Production Management in Modern Newspaper Printing

IP - Erasmus

MediaPro – Athens 9 June 2010

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Version 1.0-2 per 2010-06-07

Agenda

- Introduction
- Business agreements
- Planning
- Realtime-tracking
- Dataware house solutions: Report generation and analytic tools
- Key figures
- Continous improvement
- Summary

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Introduction

- Production Management
  - How to organize your processes in order to manage the activities from business agreements through production to production reporting and invoices

- Why?
  - Handle the invisible pre-media operations
  - Manage the just-in-time print production and time critical delivery
  - Measure the production process and the resource consumption in order to collect data for internal and external reports and business management

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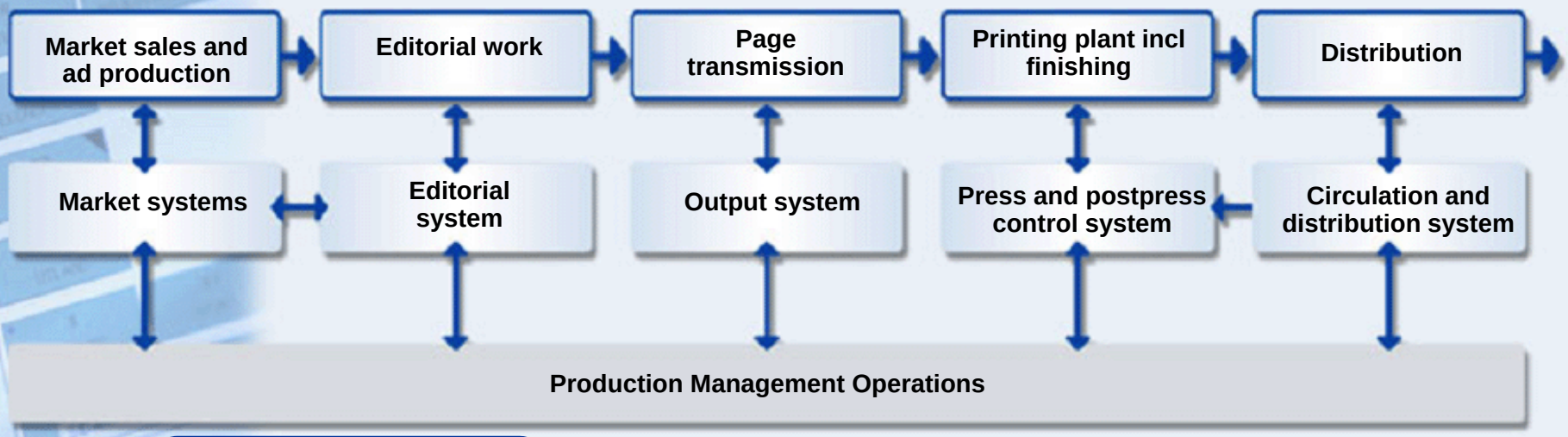
The overall newspaper production process

