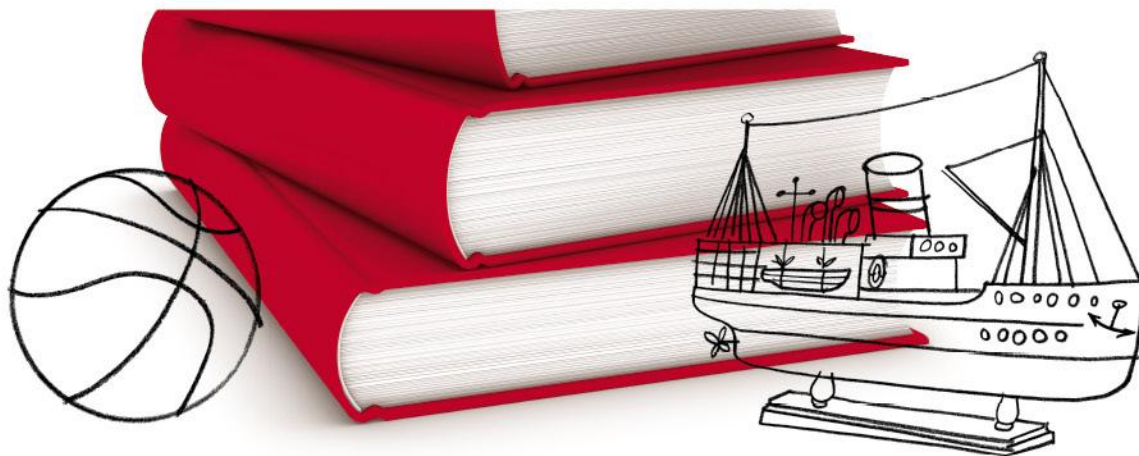




STEPS AND RESULTS ON OUR WAY TOWARDS EXCELLENCE IN FORECASTING AND REPLENISHMENT

Pekka Kuurne, Suomalainen Kirjakauppa
Seminar 2012



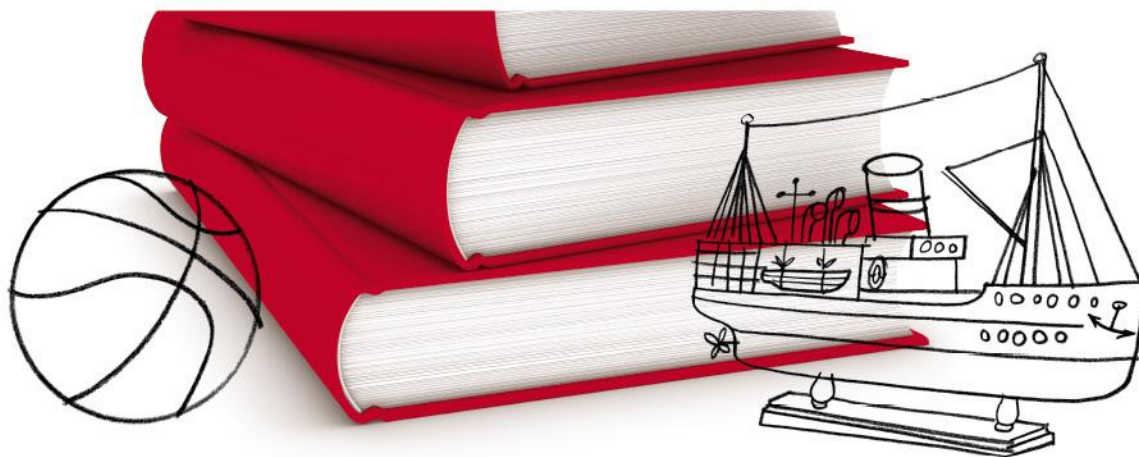


AGENDA

- Introduction
- Automatic replenishment with RELEX
- Further development with RELEX
- Results



INTRODUCTION





COMPANY PRESENTATION

SUOMALAINEN KIRJAKAUPPA OY

- **Founded in 1912**
- **Largest chain of book stores in Finland**
 - 57 stores
 - Nation-wide coverage
- **Wide and varying assortment**
 - 6.000 to 40.000 products per store
 - A total of 600.000 SKU's
- **Turnover 120 million Euros**
 - 70 % book sales, 30 % stationery
- **Personnel: 750 (2011)**





CHALLENGES

- **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



STARTING POINT

“AUTOMATIC” REPLENISHMENT USING ERP FUNCTIONALITY

This first step was important...

