# Heidelberg News

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Heidelberger Druckmaschinen AG

INTERNATIONAL
PRINECT USER DAYS

November 15 and 16, 2016

# Prinect Press Center

# Prinect 2017 Cockpit

# … Prinect 2017 Signa Station

# Prinect Portal standard functionality

→ New way of status tracking and job reporting



**Prinect Portal requirements:**
Tablet-PC or PC with browser

# What's new in Commercial Production?

1. Prinect Cockpit – New Look!

2. Prinect Portal
   → Standard Functionalities: Job status, Pending documents, Device Status
   → Customer Possibilities: Prepress Portal Services, Business Portal Services

3. Prinect Prepress
   → Prepress Portal Services: Files and Approvals
   → Pending Documents (Job Maker)
      Standard functionality
      + Smart Automation: Automation for standard products
      without W2P or MIS
   → Prinect Renderer + Color Proof Pro

4. Prinect Press
   → Prinect Pressroom Manager
   → Prinect Analyze Point

5. Prinect Postpress
   → Generic Postpress Interface

# The Prinect Portal

→ ONE Portal application providing access to Prinect
  → for Prinect Workflow and Prinect Business Manager tasks
  → Includes features of existing Portals and Remote Access.
  → Ready to configure role specific UI in controlling features by user rights.
  → Driven by web technology to run in Browser on PC or Tablet.
  → Can be installed for Prinect INT/ PBM stand alone or integrated.

→ Additional channel for Prinect interaction.
  → NO Cockpit replacement.
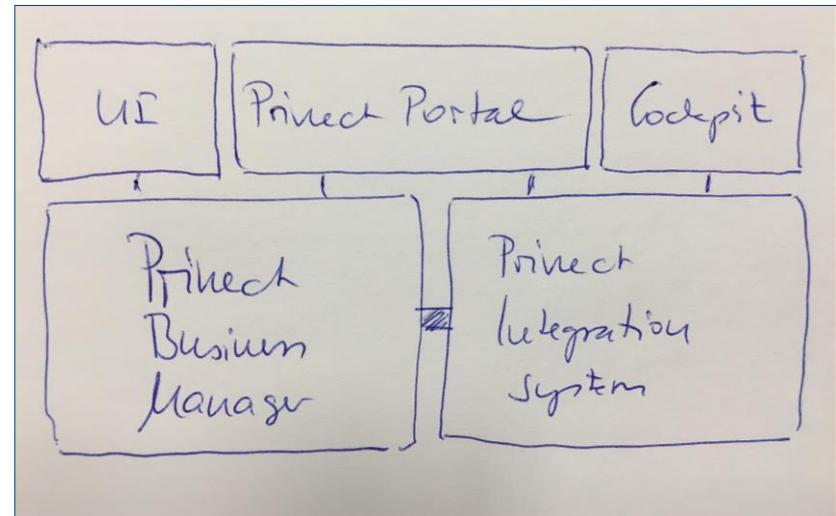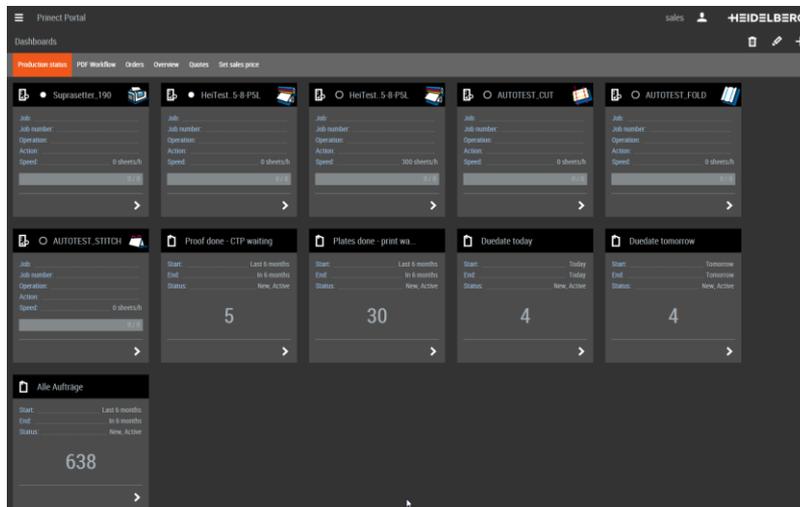
# Prinect Portal - browser based functionality

## Just easy to use

→ Functionality provided as "widgets", eg. Pending documents , Job Status, Checkpoint...

→ Configurable, user/task specific "dashboards"



Widget



Widgets arranged on user specific dashboard

# Prinect Portal - Job Maker + Smart Automation
## Produce standard products automatically - without W2P or MIS

→ Employees with access to the Job Maker can produce standard print jobs out of a pre-defined document pool with small training efforts

→ For production users – not externals or customers.

→ Document Pool shows all incoming PDF documents to be processed.

→ Start automatic processing for standard products.

→ Offer easy solution for products that can be standardized.
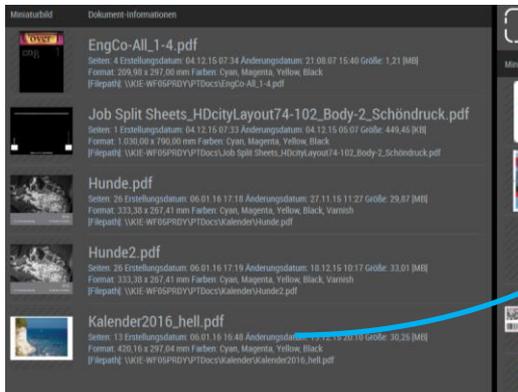
**Pending Documents**         **Job List**         **Job Maker**
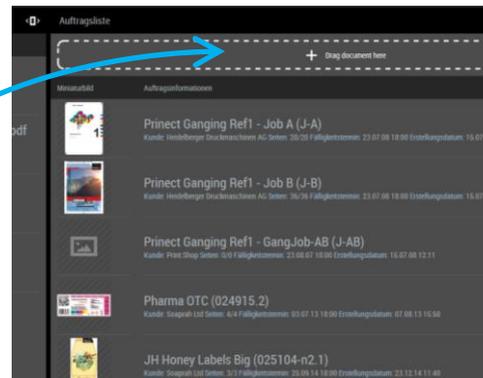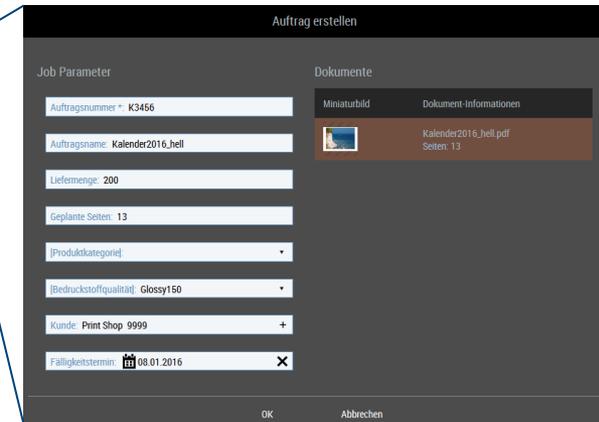
# Smart Automation 2017

→ **Improvements based on customer feedback**
- → PDF Edit
- → Copy PDF
- → Possibility to combine Smart Templates and Sequences like AutoSheet/PageProof
- → Production Type from MIS 'beats' JDF entry

→ **Conditional processing**

- → DOCUMENT information triggers to which sequence the file is forwarded
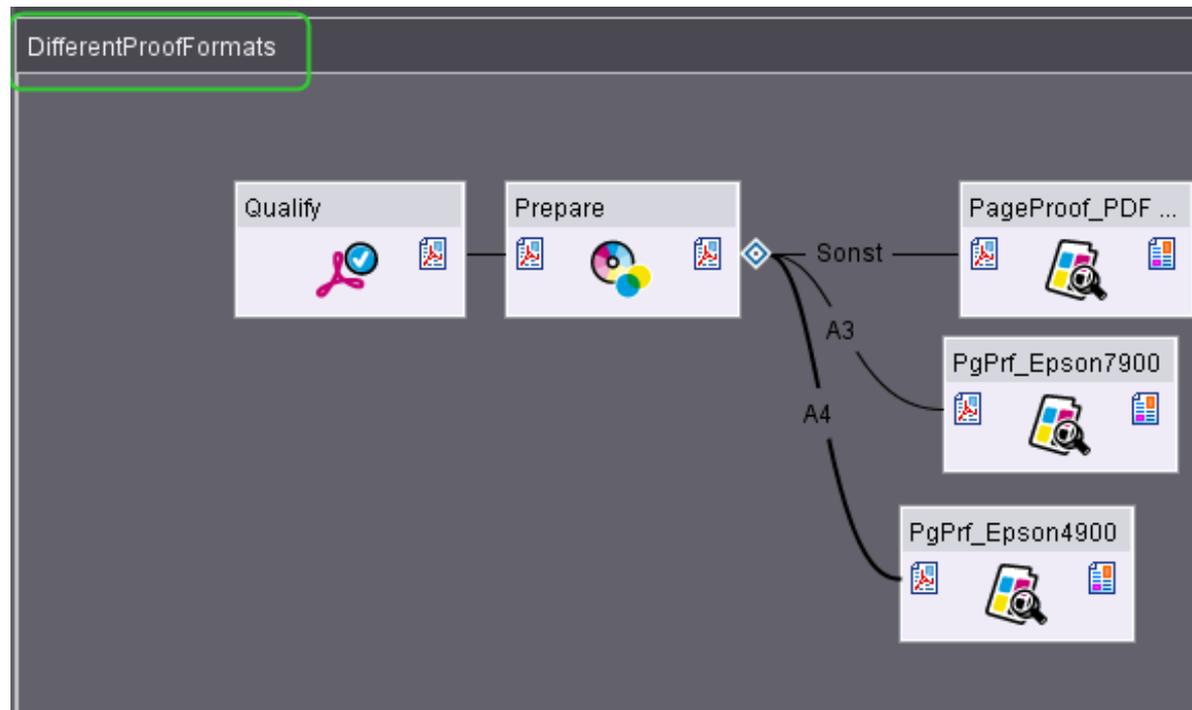
# Prinect Prepress Manager 2017