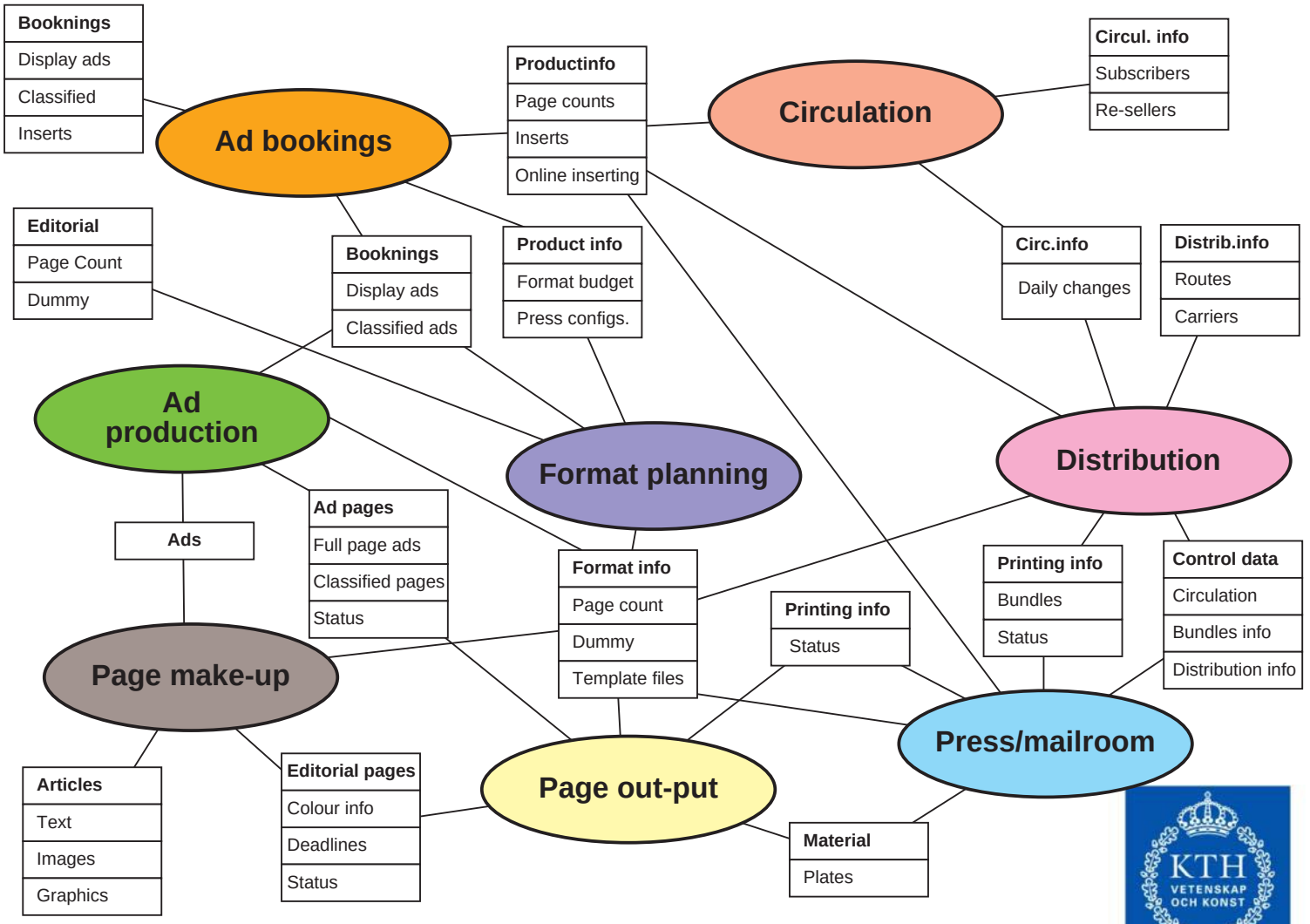


- Print Contract
- Products & format
- Time tables
- Page Production

- Production Planning
- Prepress
- Printing
- Mailroom
- Loading

- Distribution

Major processes and dynamic data to manage



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Business agreements

- Agreement between the printing plant and the customer
- Normally two type of contracts in newspaper printing
  - Long term contract printing 1 – 10/15 years
    (normally used for a major part of the production volume)
  - Short term so called spot jobs (to fill slots in the production)
  - Both contracts are normally signed after a quotation procedure
  - The long term contracts normally covers most of the investments (capital costs)
- The business agreement regulates the conditions with respect to products, production conditions and costs for example
  - **Product specification:** Physical product format, min-max page count, max colour capabilities, paper quality, occurance of inserts, issues per year, circulation (min-max), editions
  - **Process specification:** Production dates, page transfer window, max files per hour, last file from customer, time table for inserts, first good copy, time table for delivery on the loading bay → first good copy, copies per hour, last good copy
  - **Costs:** Often capacity costs for the production slot, material and costs for other services. Spot jobs are often priced differentely.

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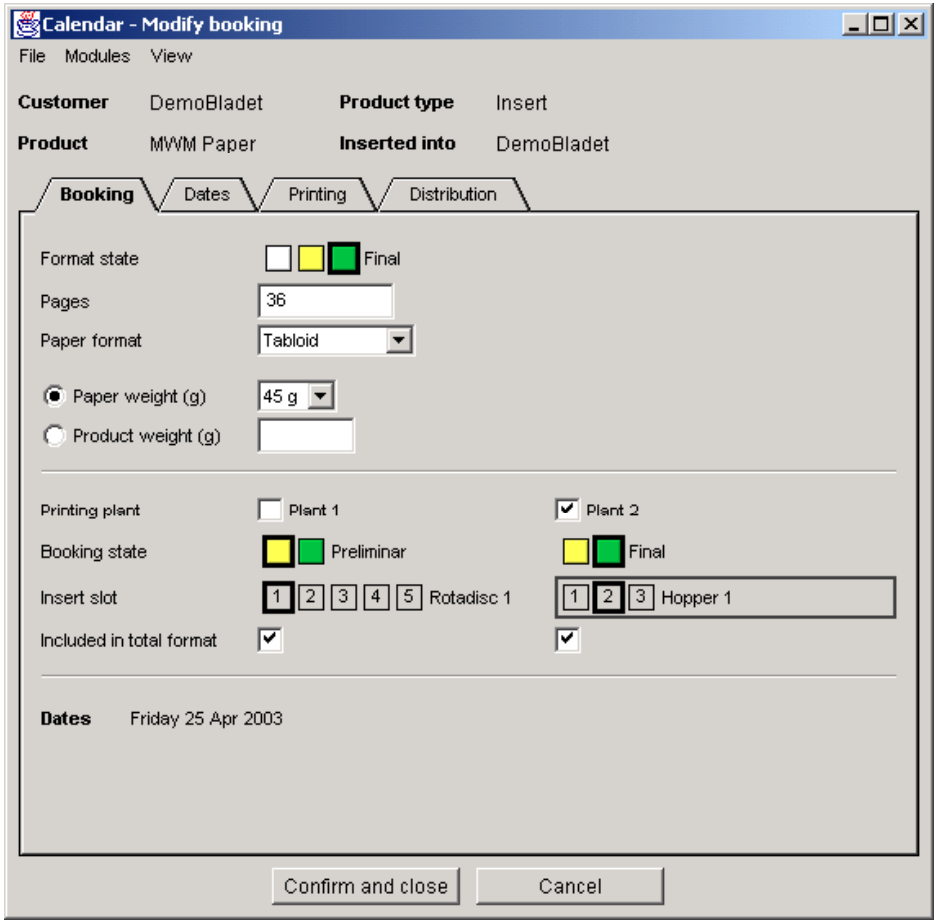
Planning: On a daily basis
– Product specifications from the customer



The page count of a certain issue is often decided less than 12 hours before the printing → The news flow and advertising sales determines the final product structure (page count per section and in total).

- Integrated workflow?

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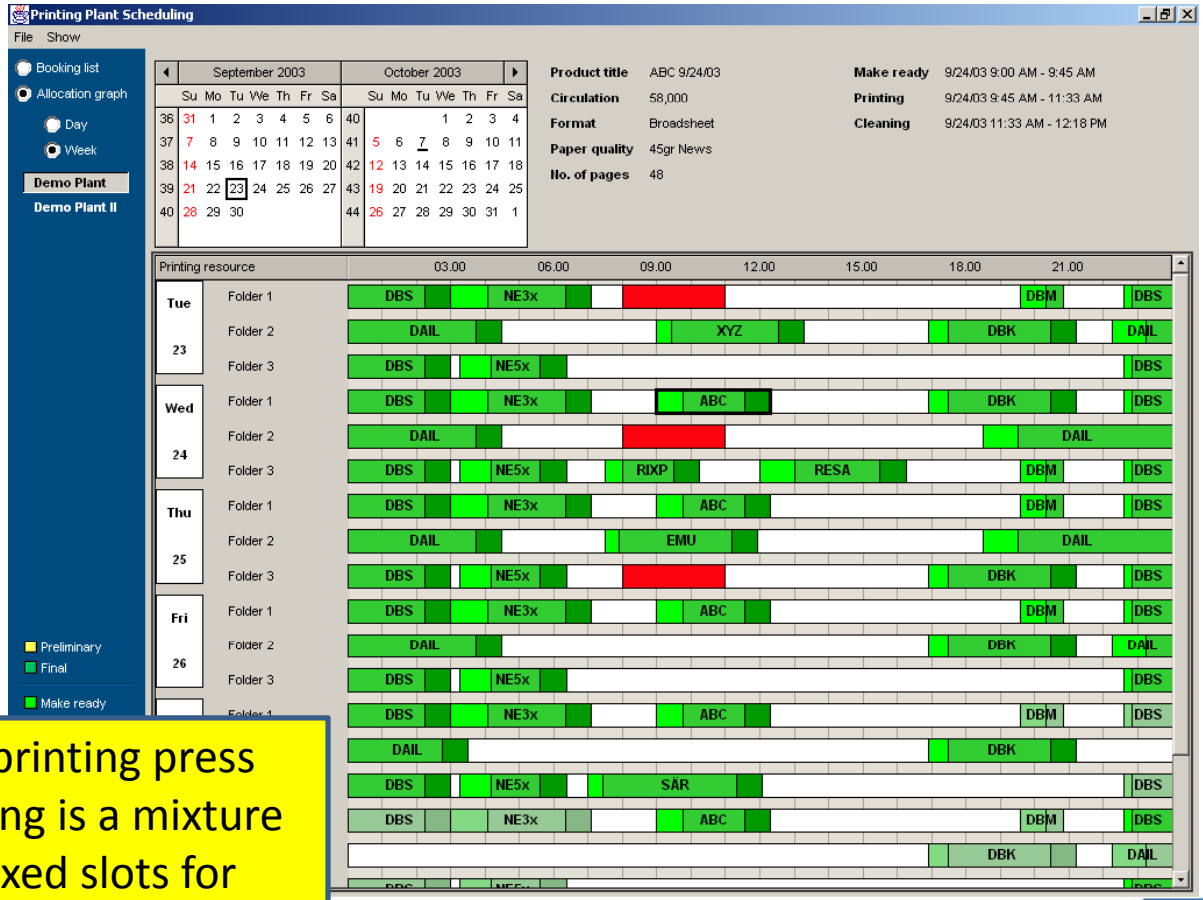
Planning: Detailed printing press allocation