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 labor in ordering

- All orders had to be reviewed manually and 80 % of them were changed
- Annually, over 17 FTE of store labor

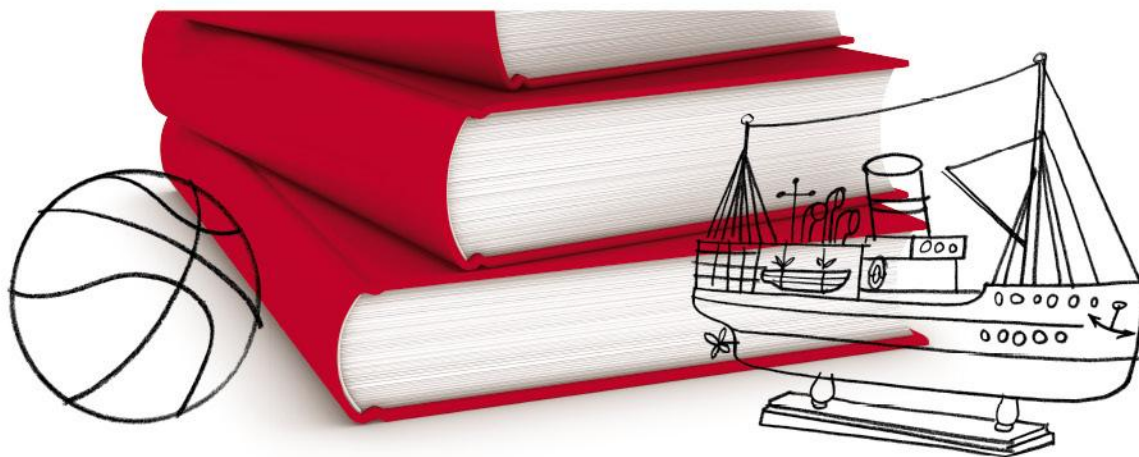
Replenishment parameters not sufficiently aligned with differing store-specific demand

