

Live webinar

# Een gloednieuwe aanpak om uw assets te beheren

Verhoog de uptime, reduceer kosten  
en verbeter de veiligheid

We start at 11:30

## Predictive Maintenance

23 & 24 september 2020  
online kennisweek



## Gijs van Erp Yokogawa



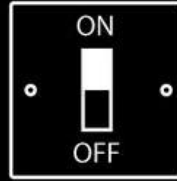
# How is this presentation structured?



Increased competition

●  
→ Systems becoming more complex

●  
More advanced systems & more usage of  
Information Technology (IT) ←



# Lack of visibility...

# Characteristics in typical OT environments

## Ineffective maintenance processes

- Siloed organizations (Operations & Maintenance)
- Multiple site visits for simple problems

# Characteristics in typical OT environments

## Human resources

- Aging workforce
- Firefighting mentality



## Older technologies

- Fragile systems
- Old software
- Conservative mentality

Technologies	Wide scale usage	
	IT	OT
Domain service	~2003	2010-2015
Virtualization	2000-2005	2015-2020
AI & Big data	2010-2015	~2020-2025
Cloud computing	2015-2020	~2025



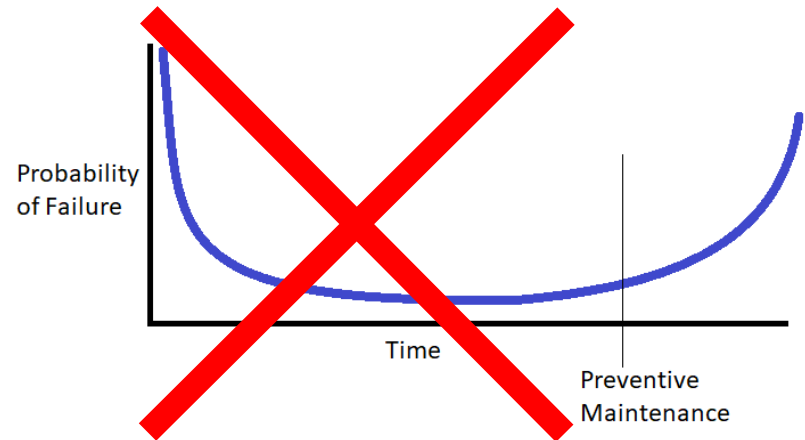
# Problems in OT environments

1. Average 5% downtime p/y (scheduled + unscheduled)
2. Component failures > predictable
3. Human failures > preventable

# DOWNTIME

## Ineffective maintenance strategies

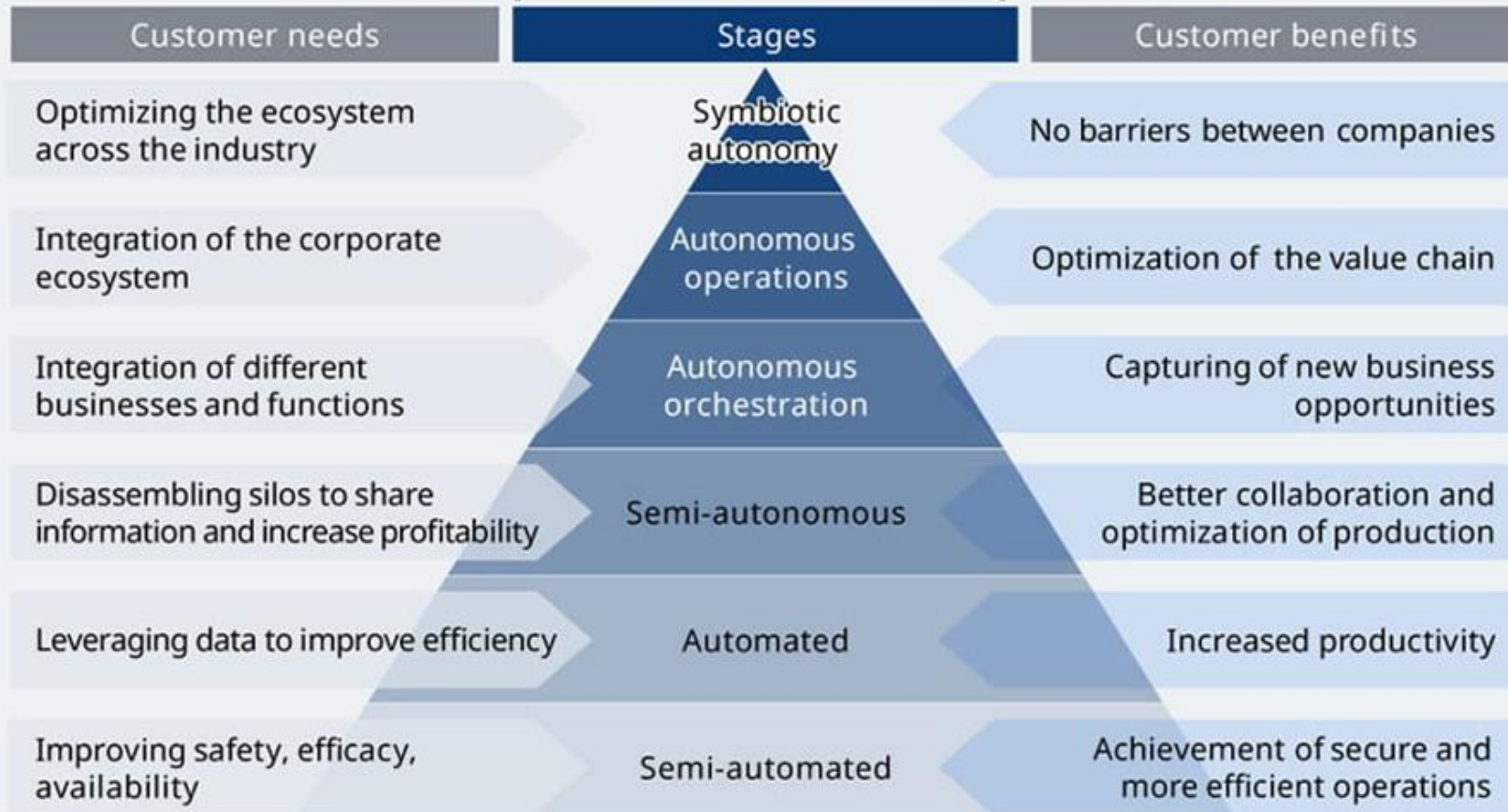
- Only 18% of components has age related failure pattern
- Unnecessarily changes
- Run to fail
- Wrong diagnosis