The printing press planning is a mixture of fixed slots for contract products and dynamic slots used for maintenance and production of spot jobs

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Business system interaction

- Each customer contract can be mirrored in a business systems
  - Publication/production dates
  - Fixed cost for each production
  - Material and service specifications and costs according to the contract, etc
  - Waste parameters (fixed waste figures, flexibel waste figures, flexible waste to a certain level,...)
- The business system needs to be updated with specific information prior to each production
  - **Product data:** Page count, number of editions, ordered number of copies, occurance of insertes, other services → Integrated workflow
- The business system needs to be updated with specific information after each production
  - **Process/Resource data:** File transfer from customer, production time in prepress, printing and postpress, material consumption, extra services, delivery to the loading area and critical transports → Integrated workflow
- The data collected from the business contract and the production generates basic invoice information and can update inventory systems etc

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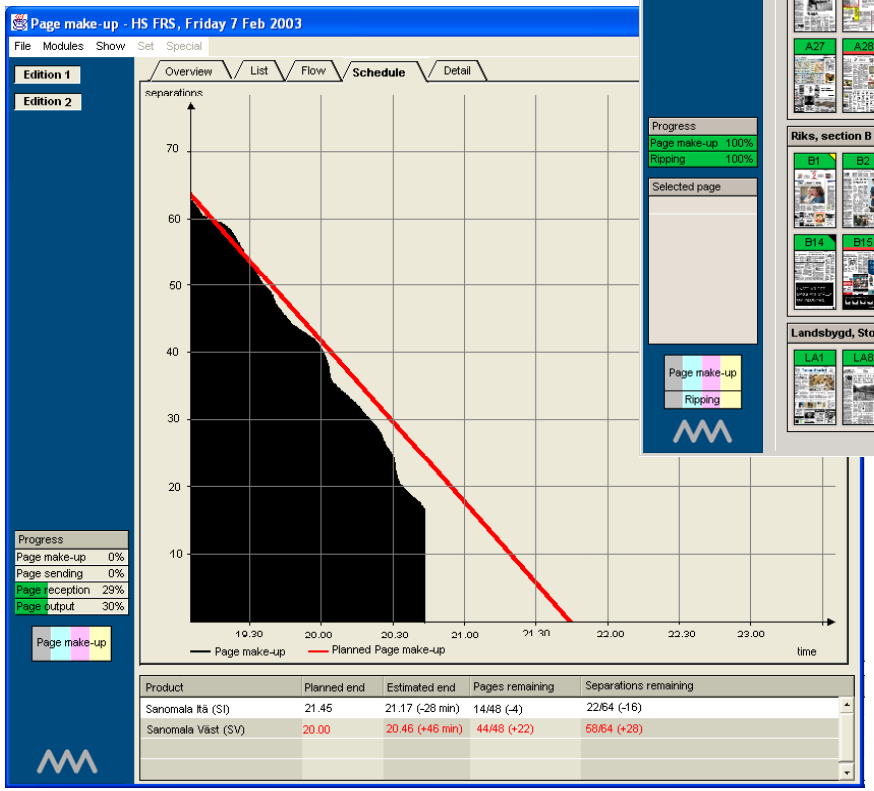
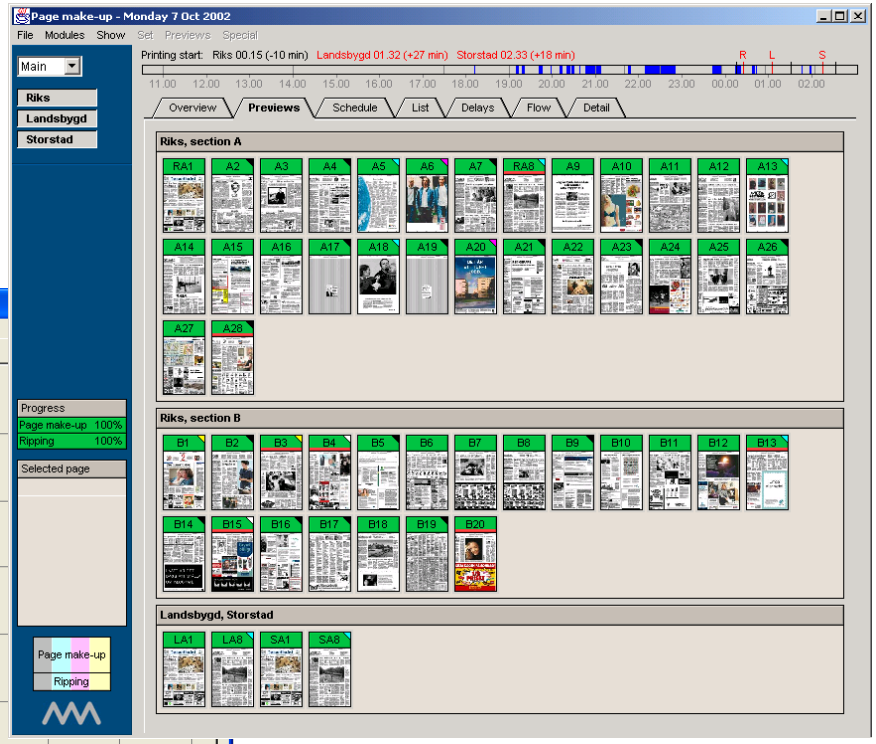
Tracking: Real time montoring of file transfer
– Page files from the customers

