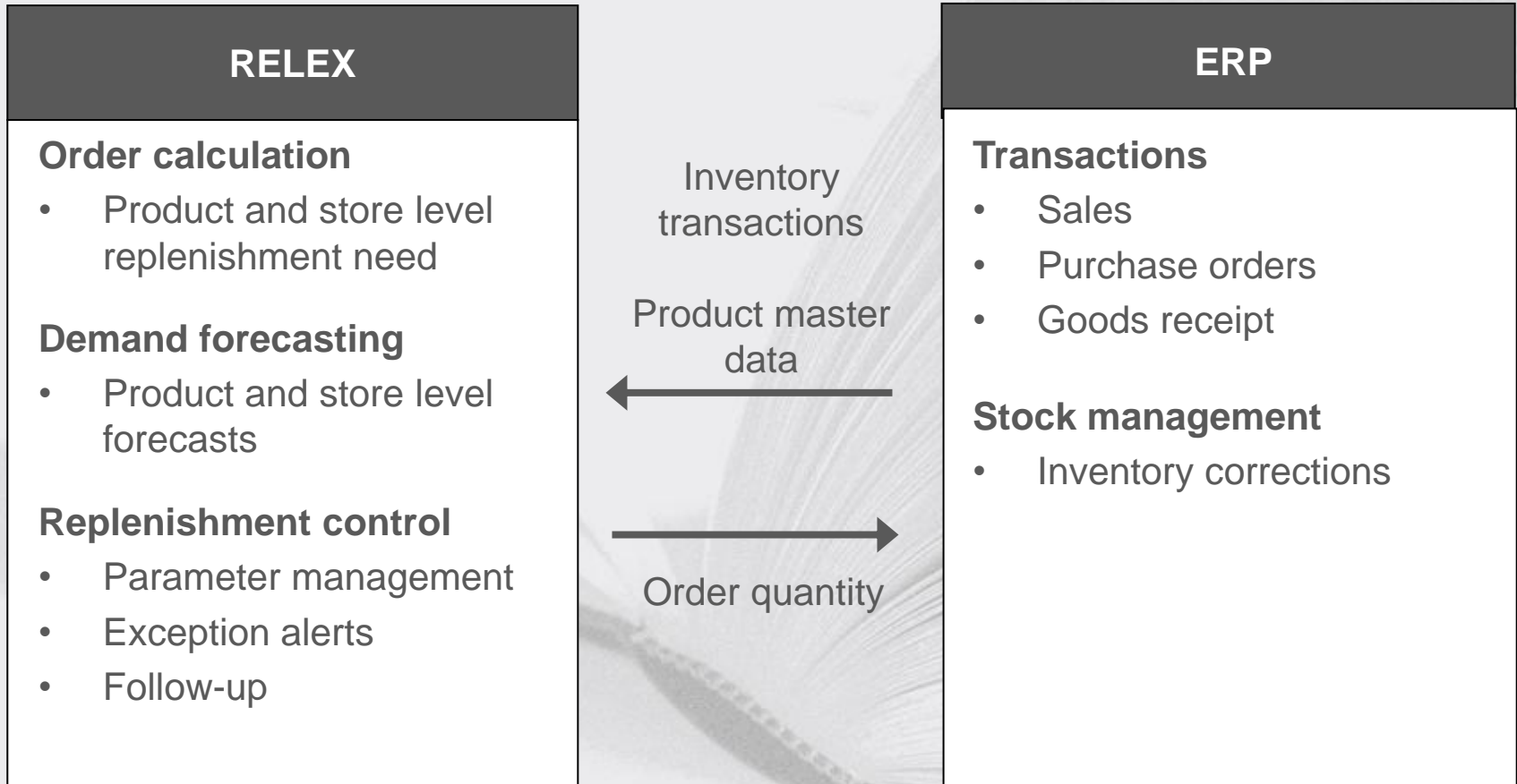What is the main function of the store?

➡️ **To sell!**

Goals in replenishment development

- To centralise store replenishment
  - Centralised store replenishment of all items, including seasonal items, promotions, and new products

- To implement business targets through store replenishment
  - Implementation of product, category, and store level availability targets
  - Maintaining visually attractive shelves
  - Replenishing according to store sales and available stockroom
  - Lowering the total cost of replenishment

