

AI and organizational culture





Heat/cooling

- Leaks detection
- Reducing return temperatures
- Reducing investments in pipes



water

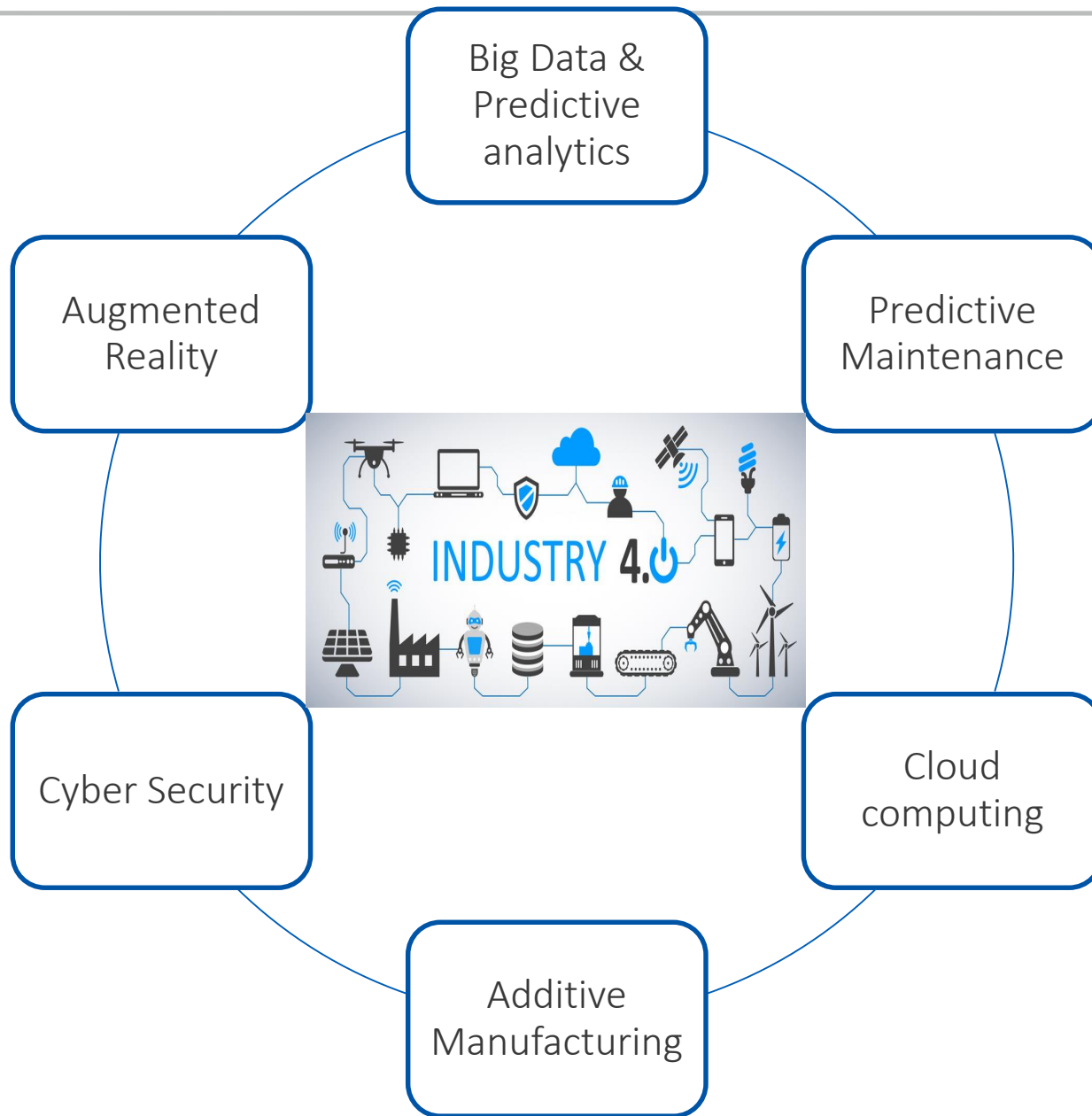
- Leaks detection
- Water waste reduction
- Increased operating optimization
- Improvement quality of the water supply