A way to quality assure the workflow from the customer – early warnings





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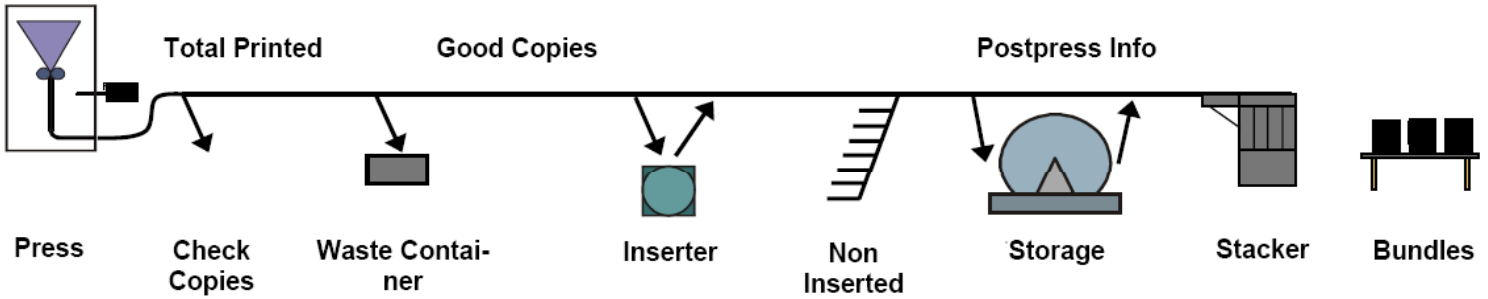
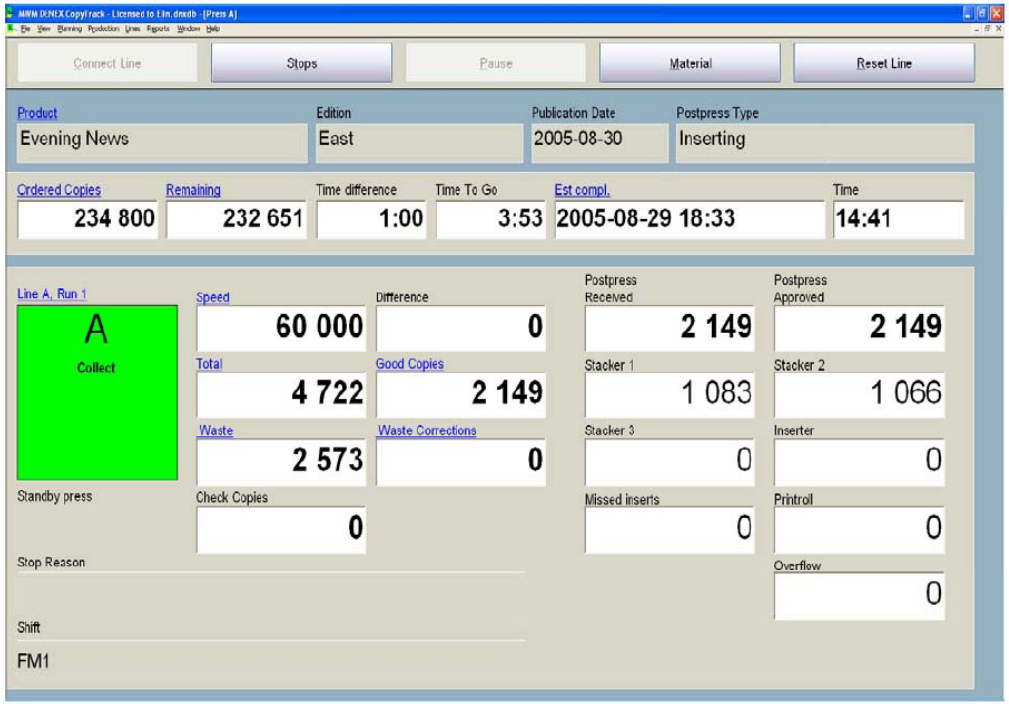
Tracking: Monitor the copy stream