- To free up as much time as possible from replenishment ordering

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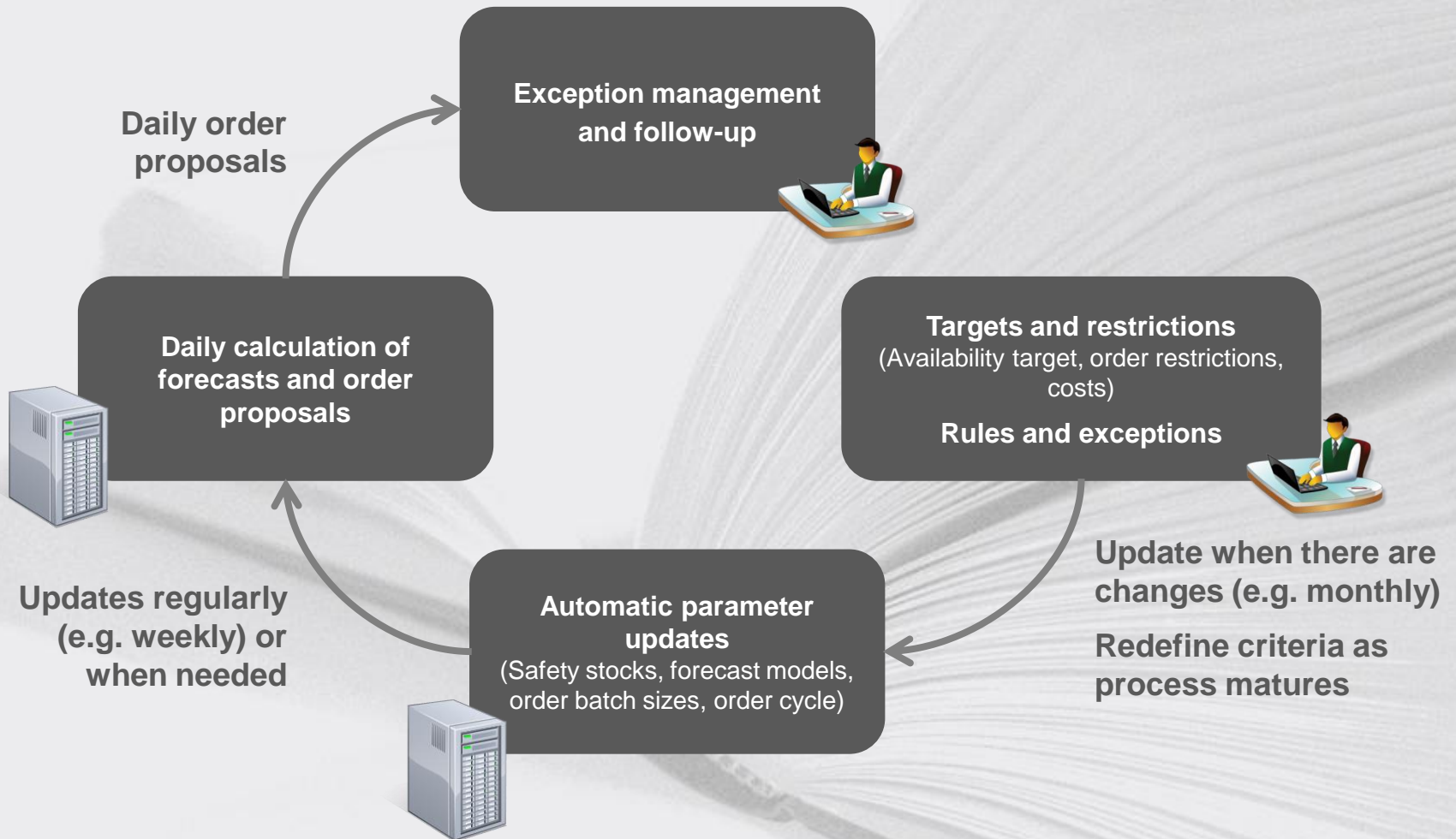
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Adding replenishment intelligence to the current ERP system

RELEX

Order calculation
- Product and store level replenishment need

Demand forecasting
- Product and store level forecasts

Replenishment control
- Parameter management
- Exception alerts
- Follow-up

ERP

Transactions
- Sales
- Purchase orders
- Goods receipt

Stock management
- Inventory corrections

Inventory transactions

← Product master data

Order quantity →

RELEX implementation timeline

Pilot in three stores

Roll out for all 62 stores

Further development and stabilisation of new process

2007 → **2008** → **2009** → **2010**

Feasibility study

Centralisation of assortment management

Improved inventory control process

Further development of assortment management

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Replenishment process with RELEX

Exception management and follow-up

Daily order proposals

Daily calculation of forecasts and order proposals

Targets and restrictions
(Availability target, order restrictions, costs)

Rules and exceptions

Updates regularly (e.g. weekly) or when needed

Automatic parameter updates
(Safety stocks, forecast models, order batch sizes, order cycle)

Update when there are changes (e.g. monthly)

Redefine criteria as process matures

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What changed?