Lost sales due to stock-outs

Need to further increase stock turnover



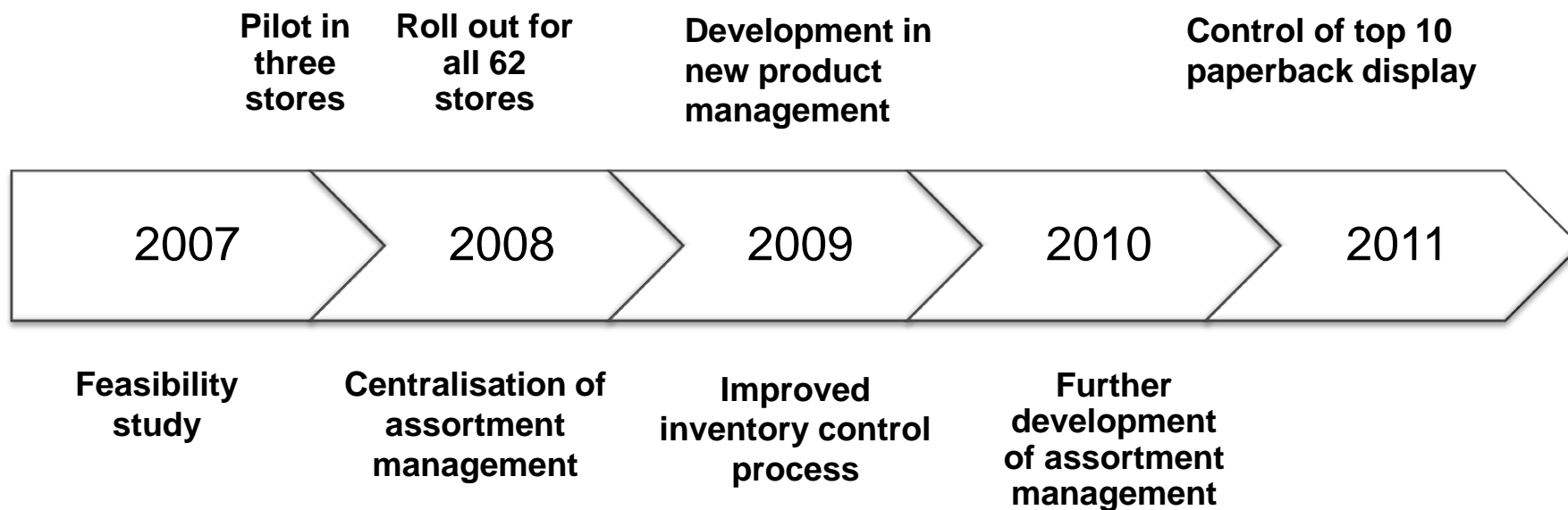
AUTOMATIC REPLENISHMENT WITH RELEX





IMPLEMENTATION TIMELINE

Continuous development of peak season management



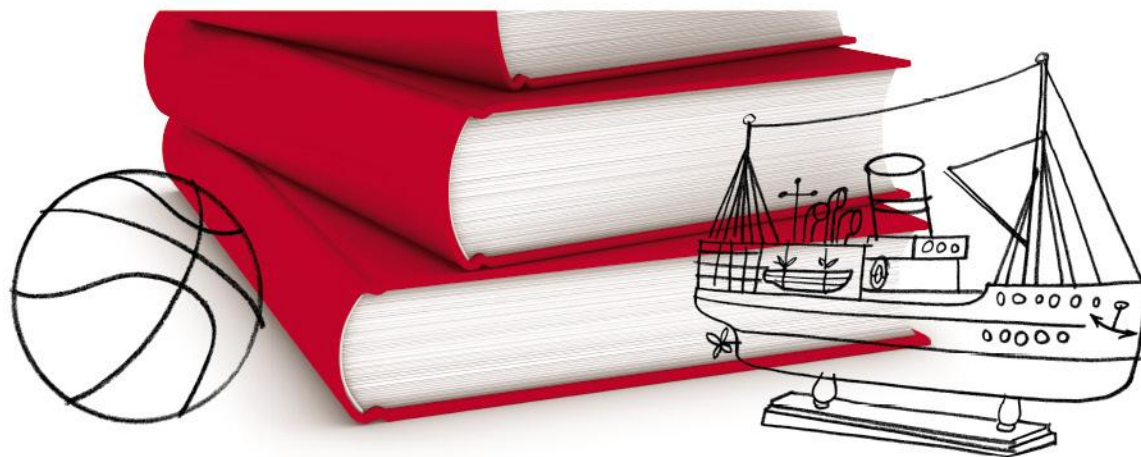


AUTOMATIC REPLENISHMENT WITH RELEX

- **Fully centralized replenishment organization**
 - Store role in ordering eliminated
 - Stores focus on customer service and sales
- **Totally automated replenishment parameter management**
 - Including seasons and new product introductions
- **Highly efficient replenishment process**
 - One person handles all store replenishment (5000-30000 order lines per day)