- Automated copy counting from folder to stacker





The key to an efficient utilisation of the raw material newsprint

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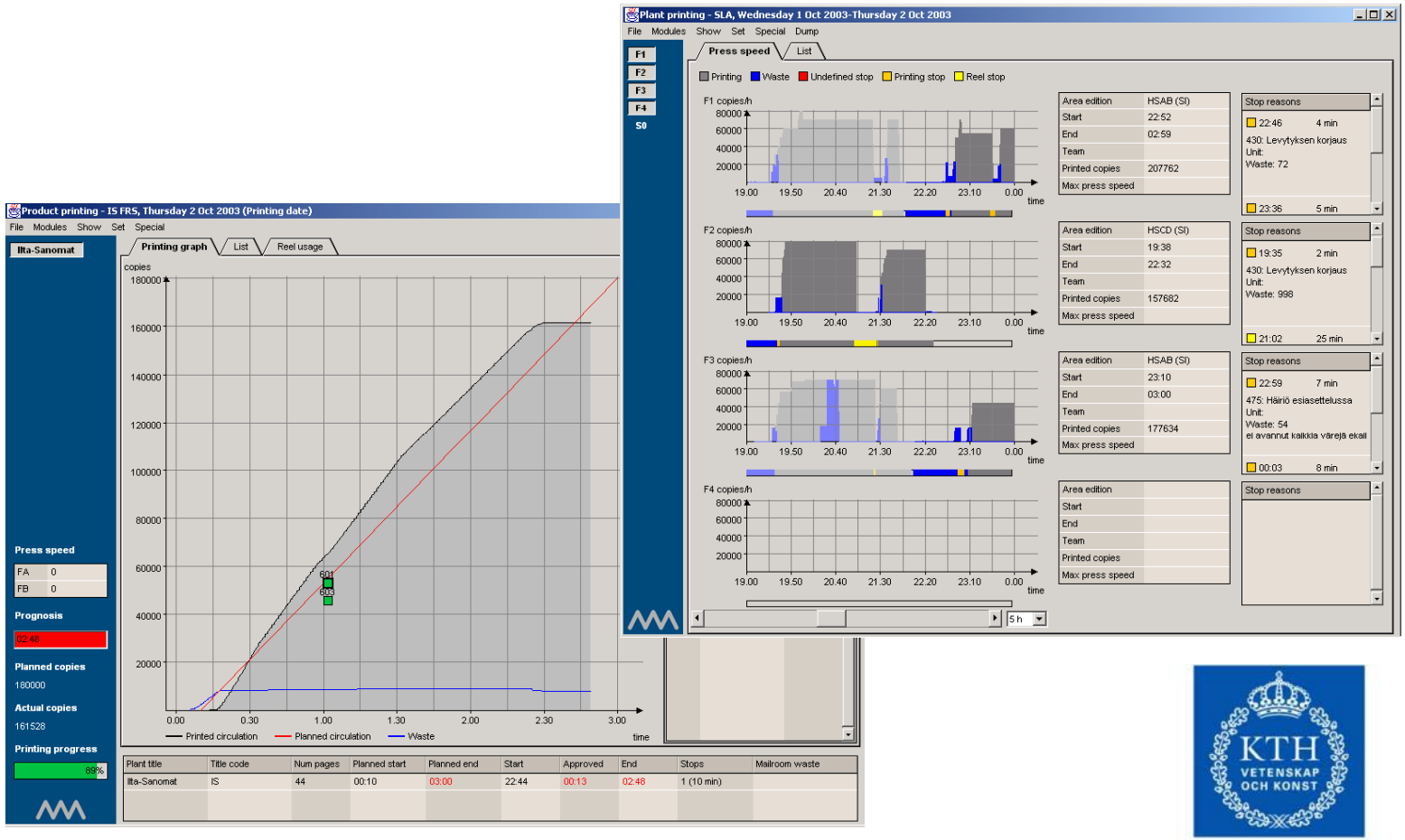
Tracking: The actual production output

- Was the delivery according to the plan?



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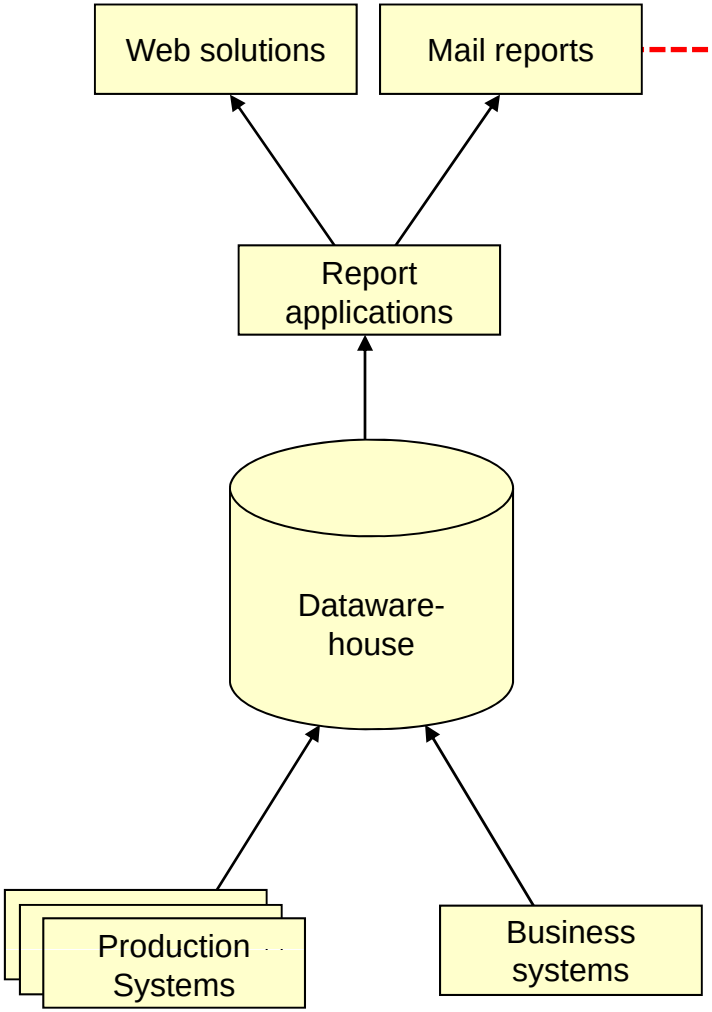
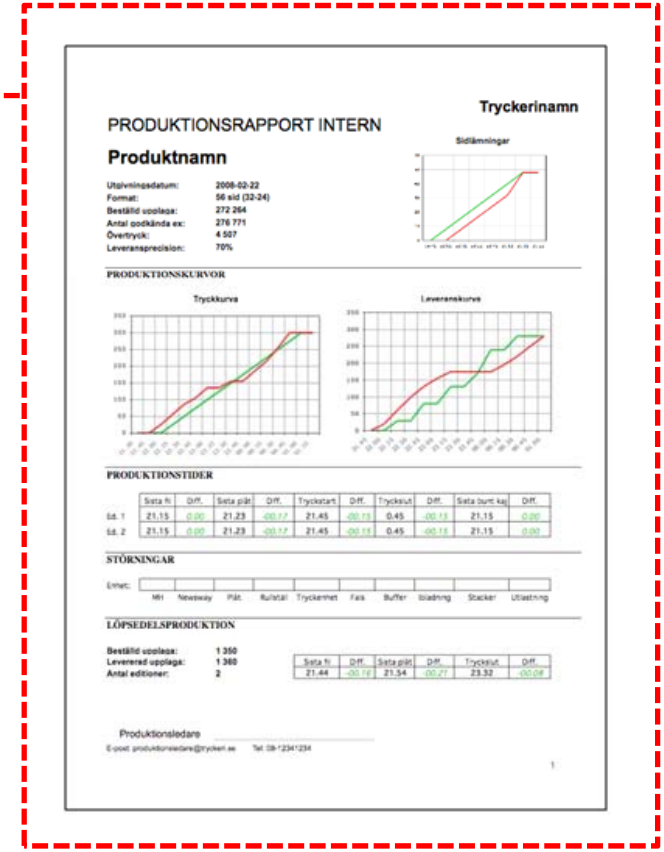
Reports: Daily basis or long term key figures

To customers and for internal use





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Key figure 1: Just-in-time delivery