**NEW: "PDF Compare" inside of Workfow**
- → Input pages can be compared automatically vs. pages coming out of "Prepare"
- → Engine included in PDF Automation Pack  (Trap/No Trap)

**Improved handling of large PDF documents**
- → More sophisticated  options to check, split, and convert large PDF documents

**Hotfolder Workflow: More information from PDF file names fills job info**
- → E.g. Delivery Quantity, Customer ID, Paper Quality, Product Code, Due Date

**Preflighter Improvements**
- → Overall ink coverage shown in Preflight report
- → Preflighter Profiles based on PitStop 13
- → Checking of page sizes vs. job specification

**Automatic generation of sheet varnish in net size inside Workflow**



Qualify-A4 (Qualify)

| | | |
|---|---|---|
| ☑ Hotfolder | on | AllHotfolders |

Hotfolder
Insert into external hotfolder path
☐ Delete document after processing finished
☑ Create new job and process document there
☐ Keep hotfolder in new job
Job group for new job
When job number already exists
1. Job Number
2. Job Name
- Customer ID
3. Product Code
4. Delivery quantity
- Due Date (YYYYMMDD)
- Printing material quality

# Prepress Manager & PDF Toolbox
# PDF Compare

→ Comparison of prepared PDF with delivered data
    → Visual comparison shows differences

[ 1 ] \\KIE-WF06PRDY\TestData\FrankG\Compare\Testseite_Original_ÄÖÜ.pdf - 1
[ 2 ] \\KIE-WF06PRDY\TestData\FrankG\Compare\Testseite_Edit_ÄÖÜ.pdf - 1
Auflösung: 300.0 dpi - Vergleichen innerhalb: Endformat-Rahmen - Mittlere Prüfungsgenauigkeit

[ 1 ] 420.00 x 297.00 mm            [ 2 ] 420.00 x 297.00 mm            Fehler: 41   Warnungen: 0
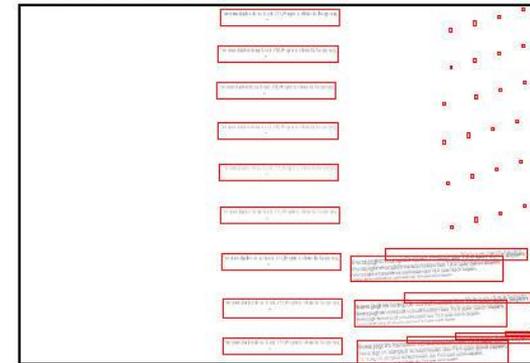


**Production security, avoid unwanted changes!**

# Prinect Signa Station

## Prinect Signa Station

→ Several improvements based on customer feedback

  → Ganging & MSO: combined for broader functionality + single user license available

|  | Folding Sheets (incl. F1, F2) | Assembly Blocks | Shapes |
|---|---|---|---|
| via Gang Pool (always with content) | Gang Job P2016 |  | Pack MSO, Gang |
| Individual Job Definition (with content) |  | Montage MSO P2016 | P2016 |
| Individual Job Definition (without content) |  |  | P2017 |

→ better algorithms:
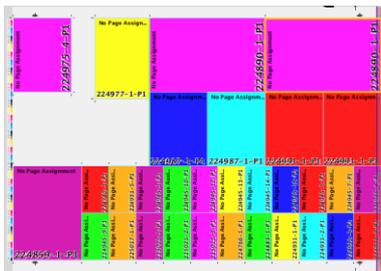
Signa 16: 750Sheets

Signa 17: 500 Sheets

# Prinect Renderer 2017

**New Adobe PDF Print Engine 4**
→ Most recent Adobe Technology, including all bug fixes and enhancements

**New sequence type: "Page Output"**
→ Enables e.g. to output sheets imposed by other systems (InDesign and others)

**Higher resolution for PDF Export: 1200 dpi**
→ before: 720 dpi
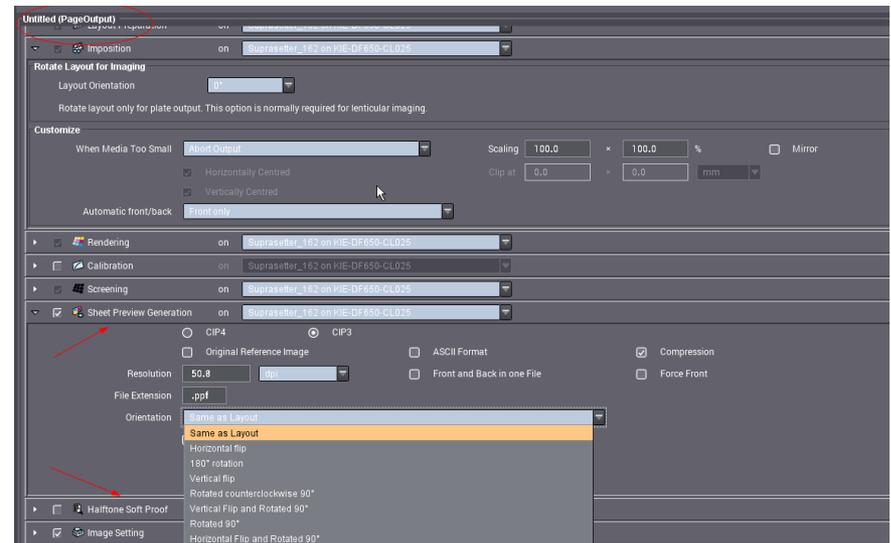
# Prinect Data Center - Archiver Pro ...

... the perfect extension to the basic archiving functions of Prinect.

→ Archives of any kind of content data or assets together with the related print job

→ Browser based GUI to navigate through, find and view data for quick and easy re-use

Its content data management capabilities make it the ideal replacement of
            Prinect Content System

# Prinect Data Center - Archiver Pro
# Function Overview And Comparison

| Functionality | Details | Prinect Standard Archiving | Prinect Data Center Archiver Pro | Prinect Content System |
|---|---|---|---|---|
| **Data Area** | Prodution Data | yes | yes | yes |
| | Content Data | no | yes | yes |
| **Data Area (for search)** | Archive | yes | yes | yes |
| | Online File System | no | yes | yes |
| **Management / Operation** | Auto Setup Content Folder | no | yes | yes |
| | Hotfolder | no | yes | yes |
| | DirectLink to Content from Cockpit | no | yes | yes |
| | Copy / Paste (Archive / File System) | no | yes | yes |
| | Jetbase Data | no | yes | yes |
| | Global / User Link | no | no | yes |
| | Contentdaten archivieren(ohne Auftr | no | no | yes |
| | PlugIns (Quark, InDesign) | no | no | (yes) |
| **Search** | by Prinect Job Criteria (ID, Name, Color Space, Fonts, …) | (no) | yes | yes |
| | by object element criteria (Name, Type…) | (no) | yes | yes |
| | by meta data (XMP, EXIF, IPTC, …) | no | yes | yes |
| **View / Navigation** | Navigate through entire Job Context | no | yes | yes |
| | Standard Views (List, flip, Grid, Details, …) | no | yes (no Cover View) | yes |

# More than 1300 packaging printers use a Prinect Workflow

→ Approx. 30% have an integrated workflow –combining prepress, press, and often postpress
→ Integration share is growing rapidly!

Dedicated packing features for design creation & tool making, 1up and sheet preparation!

Dedicated packing features for presetting & inspection!