Electricity

- Possibility of dynamic pricing
- Increased operating optimization
- Reduced investments in the grid
- Increased reliability

I4.0, AI and the Digital transformation

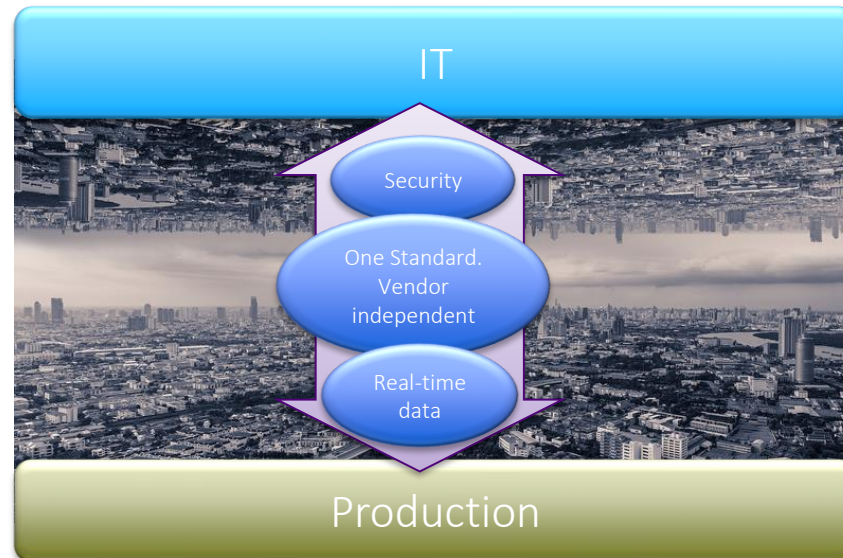


Linking IT and Production worlds



Creating a link between 2 different worlds with 2 different cultures

1. Enabling visibility to production data. Data is key for taking business decisions
2. Setting unified communications standards for IT and production
3. Secure communications enabled



Is it necessary?

And what will it give us?

Where would we be with no internet?

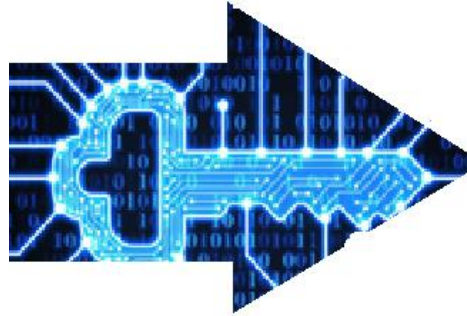
kamstrup



Pre-internet

- Clipboard
- Stack Lights
- Memos
- Telecom
- Meetings
- Schedule boards
- Pushbutton
- Phone
- Daily report

Digital transformation



Post-internet

- Email, SMS
- Andon
- Digital Communication (MES)
- Webpage
- Slack / teams
- Digital / realtime planning
- MES/SCADA/AI
- Video conferance
- Realtime reporting

Digital transformation



Personal development



Industrial development



Why is the industry behind?

Because we don't know how

And are unsure on why

So what do we do?

What we did at Kamstrup

Supporting Kamstrups production

2 System architects

2 Data scientists

3 Data Analyst

4 Production support

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1. Remember who the customer is and who you are supporting
 2. Beware of data overload
 3. The solution should always support a problem
 4. Do not focus on the tools
 5. Start small but think big
 6. Domain knowledge is key ($x=2*y$)
 7. Remember the handover

Do not forget the Culture



1. LEAN
2. PT department
3. IT
4. Developers
5. Management

Think forward

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