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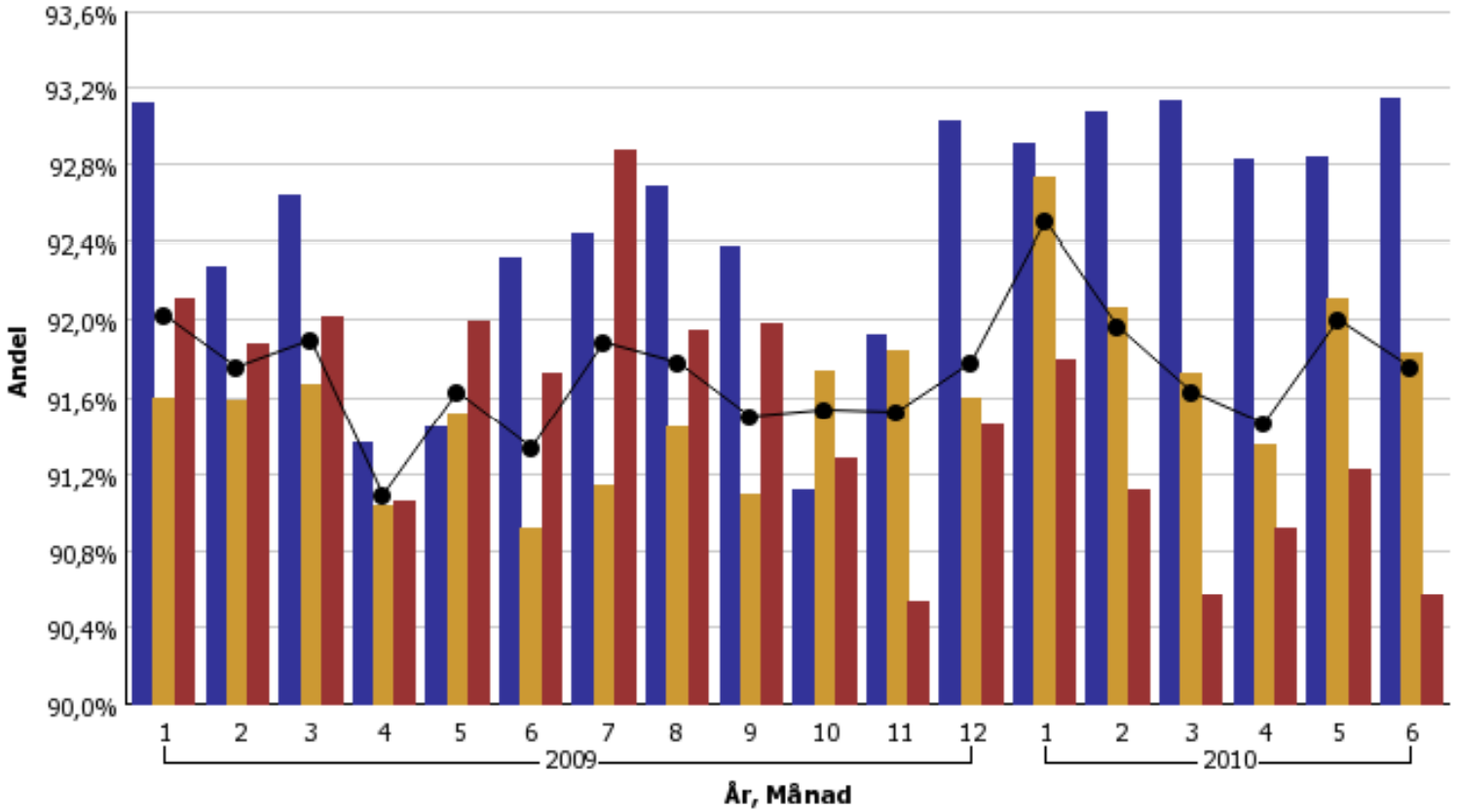
Key figure 2: Newsprint Utilisation



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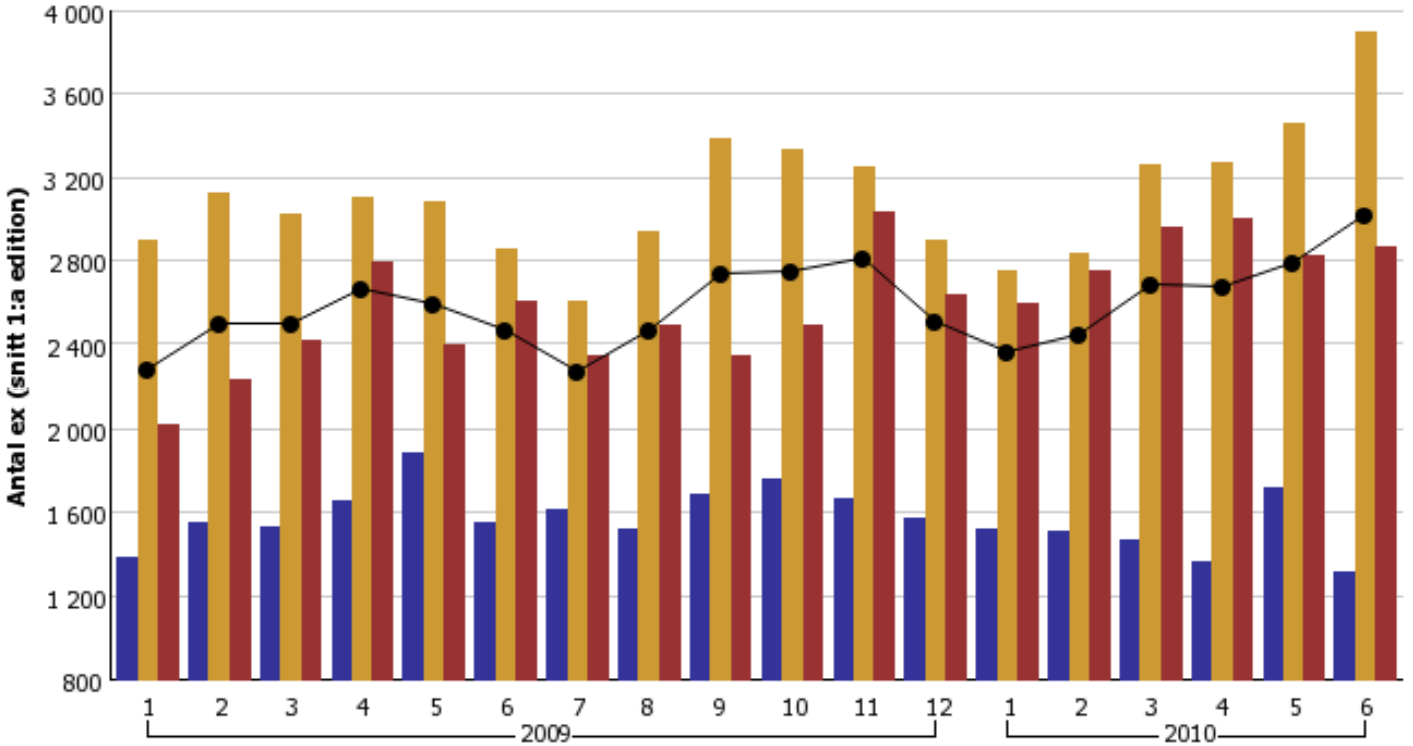
Key figure 3: Startup waste