FURTHER DEVELOPMENT WITH RELEX





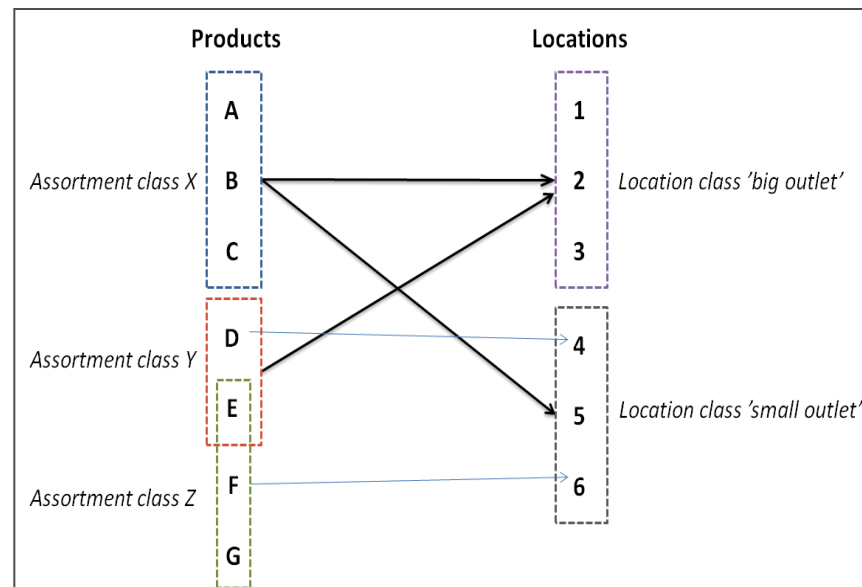
NEW PRODUCTS

- **Over 200.000 new SKU's annually**
 - Managing these manually is impossible; maintaining information on reference products would be too time-consuming
- **Management of new products has been completely automated using RELEX's solution**
 - Heuristics for setting initial parameters based on product group sales profiles
 - Rapid updates based on first weeks' actual sales
- **With RELEX a very high level of automation and improved availability of new products has been achieved**



ASSORTMENT MANAGEMENT

- Suomalainen Kirjakauppa's ERP-system did not support assortment management, but there was a need for it



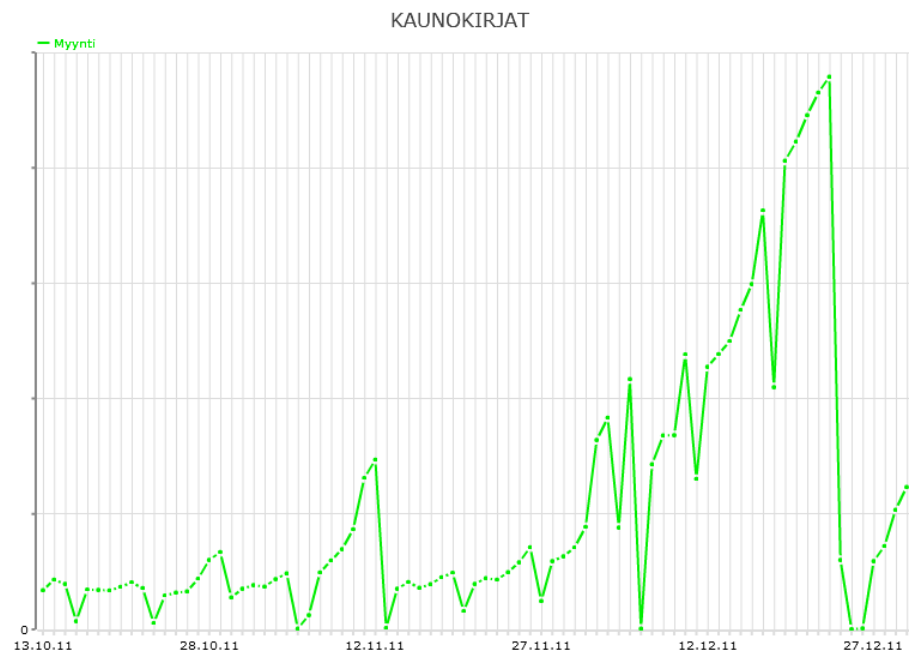
- RELEX is used for forming store-specific assortments, based on a modular approach
- RELEX allows for a combination of analysis and decision-support as well as operative assortment changes in the same view



MANAGING CHRISTMAS

BACKGROUND

- **The Christmas season is a key sales driver**
 - Christmas sales generate approx. 20 % of annual revenue
- **Forecasting during the Christmas season is difficult, yet extremely important**
 - The majority of the assortment has changed from the previous Christmas season
 - There are significant differences in sales between the stores and end-of-season excess inventory is a big risk