30%

30%

40%

- Prepress
- Press
- Integrated Workflow
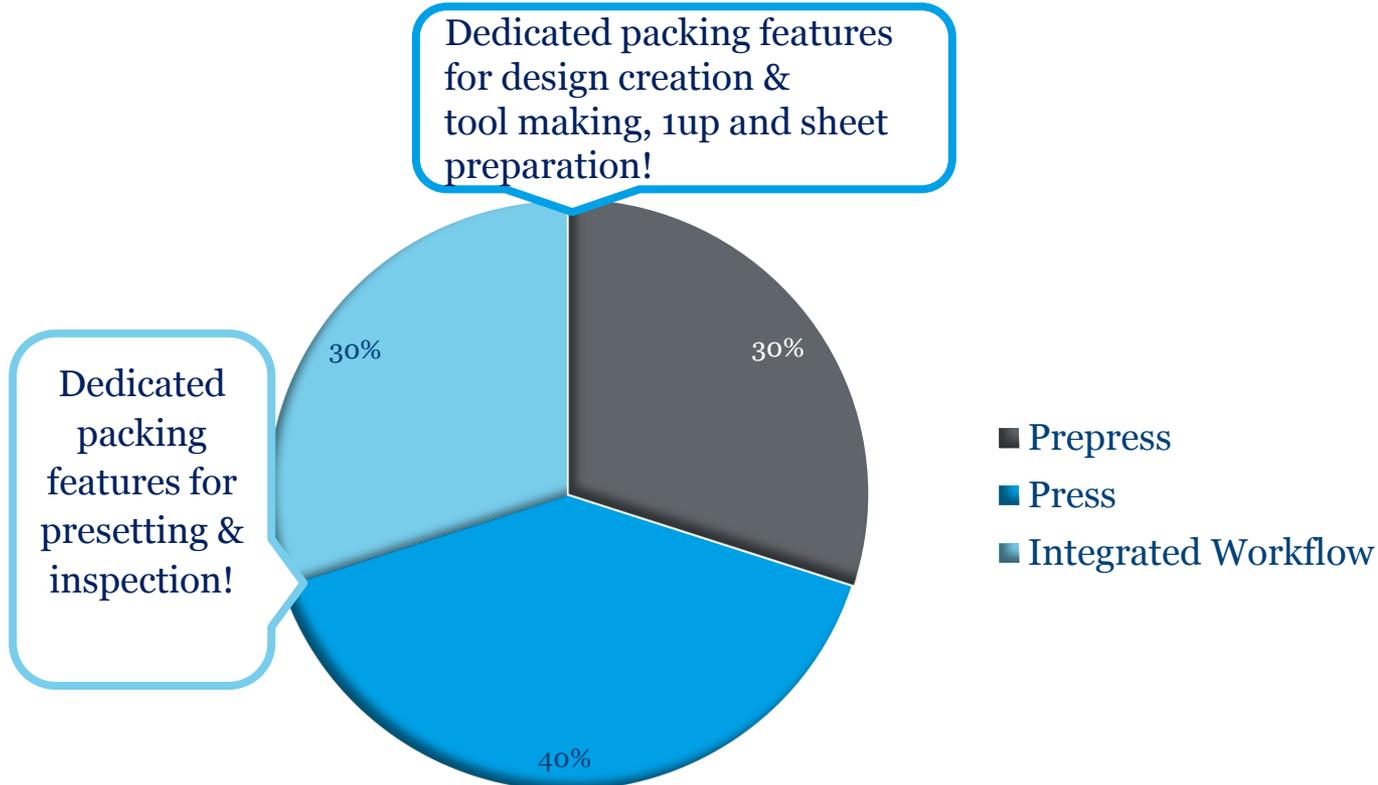
# Highlights for folding box production

1. Automated structural design & exact estimation data

2. New features in Package Designer

3. New features in PDF Toolbox and Prepress Manager

4. New features in Signa Station Packaging Pro

5. Quality reports in Analyze Point
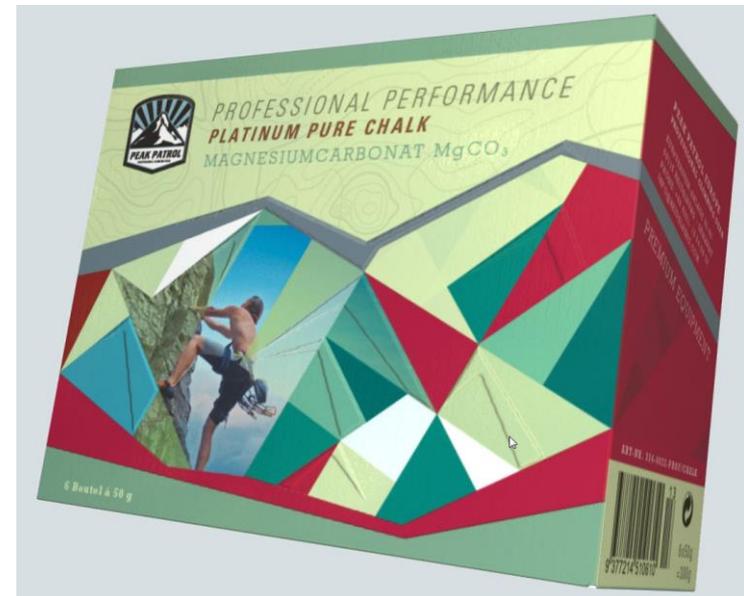
# New features for cut & stack labels for sheetfed workflow

→ Automation with Business Manager:
    → One-up preparation and approval
    → Autoganging

→ Signa Station:
    → Ganging / Sheetoptimizer (combined in 1 license)
        → Define overproduction per article
        → Load shape(s) in input list

    → Packaging & Montage mode:
        → Special marks for precutting

→ Advantages:
    → Highly automated label workflow to
        → Save time & production costs
        → Ensure stable, high quality