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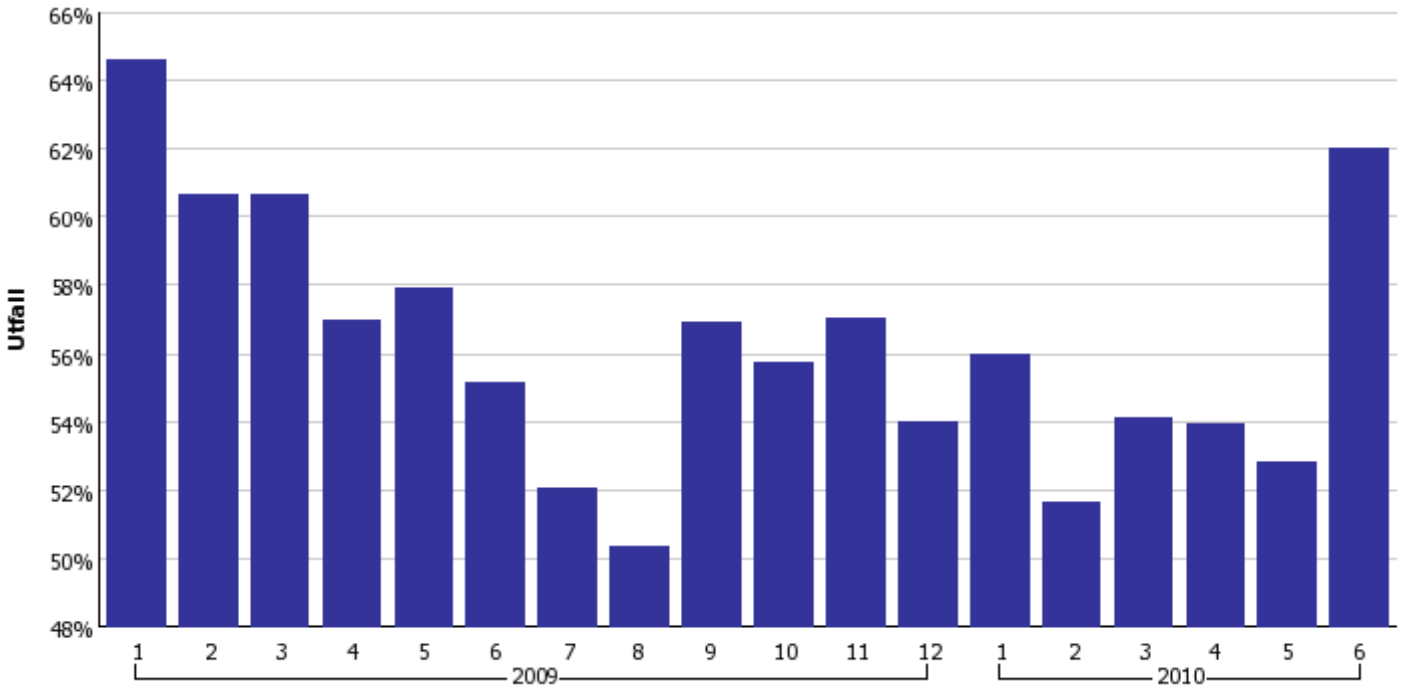
Key figure 4: Printing press utilisation



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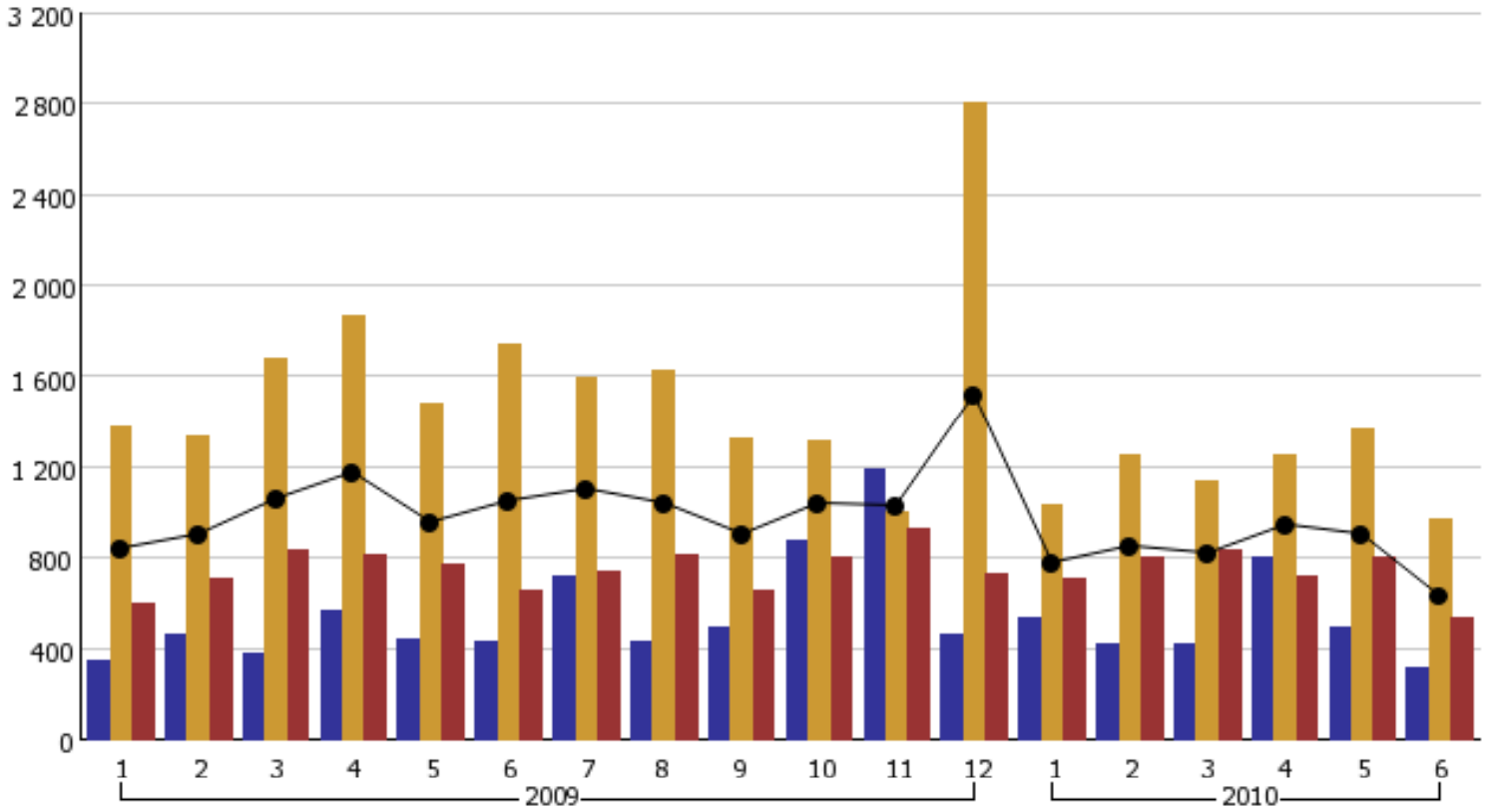
Key figure 5: Mailroom waste
(average per production)