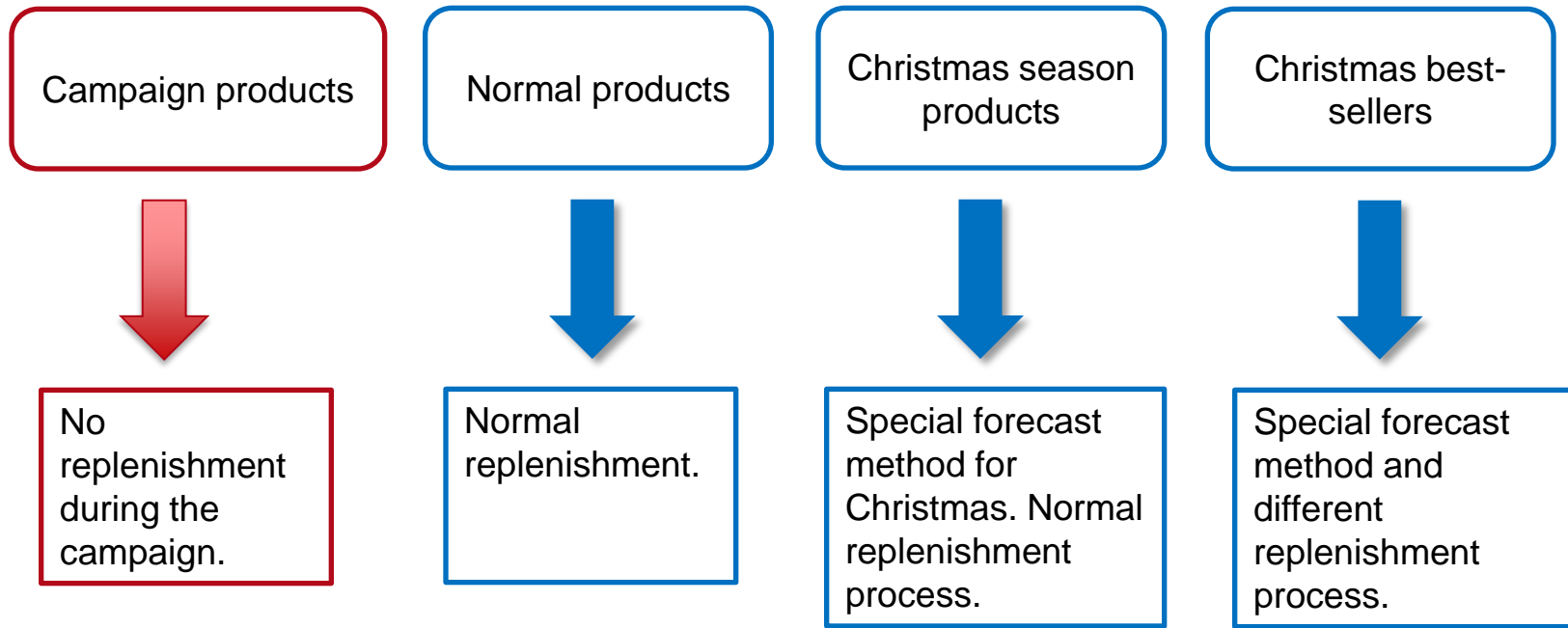




MANAGING CHRISTMAS

PREPARING FOR THE CHRISTMAS SEASON

- Products are classified into four different classes
 - Every class has their own replenishment process





MANAGING CHRISTMAS

OPERATIONS DURING THE SEASON

- **Management of seasonal products:**
 - RELEX has developed a forecast model, which reliably forecasts peak season demand for new products
 - Best-sellers have their own forecasting and replenishment model, because they have a steeper sales curve
 - The replenishment process is the same as off-season
- **Managing the end of season:**
 - Towards the end of season, stocks are lowered to avoid excess inventory after the season
 - Controlled ramp-down presented in the next slide



