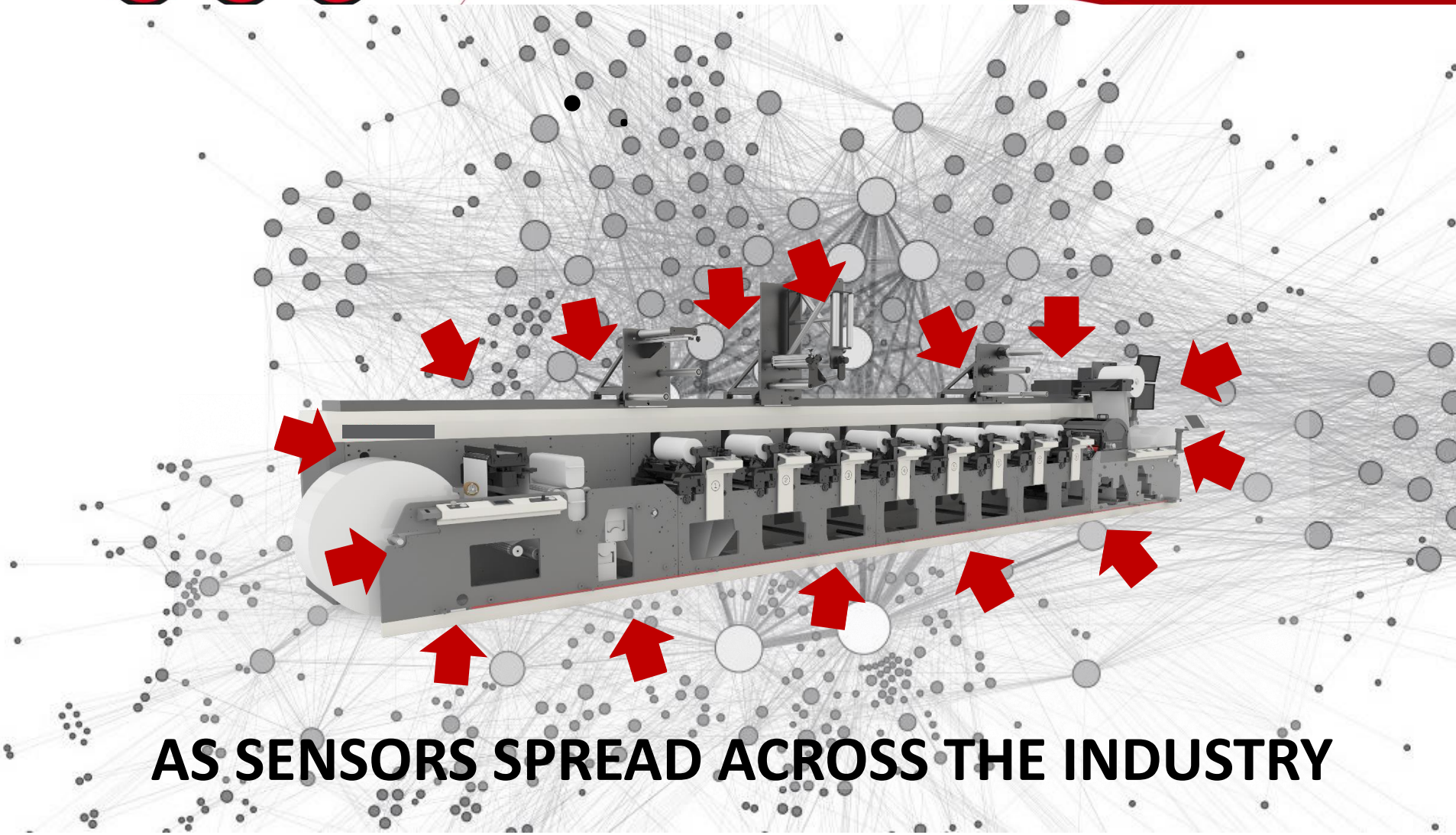
# THE CHALLENGES AND OPPORTUNITIES OF BRINGING THE INTERNET OF THINGS, INDUSTRY 4.0 TO LABEL PRINTING



# AS SENSORS SPREAD ACROSS THE INDUSTRY

MPS
PRINTING PRODUCTIVITY

talk to me

# Connectivity & Work flow

Local memory

Modem

Remote Diagnostic

User support

Customer side

**PRE PRESS**

100% inspect.

Plate mounting

.....

**POST PRESS**

100% inspect.

Slitter rewinder

.....

**MIS**

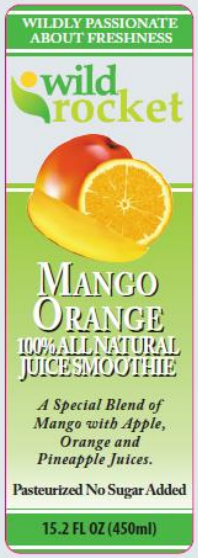
# ORDERING LABELS

- From website or email to MIS and Prepress
- Automatic pre-flighting
- Informs customer automatically by email – includes report.
- Quantity, deadline and delivery address automatically uploaded in MIS.
- Order number and confirmation given.