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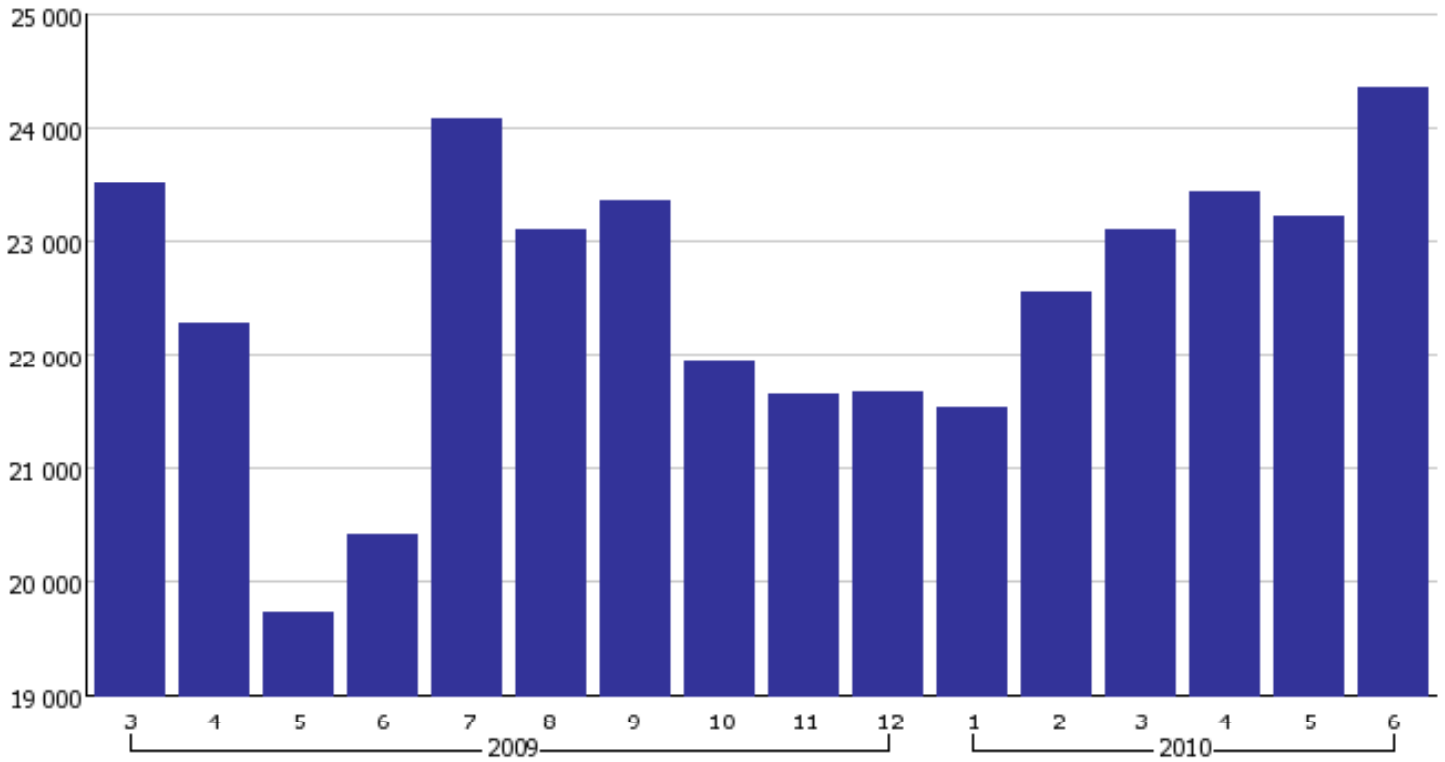
Key figure 6: Copies per hour and insert machine
(mailroom bottle neck)



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Continous improvement

- Pre-calculation prior to the production and post-calculation after a specific production
  - Did we manage the target figures for make-ready, production time, material consumption etc?
  - If not – where didn't we manage the process and why?
  - Can we improve the process or do we have to modify the target values?
  - Is the product not suitable for us?
- Evaluate your key figures frequently and in a structured manner
  - Sample: Target values for paper utilisation
  - Are we close to the target values or have we passed them and need to define new targets?
  - Do we need to initiate any activities in order to improve the performance?
- Involve the operators and managers
  - Create an open environment and encourage people to suggest how the production can be improved
  - The operators often know more than they tell if you don't ask
  - Find ways to stimulate process development in the organisation

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Summary

- Production managment starts at the same time as your sales representative has a discussion with a potential customer
- The business agreement forms the basis for a successful and profitable production
- Make your internal processes as digital as possible and try to standardise and automate the production and business processes
- Secure that you have a business system that supports your business and production processes “without” manual work
- Make your workflow visible in order to identify early deviations and avoid delayed production
- Capture and store production data and use standard tools in order to generate production reports, post-calculations and key figure reports
- Stimulate continous improvement and create an enviroment where you have resources to work with long-term process development

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