# Prinect Multicolor
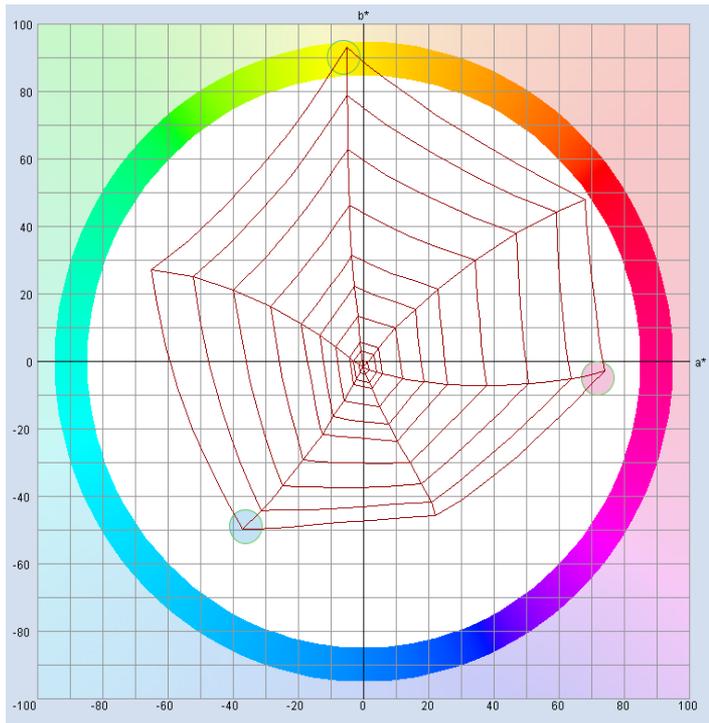


ISOcoated_v2
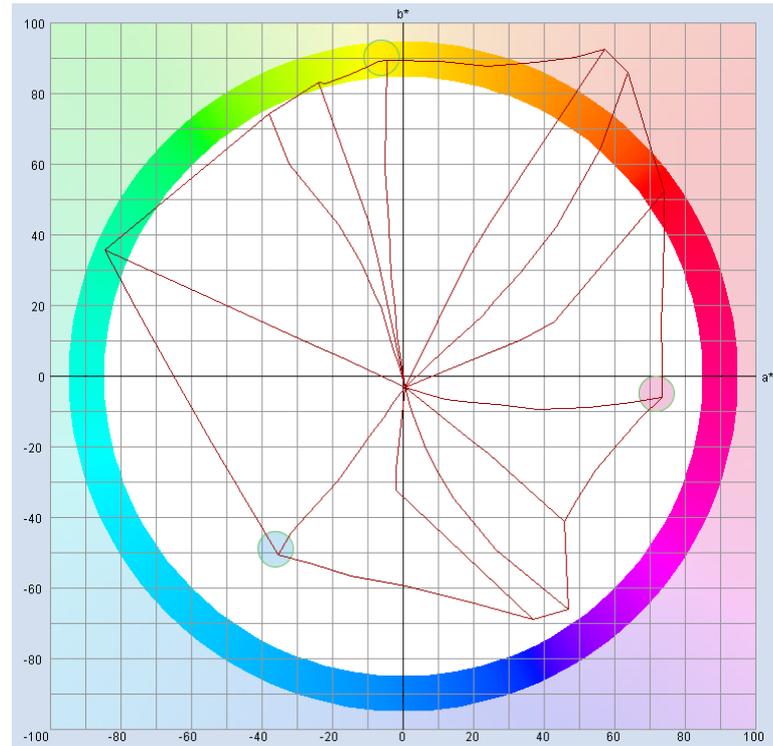


Multicolor 7c Profile

# ISOcoated_v2 vs. Multicolor 7c

# Automated Paper Stretch Compensation available

**Workflow**

APSC Preset data

Compensated printing plates

Area coverage
Press data
Substrate data
Characteristic curves

Optimizing process

Job data

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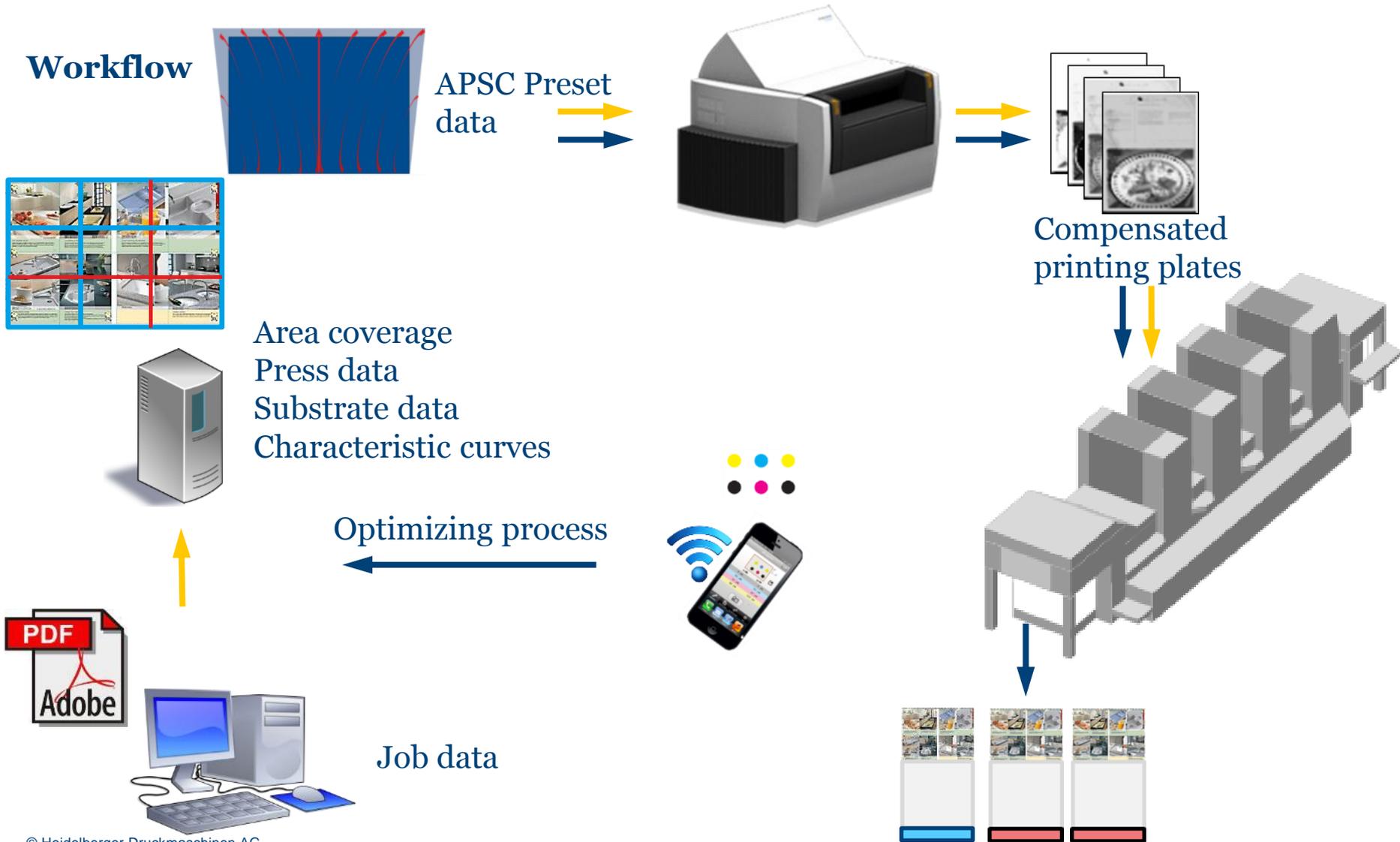
# Prinect DFE
# One solution for many technologies

Prinect DFE is the technology used for all digital print engines of Heidelberg:

- **Labelfire**: Inkjet, web

- **Versafire**: Toner, cut sheet

- **Primefire**: Inkjet, cut sheet

Prinect DFE is customizable for different market segments:

- **Label Printing**

- **Commercial Printing**

- **Packaging**

**Primefire**

**HEIDELBERG**

**Prinect**

**Partner**

**Versafire**

**Labelfire**
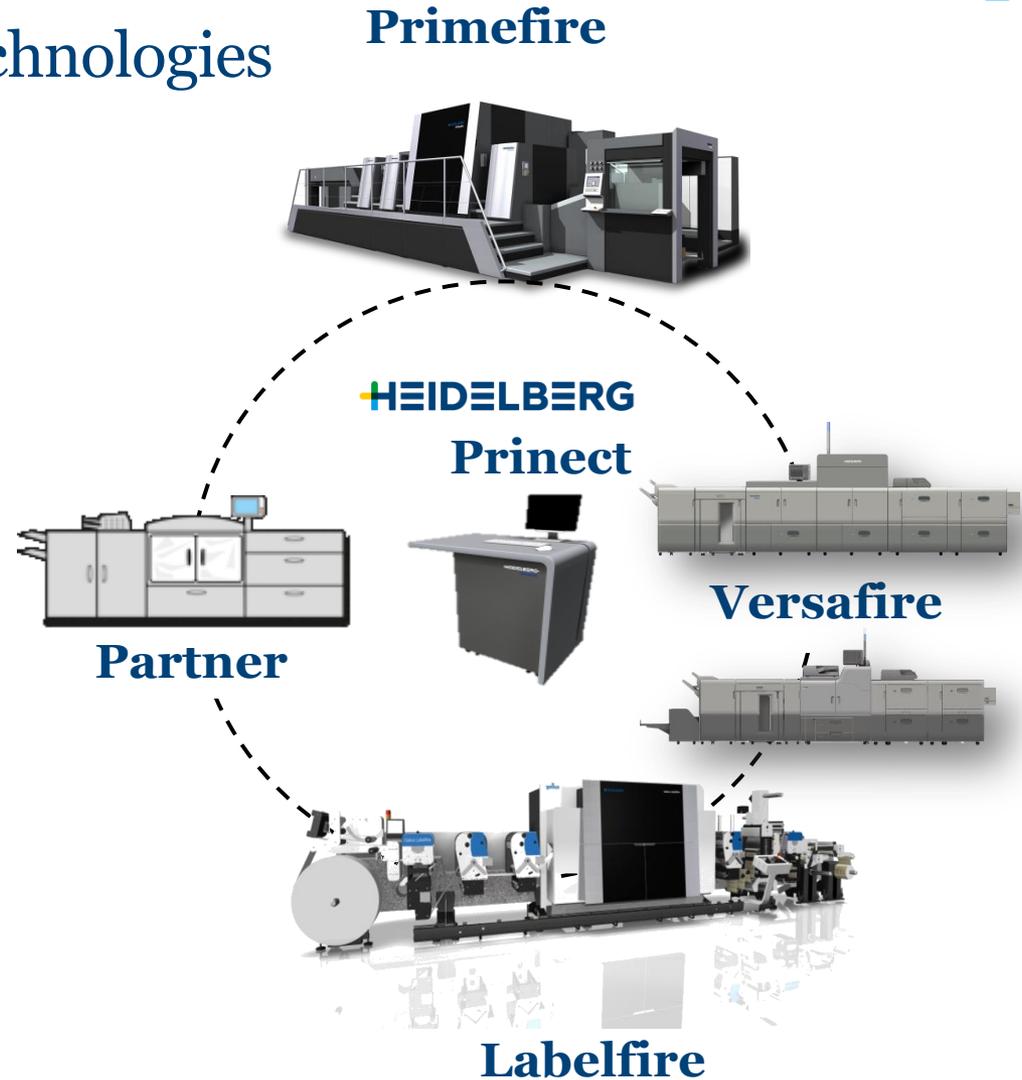
# Prinect DFE – VDP Authoring

## PDF Toolbox – Acrobat Plug-Ins

### Static PDF Background



### Variable Content as PDF

MRS.
JANE JONES
9 MAYFLOWER DR
PLYMOUTH, MA 21340

### OR Variable Content as CSV

# Prinect Web Shop

**Entry level web shop**
→ For the immediate start
→ For standard products and processes
→ Range of features "out of the box"
→ B-to-C or B-to-B business
   (open shop or closed Shop)
→ Integration into Prinect workflow

**Advantage for the printing house:**
→ Automate order management and
   production
   → small orders in price and run length
      pay off
   → New customers are attracted

# Prinect Web Shop – Main Aspects

→ SaaS-Set up

   → Hosted by Heidelberg

   → Editor, InDesign Server connection

   → Browser-based, frontend + backend

→ Basic E-Commerce shop Open Source
Specific Web-to-Print Modules
for print products programmed for
Heidelberg

→ Integration into Prinect through
Web-to-Print Connector to Prinect

# Let's go into the pressroom

# Prinect Pressroom Manager &
# Prinect Press Center XL 2 with Wallscreen XL & Intellistart 2

→ Clear display of all available job and presetting data
→ Prinect provides the best information package for the press operator
→ **Full scope of job and presetting data only available with Prinect**



**Prinect Pressroom Manager: the DFE for Speedmaster offset presses**

# New Wallscreen XL job list

Enhanced job list parameters for selection:
- → Queue status
- → Pull lay
- → Paper
  - → Name
  - → Dimensions
  - → Grammage
  - → Grain direction
- → Inking (4/4)
- → Color sequence
- → Article No.



**Full Prinect integration delivers…**

    **…. all these parameters!**

    **…. best support for the press operator!**

# Wallscreen XL with myPrinect

→ Prinect Widgets provide the direct access to Prinect
→ Operator gets new tailor-made convenience and comfort functions



Pre-requisites:
Prinect 2017
Prinect Press Center XL 2 with Wallscreen XL (S16B)

# The Prinect Widgets at Wallscreen XL

**Status**
→ Displays activity of started job

**Pallet sheet**
→ Displays pallet number and amount sheets on the pallet
→ Allows print out

**Overprint**
→ Displays total ink coverage

**Plate on demand**
→ Displays actual amount of requested plates in progress
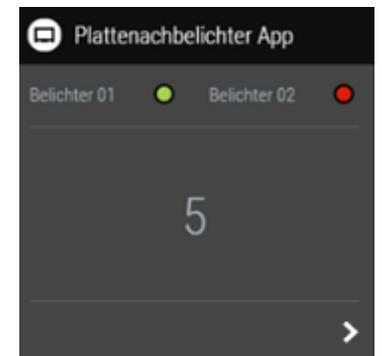
# Prinect Image Control 3

- Using proofs to adapt the print

- Replacing the traditional print control strip by distributed print control elements allow for enormous savings of cardboard

- CMYK and PMS solid colors are detected automatically and ensure the highest uniformity of corporate colors and multiple ups