- Centralised replenishment organisation
  - Store role in ordering eliminated

- Totally automated replenishment parameter management
  - Including new product introductions

- Special demand situations also handled by replenishment team
  - Seasons (Christmas)
  - Promotions

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Current replenishment process

- **The bulk of the products are in continuous replenishment**
  - Either from central warehouse or by direct delivery suppliers

- **RELEX's solution is used for all operational replenishment and replenishment control**
  - Calculation of daily replenishment orders and demand forecasts
  - Optimisation of forecasting and replenishment logic and parameters
  - Daily and weekly exception management
  - Monitoring of the replenishment process (and sales)

- **Replenishment is done daily, five days a week**
  - Usually each product/vendor has 1-3 replenishment days per week
  - Processed order lines vary between 5.000 and 30.000 per day

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Current replenishment organisation

- **Main responsibility of replenishment in logistics**
  - Main planner replenishes all stores, 600.000 SKU's, which normally takes one hour per day
  - In addition, responsibilities include reporting, store communication, process development...

- **Stores only place orders based on customer requests**

- **Product managers and assistants participate in replenishment management**
  - Seasonal and promotional replenishment (in co-ordination with logistics)
  - Visual shelf management
  - Exception management

- → **The time that was previously spent on basic replenishment can now be used on exceptions and development projects**

Managing the Christmas season

- **Forecasting during the Christmas season is difficult, yet extremely important**
  - Most of the assortment has been changed since the last season
  - A high sales peak just before Christmas leaves little room for corrective actions, especially since end-of-seasons stock should be minimised

- **RELEX provided a robust forecasting method**
  - No SKU level historical data on previous seasonal sales is needed
  - Forecasts are automatically adjusted based on development of sales
  - Exceptions are automatically detected and presented to the assortment manager

- **Excellent results**
  - Significant increase in availability: from 87% to 93,5 %, promotional products 97,5%
  - Store resources spent on customer service rather than ordering

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Managing assortment change and new products

- **Over 200.000 new SKU's annually**
  - Managing these manually is impossible; maintaining information on reference products would be too time-consuming
  - Many product introductions are reasonably easy to replenish (slow sellers), but there are also very difficult cases

- **The process has been completely automated using RELEX's solution**
  - Category group level initial replenishment parameters that are updated weekly based on actual sales using control heuristics
  - After fours weeks, the system automatically detects the optimal SKU-level forecast and replenishment parameters

- **This has enabled a very high level of automation and improved availability of new products**

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Managing shelf presentation

- **For slow sellers, replenishment optimisation can lead to shelves that look empty**
    - Even if shelf availability is perfect, unattractive shelves have a negative impact on sales
    - Very important in some product groups, such as pens

- **RELEX's solution allows for efficient management of shelf presentation targets**
    - "Visual minimums" to ensure selling shelf presentation
    - Mainly set centrally, but in some cases based on store needs

- **In the future, better integration of replenishment, planograms and actual shelves will be implemented**
    - Currently, new, more inventory-efficient display solutions are tested

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Results

Issue	Old process	New process
Shelf availability	91 %	98 %
Replenishment ordering work	80% of the order proposals were adjusted manually	Only 2% of order lines manually adjusted, which requires about one hour of manual labour per day
Inventory turnover	Unsatisfactory inventory turnover	Inventory turnover has increased by 15 %, while backroom inventories have been reduced
Seasons and promotions	Manual ordering during promotions and peak seasons	Availability for season products has improved, while end-of-season stock has been reduced
Customer service	Significant time spent by store personnel on ordering	More efficient replenishment has freed up time for customer service

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Lessons learned

Focus on processes

It is not only about the system, the process needs to change, too

Ensure that the other processes support the change (product data management, reliable deliveries etc.)

Utilise positive experiences

Good results create a virtuous circle of success

Choose the stores for pilot and first roll outs carefully

The quality of the main user makes the difference

A high level of automation is only achieved if the daily operational control is on a good level, a talented main user can push control and automation to new levels

Roll out quickly

Learn by piloting – it highlights the most important success factors

Minimise the time between the old and new process

Focus on challenging demand situations

Difficult demand situations often have the biggest upside

Christmas season was the main focus for Suomalainen Kirjakauppa

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Partner selection criteria

- Suomalainen Kirjakauppa examined several options when looking for a replenishment solutions provider

- Our reasons for choosing RELEX
  - Replenishment solution that can manage a large number of products and stores
  - Live pilot option to ensure fit of solution and processes before committing to the investment
  - Extensive knowledge of product replenishment in the specialty goods trade
  - Enthusiastic problem solvers that genuinely want to understand our business needs

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Pekka Kuurne

Development Manager

Koivuvaarankuja 2, FI- 01640 Vantaa, Finland

tel. + 358 407334157

email: pekka.kuurne@suomalainenkk.fi

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THANK YOU!

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