MANAGING CHRISTMAS

CONTROLLED RAMP-DOWN

<< Takaisin

KIRJAT

<- Edellinen Seuraava ->

Aloita asteikko nolasta

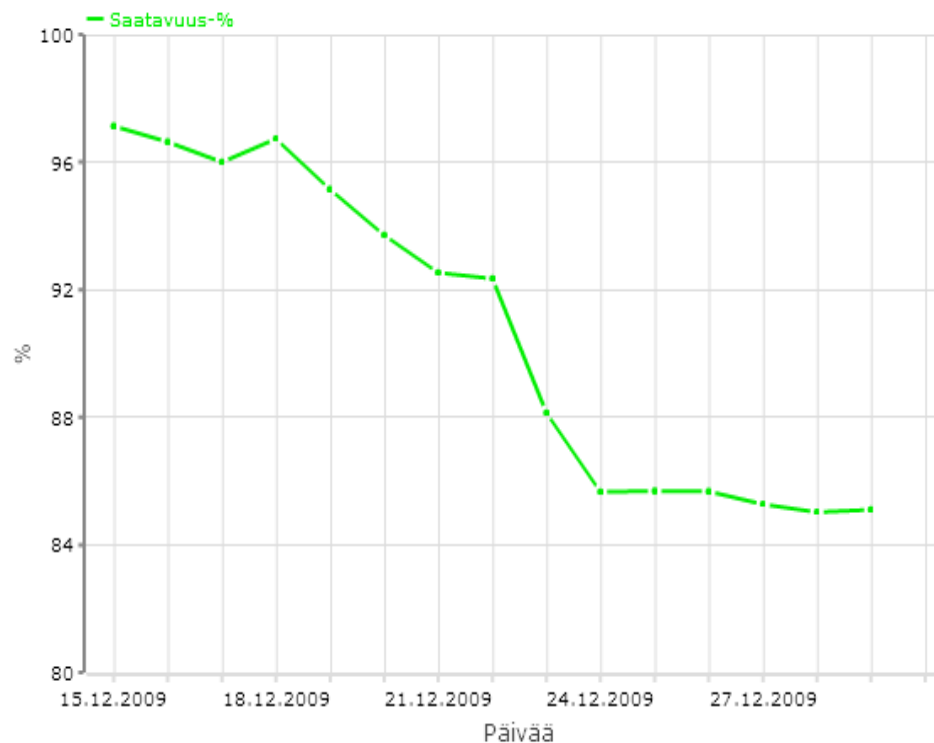
Näytettävät mittarit:

Myynti (avo)

Saatavuus-%

Myynti

Päivitä



Shelf availability (%)

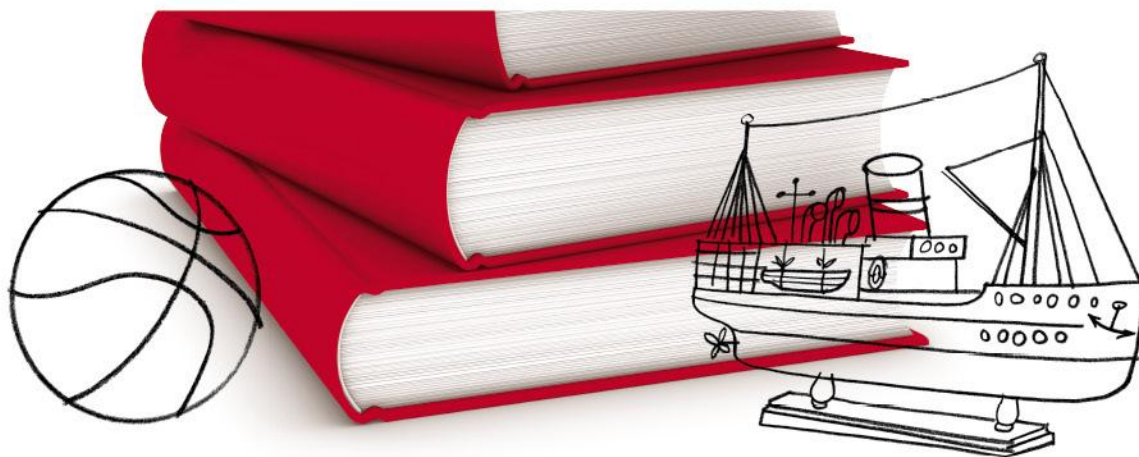


OTHER DEVELOPMENT ACTIONS

- **Business rules for automating a wide variety of special situations**
- **Example: Automatic management of top 10 displays in stores**
 - In Suomalainen Kirjakauppa's stores the 10 currently best selling paperbacks are put on display
 - RELEX's business rules are used for automatically updating the top 10 items and for adjusting their presentation stock targets



RESULTS



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



Pekka Kuurne
Development Manager

Maistraatinportti 1, FI- 00240 Helsinki, Finland

tel. + 358 407334157

email: pekka.kuurne@suomalainen.com



THANK YOU!