- First system in the world that can control Opaque White

- Offline Inspection for faultless prints without additional measurement. (April 17)
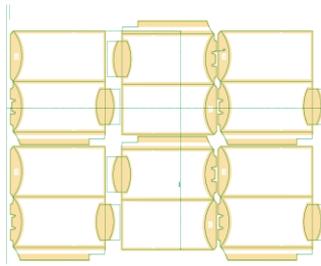
# Data Terminal – Job selection by folding sheet number

→ **Goal**

  → Easy and error free finding and starting of folding operations

→ **Function**

  → Print a barcode on each folding sheet and scan it at Data Terminal

→ **Implementation**

  → Each Folding sheet has a system unique identification

  → Placement of the new barcode mark on the printing sheet during impositioning (with integrated Signa Station), Prefix „F$" eg.  F$00000010000001

  → Scan the barcode at folding device

Integrated Prinect Signa Station 2017
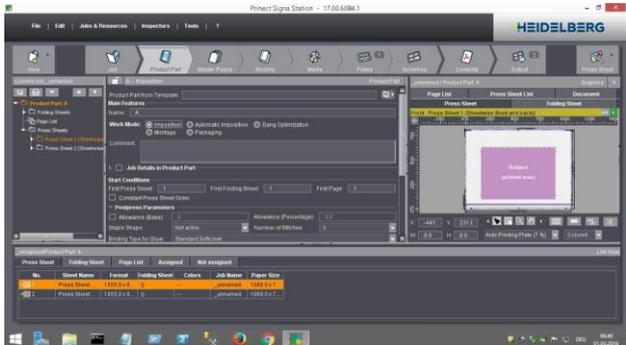
Data Terminal 2017
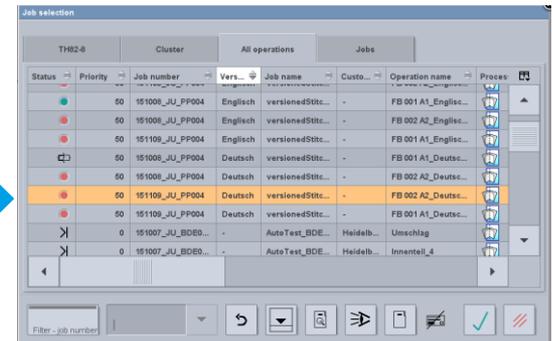
# Generic Postpress Interface (GPI)

**Implementation**

→ DataTerminal as GUI for Prinect functions

→ Login/logout user

→ Start/stop job, report material consumption etc.

→ Add new connection type „GPI"



Prinect

Postpress Manager

GPI Connection

DataTerminal

DataTerminal
+ CounterBox

DataTerminal
(integrated at Stahlfolder)
+ direct CDM-Interface

DataTerminal
+ GPI
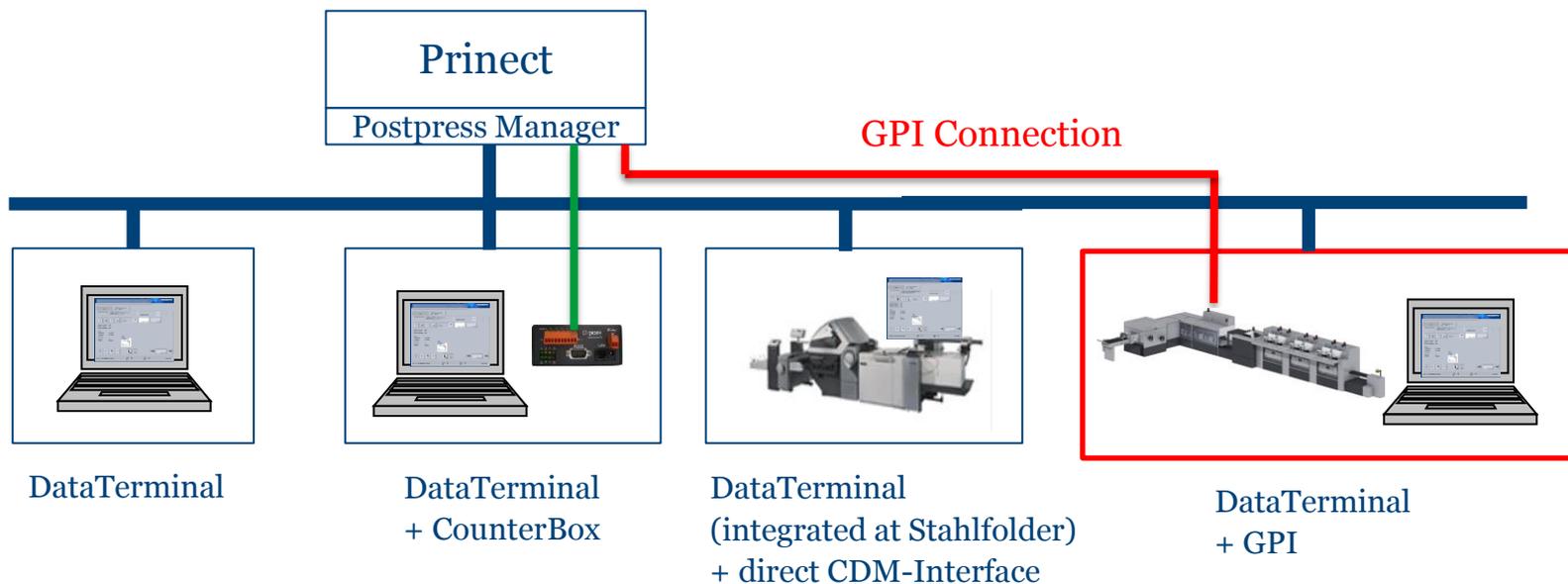
# Market situation of Prinect Business Manager

- **More than 70 installations worldwide (+ 250 Cerm inst.)**

- **Large customers are buying / starting to buy**

- **Big interest of "mixed" customers in PBM**

- **First base projects successfully executed!**

- **Portals and Speed Estimators more and more accepted by customers**

# Prinect Portal – the new browser-based tool to handle and manage print orders

→ New browser-based tool for all
→ workflow steps:

→ Request for Quote, ordering, stock withdrawal, job tracking

→ Create quote and estimate

→ Approval workflow of content layout

→ View detailed production status

→ Get delivery, invoice and analysis

→ Keep customer and project overview



*all activities and tasks at a glance*
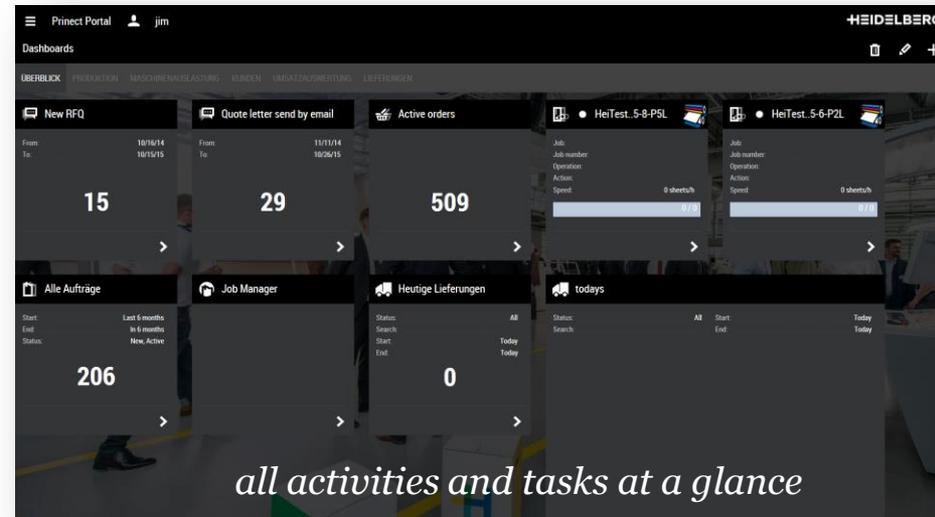
Roles and rights control for all functions
→ Print Buyer, Sales Rep, Order Manager, Production Operator, other

# Dedicated portal solutions for all users

## Prinect Portal

### Print buyer

Demands:
- Online RFQ
- Receive online quote
- Online ordering
- Upload and approval workflow
- Stock withdrawal
- Tracking

### Sales Rep

Demands:
- Customer overview
- Project overview
- Online RFQ + automatic estimating
- Online quote
- Online ordering

### Order Manager

Demands:
- Project overview
- Task lists
- Automatic estimating
- Determine sales price
- Create quote
- Create order
- Ship produced orders

### Production Manager

Demands:
- Job overview
- Set status
- Production tracking
- Upload and approval workflow
- Production reports

# Fully automatic quote calculation

→ Speed estimator – overcomes manual estimation efforts
  and feed portals with automatically calculated costs / sales price

→ Browser-based RFQ screens for print shop employees and print buyer

→ Automatic calculation of all possible production paths and automatic
  selection of the cheapest way to production



RFQ: Define product          AUTOMATIC QUOTE CALCULATION          Check cost & sales price          Send quote letter

→ Efforts for quote creation of standard products reduced by up to 90 %

# Best of 2 worlds: Combine product pre-definition in MIS with Smart Automation (driven by product code)

**Prinect Business Manager**

- Layout

**Folding scheme** | **Imposition**

874 x 614 | 630 x 874

- **Process Net**

| Cover 2.588 sheets | DB (16) 1 2.588 sheets | DB (16) 2 2.588 sheets | DB (16) 3 2.588 sheets | DB (16) 4 2.588 sheets |
| | (4 x 2) 16 pages | (4 x 2) 16 pages | (4 x 2) 16 pages | (4 x 2) 16 pages |
| | Folded 2.588 sheets | Folded 2.588 sheets | Folded 2.588 sheets | Folded 2.588 sheets |
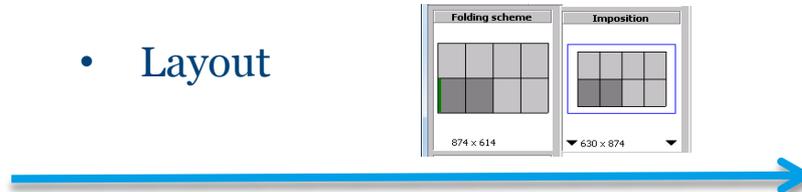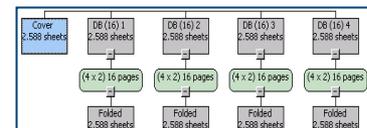
**NEW** • **Product Code**