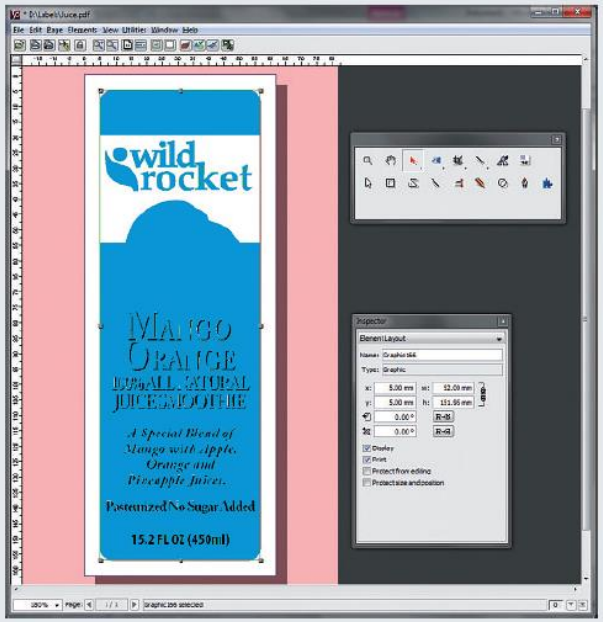
Saving Time and Preventing errors = Waste

# PREPRESS & APPROVAL

- After the pre-flight, flattening, trapping, die lines, white masks and other adjustments can be done automatically  or manually
- Print-ready PDF's are made
- Soft proofs are sent to the customer
- Online preview of the artwork
- If all correct, online approval.
- The job can go to production planning

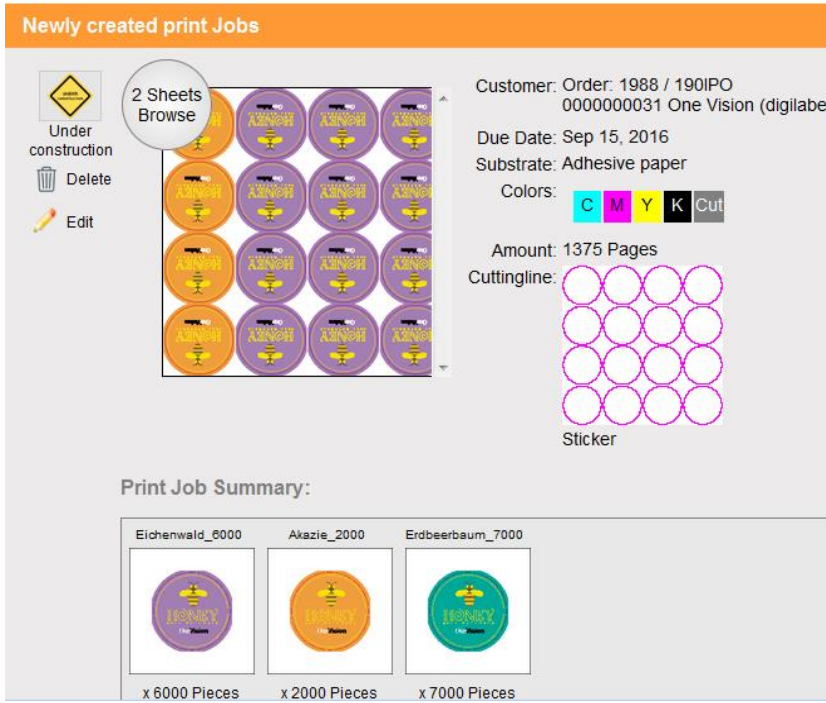



Original label image



# PRODUCTION PLANNING

- Job overview
- Deadlines, addresses
- Substrates availability
- Most economic production process is determined
- Machine availability
- Cost is calculated.
- Layout for the press selected is made.
- Job is sent online



# PRODUCTION

Data is sent for:

- Plate making
- Ink mixing
- Machine settings
  - Anilox to sleeve
  - Plate roller to impression roller
- Register settings
- Camera inspection

MPS
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# PRODUCTION

As of connectivity (IoT)

Automatic recognition of:

- **Anilox rollers**
  Recognition of Anilox specifications
  Realtime usage monitoring.
- **Ink levels**
  Sufficient ink for the job?

# PRODUCTION

As of connectivity (IoT)

OPERATOR RECOGNITION by
**RFID on ID of operator**

Operator specific:
- Operating panel lay-out
- Measurement of operator KPI's

# MANAGEMENT FROM A DISTANCE

MIS,
for all job related information

**talktome** Mobile Portal

For all machine related information

talk to me

# BENEFITS

- ✓ Real-time production status
- ✓ No paperwork
- ✓ Clear (historical) data
- ✓ Less downtime
- ✓ Detailed insights in performances
- ✓ Optimization of resources
- ✓ Maximum operational results
- ✓ Overall improvement of your equipment effectiveness

# NEW OPPORTUNITIES

## YOU KNOW

- ✓ What the cost price per label is
- ✓ Whether the planned schedule is going to be met
- ✓ If a job is running on the calculated speed
- ✓ The waste figures

- **Opportunities for New business developments**
- **New ways to conduct business**

# THE (NEAR) FUTURE

- More automation and Robotization
  Taking over more and more manual tasks.

- Mostly Hybrid and Fully Digital Presses

- The all-in-one print solution.
  - Sending designs online to a press that can manage its own settings.
  - Production in one pass.
  - Shipment and billing without human interaction.

MINDSET

# KEY LEARNINGS

- ✓ Workflows, Iot and collecting data alone will not bring success
- ✓ hardware and software are “ready”
- ✓ Is your organization ready?
- ✓ Are you ready?

MPS

PRINTING PRODUCTIVITY

**OPERATOR** FOCUSED, **RESULTS** DRIVEN.

# ACCEPT
# CREATE
# INVEST

# THIS FIRST STEP SHOULD BE THE ONE STEP TO STAY AHEAD. **START SMALL, BUT START NOW!**

# THANK YOU

# SHIFT_018