**Prinect Production System**

**Predefined by MIS**
→ Layout
→ Process net

**Smart Automation**
→ Driven by product code
→ Select appropriate temp-lates (e.g. for qualify, prepare, proofing)
→ Assign PDF pages

**Output**
→ Proofing
→ Digital Print
→ RIP & Plates
→ Press
→ Live Info / Status / Feedback
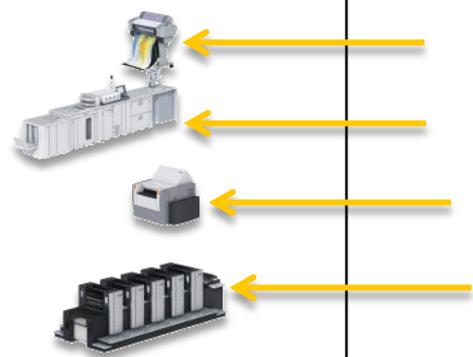
# Integrated Workflow for **Quota Jobs**

→ PBM: Plan specific sales order
    → Specific versions with specific amounts to be delivered
    → Create production job with Paper and machines
    → E.g. Bikes – 50000 German, 100000 English

→ INT:
    → Take over production job
    → Autocreate Layout
    → Get approved pages from product jobs
        → Remember Source
        → Warn for changed source pages
    → Do production of job (plates, print, …)

# Dispatch Portal and Logistic Interface



**PBM**

**Estimate**

**Job**

Dispatch Portal

Up-to-date transport costs

Shipment data (Xml-based delivery note)

Tracking ID of logistic supplier

**Service Provider**

**(Consignor)**

DHL

UPS

TNT

DPD

Significant savings by online transfer of shipment data to logistic suppliers
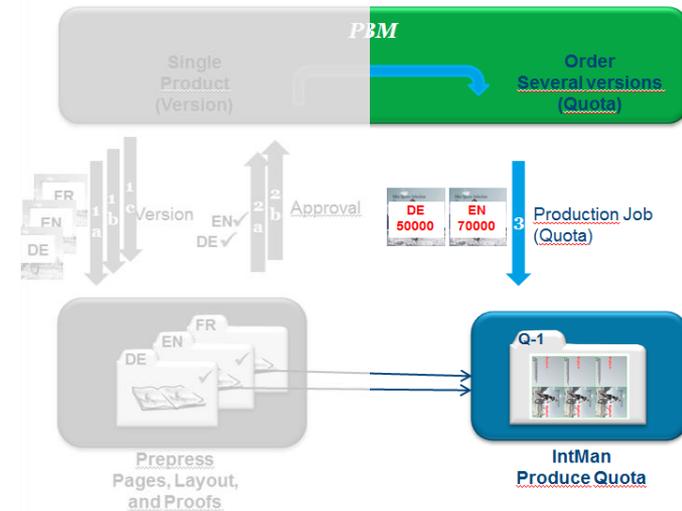
# Prinect Production Manager

Includes the complete Prinect Production Workflow for Digital, Prepress, Press and Postpress, with all Integration and Automation features, for Commercial and Packaging

## Prinect Production Manager

| Portal | Prepress | Press | Postpress |
|--------|----------|-------|-----------|

# Prinect Production Manager
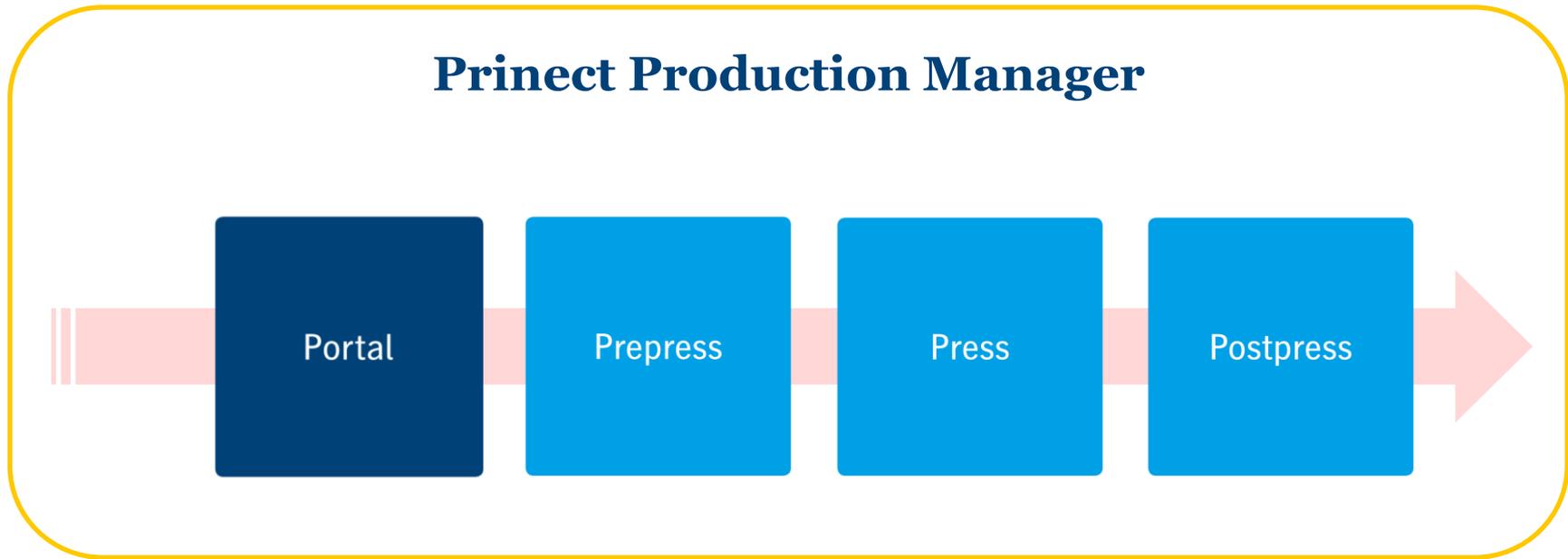
**Rental**

New business model

Temporary licences

Volume based
monthly usage fee

Low initial
cost

# Prinect Production Manager

Prinect software subscription, hotline and remote support included in the monthly fee

Portal

Prepress

Press

Postpress

Production Manager Workflow

Prinect subscription and remote support
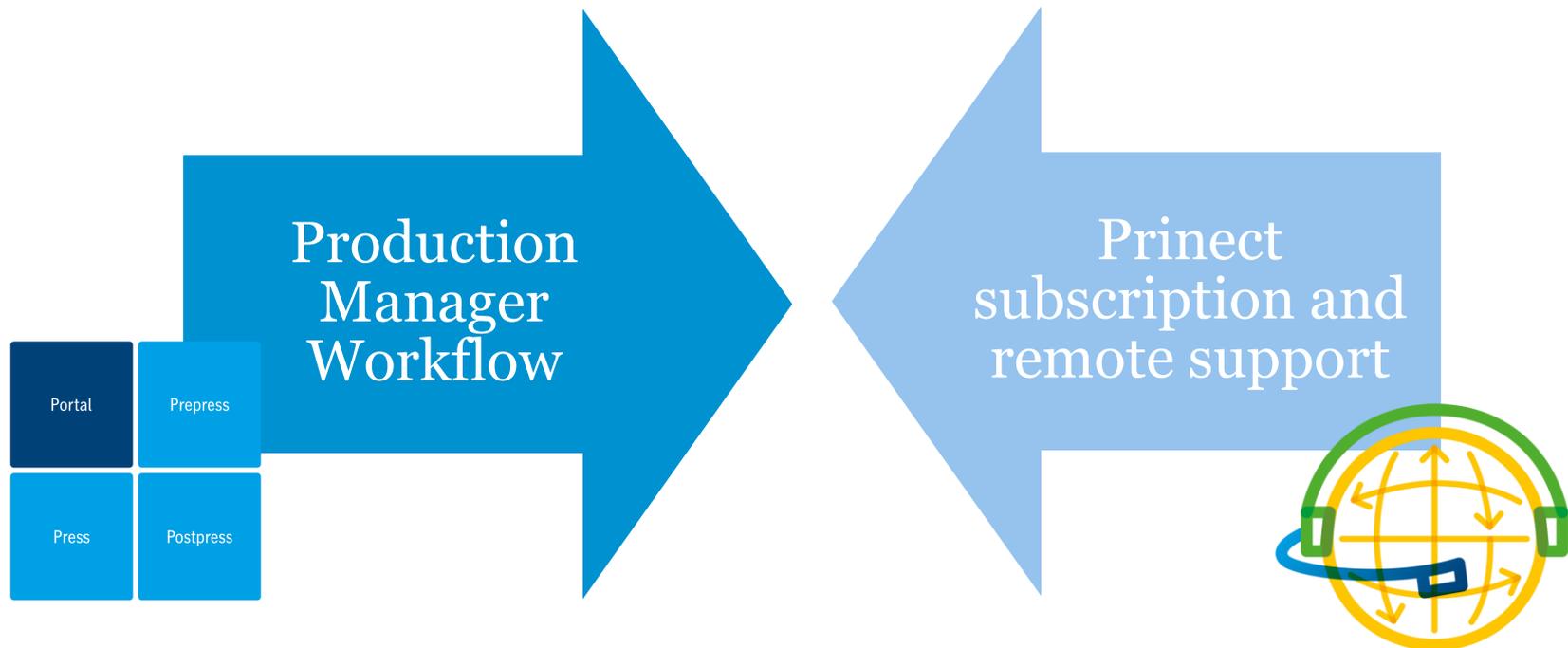
# Prinect Production Manager

***The Production Manager fee follows your business***

→ Base fee + volume based fee

→ Volume based fee depending on generated sqm TIFF per month

Easy calculation:
Base fee + generated sqm TIFF x price for TIFF
= monthly usage fee for Prinect Production Manager

# Prinect Production Manager

## Prinect Production Manager

| | |
|---|---|
| Portal | Prepress |
| Press | Postpress |
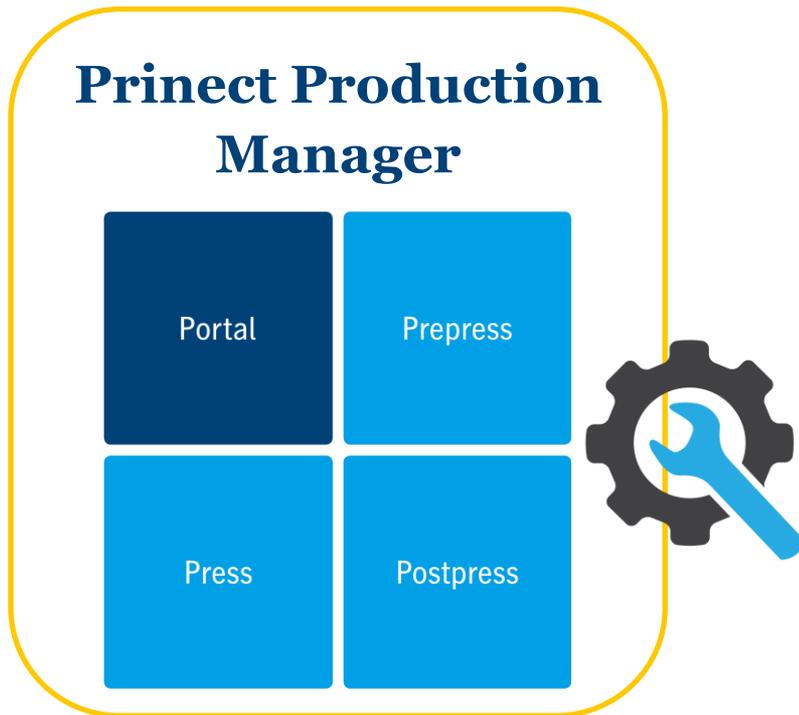
**Configurations can be extended at any time, without any increase of the monthly usage fee**

Extension of Production Manager workflow requires training module

# First UK customer for Prinect Production Manager

Jones & Brooks becomes the first UK company to sign up for Heidelberg's 'pay as you go' volume-based pricing Prinect Production Manager workflow.



Jones & Brooks managing director Ronnie Blair said: "It protects us because we're not paying out a lot of money if we haven't got a lot of work for the machine. As we build up the volume of work then obviously we'll pay more, which we think is a good way of doing it. Heidelberg configures the workflow to our specific needs and we can adapt the configuration or add other workflow modules if we need to. This will enhance our file preparation for work across the different technologies we have here." Quotes: Print Week

# Operational excellence. Overall Equipment Effectiveness (OEE) today is at ~25%



**OEE**

- Reduced average production speed
- Maintenance and technical availability
- Minimum 2 min. makeready per job

Realistic Performance Border

Area of currently achieved performance

Average run length

500 | 1.000 | 2.000 | 4.000 | 8.000 | 16.000 | 32.000

100% / 90% / 85% / 60% / 50% / 40% / 25% / 15% / 0%

# Operational excellence. **The average OEE will double within the next 10 years to 50%.**



OEE

- Reduced average production speed
- Maintenance and technical availability
- Minimum 2 min. makeready per job

Realistic Performance Border

Area of expected performance in 2026

Area of currently achieved performance

Average run length

# Operational excellence. **The average OEE will double within the next 10 years to 50%.**



OEE

- Reduced average production speed
- Maintenance and technical availability
- Minimum 2 min. makeready per job

Realistic Performance Border

10 Jobs per **day**
**High net Speed**

10 Jobs per **shift**
**Automated fast Make Ready**

10 Jobs per **hour**
**New solutions required**

Trend

500    1.000    2.000    4.000    8.000    16.000    32.000

**Average run length**

# Major challenges on Reporting

To provide a consistent, uniform solution for the most effective resource usage, we have to:

(1) Combine the financial and productivity / quality data.

(2) Provide consistency of Key Performance Indicator (KPI) information given in Heidelberg applications.

(3) Extend KPI information and integrate Benchmarking features.

(4) Provide multisite analysis features.

(5) Provide a state-of-the-art Bussines Intelligence application.

- Intuitive | Mobile | Drilldown | Email | Export | …

## "Prinect BI"

# Requirements for a Business Intelligence (BI) solution

- Users, security, access rights, …

- Translation of the reports

- Versioning (data warehouse, standard reports)

- Export to Excel

- Customization on a copy of the standard report
  This allows update/improvement of our standards

- Allow the build of new custom reports from scratch

- Integration of the reports in PBM and on the Prinect portal

- Third party data integration (other databases, customer excel files)

- Email driven reports

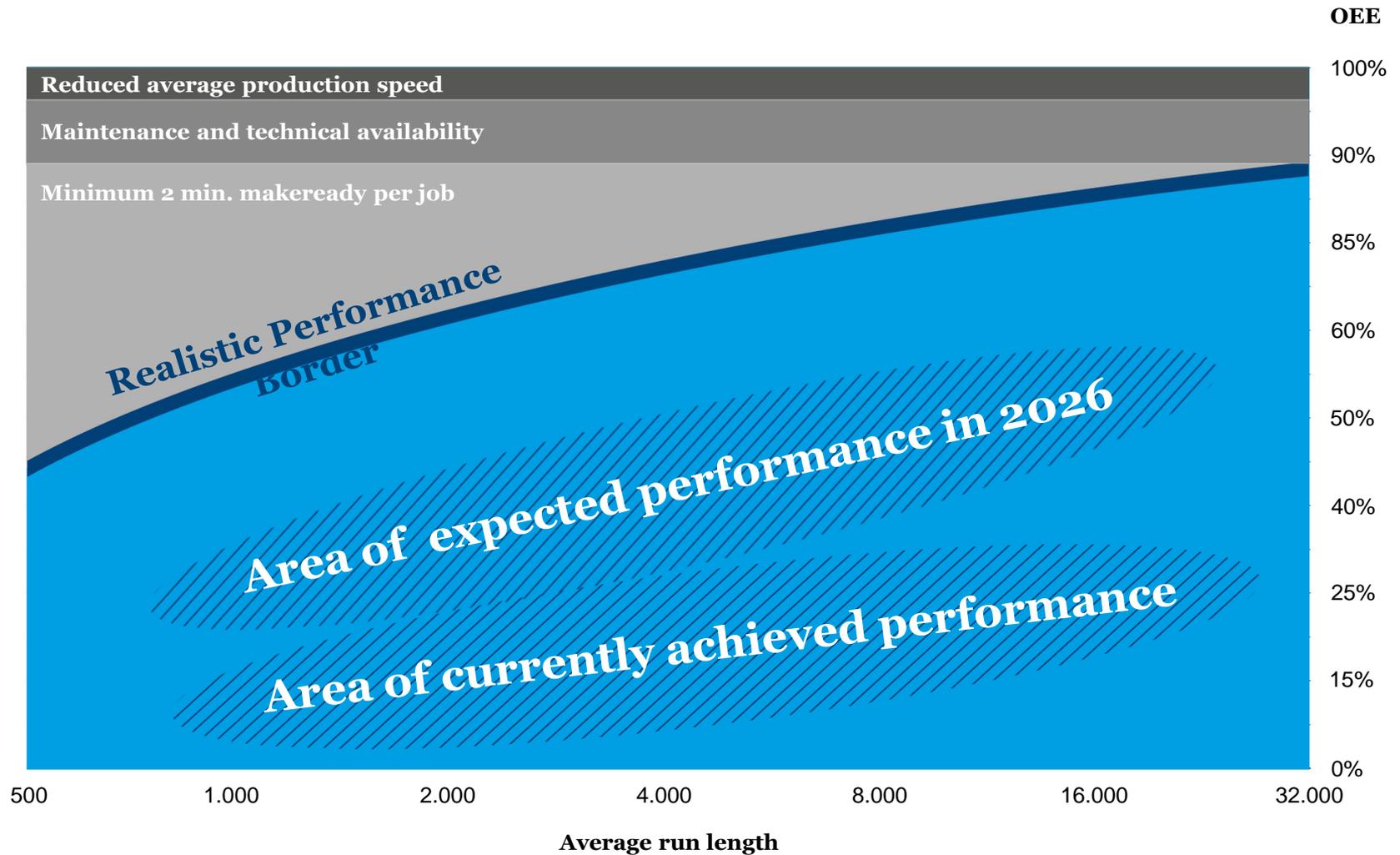- …
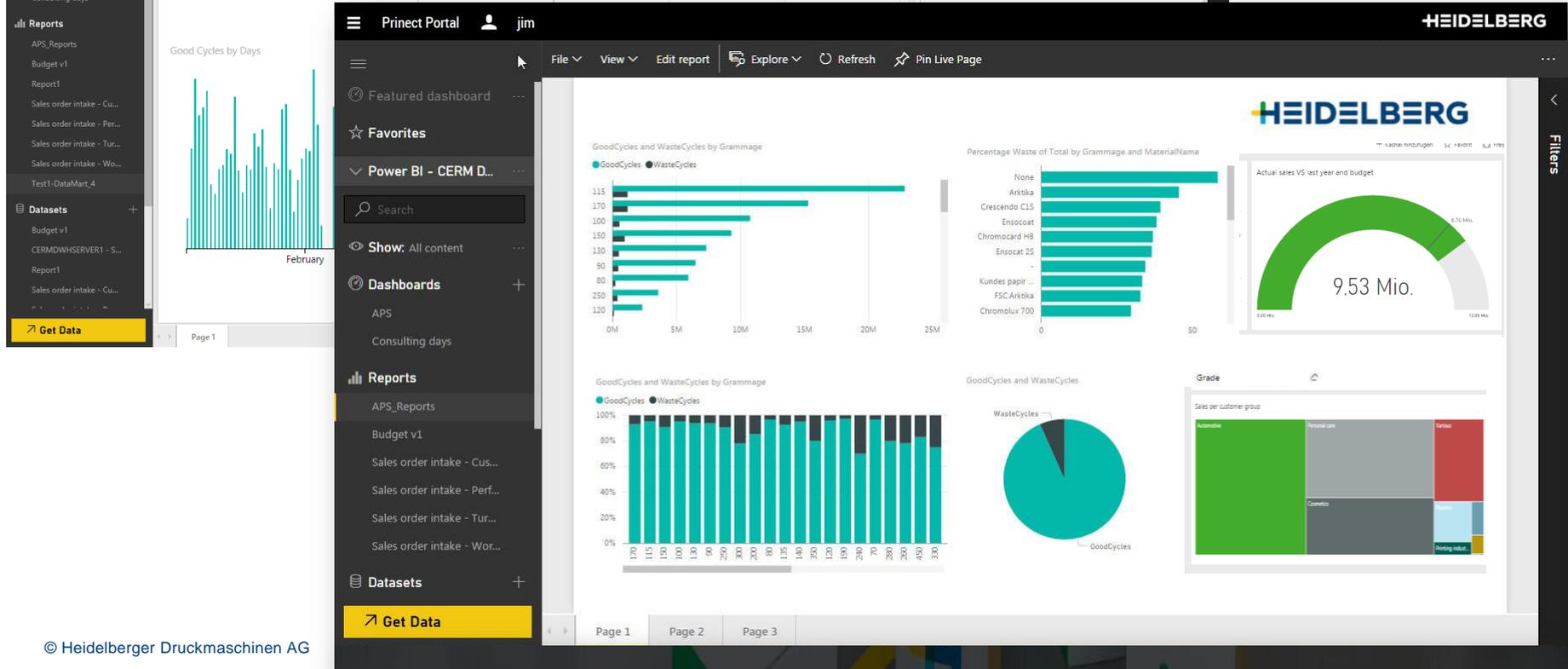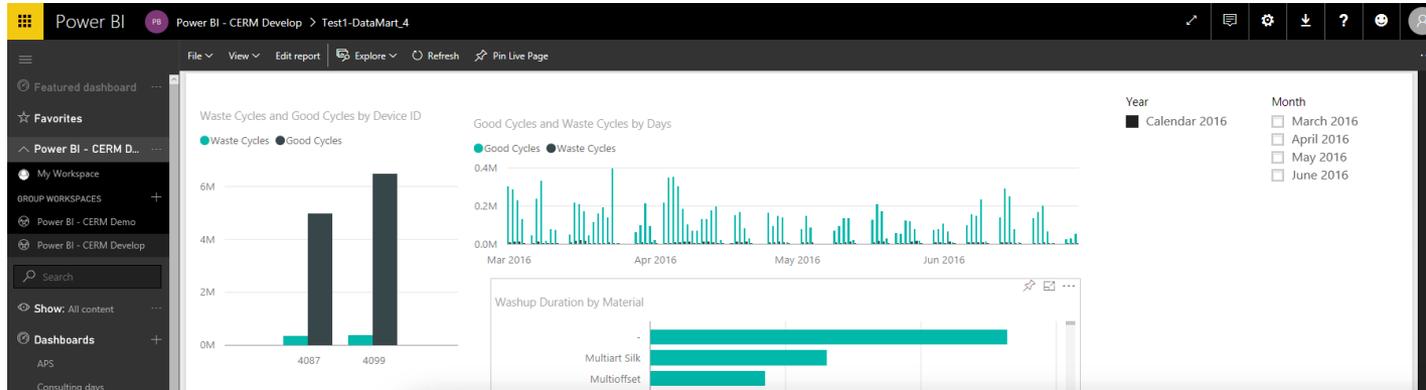
# Prinect BI

# General structure
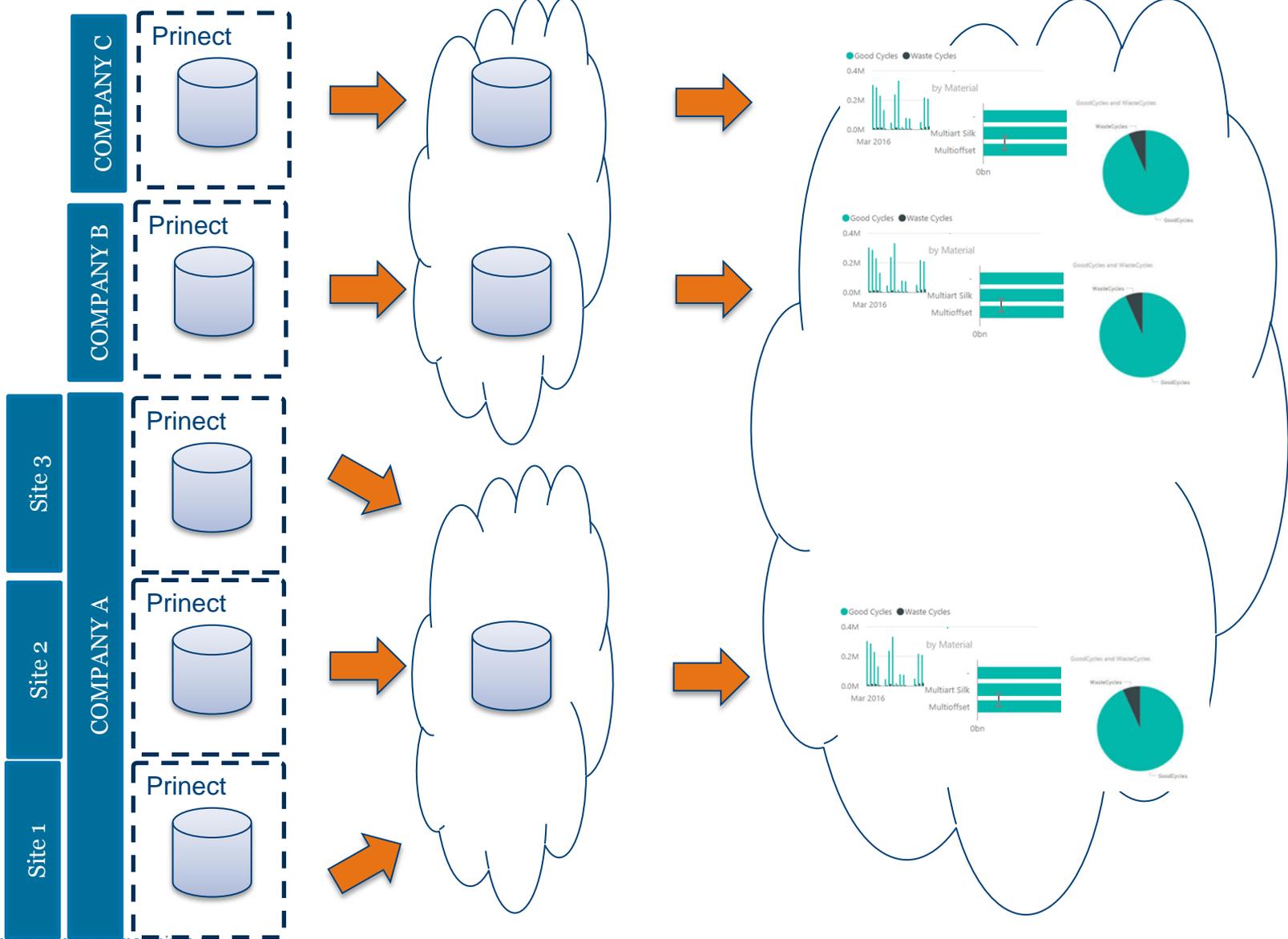
# Prinect BI will...

→ be a new, cloud based product.

→ be planned to get available via HD Assistant and Prinect Portal

→ focus on analyze processes, devices, jobs, operators to guide customers

→ not  provide real time tracking and status information

→ not replace Analyze Point

→ Prototype ready for first customers in early summer 2017

# Our mission: getting you there



OEE

Reduced average production speed

Maintenance and technical availability

Minimum 2 min. makeready per job

Realistic Performance Border

Area of expected performance in 2026

Area of currently achieved performance

100%

90%

85%

60%

50%

40%

25%

15%

0%

**Average run length**

500    1.000    2.000    4.000    8.000    16.000    32.000

# Heidelberg News

Thank you