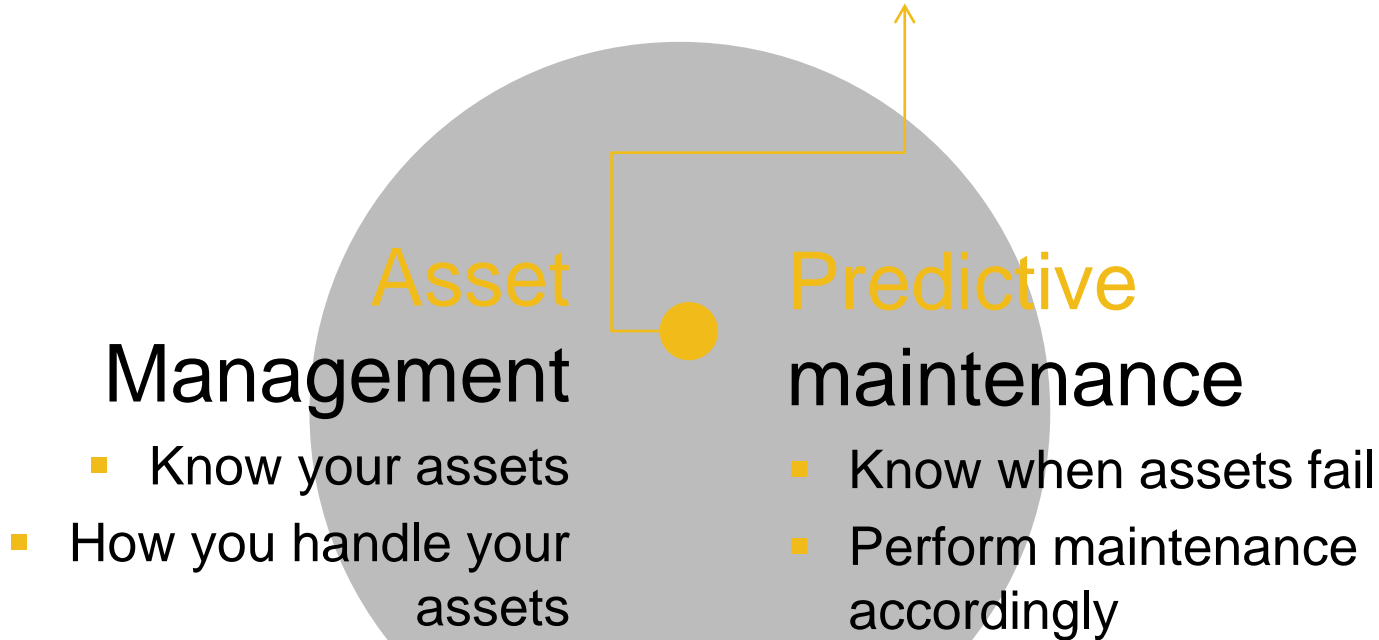


Old fashion way of thinking about maintenance

# Yokogawa's vision for the future

## Roadmap to autonomous operations





# Need from the field as a base



## NAM GLT (Shell & Exxon), start 1996

- Biggest West European gas field
- Very high availability requirements
- Maximum 1 day onsite maintenance each two years



## Yamal (Novatek, Total & CNPC) start 2018

- Biggest LNG plant globally
- Artic remote location, 1 bed for maintenance employee

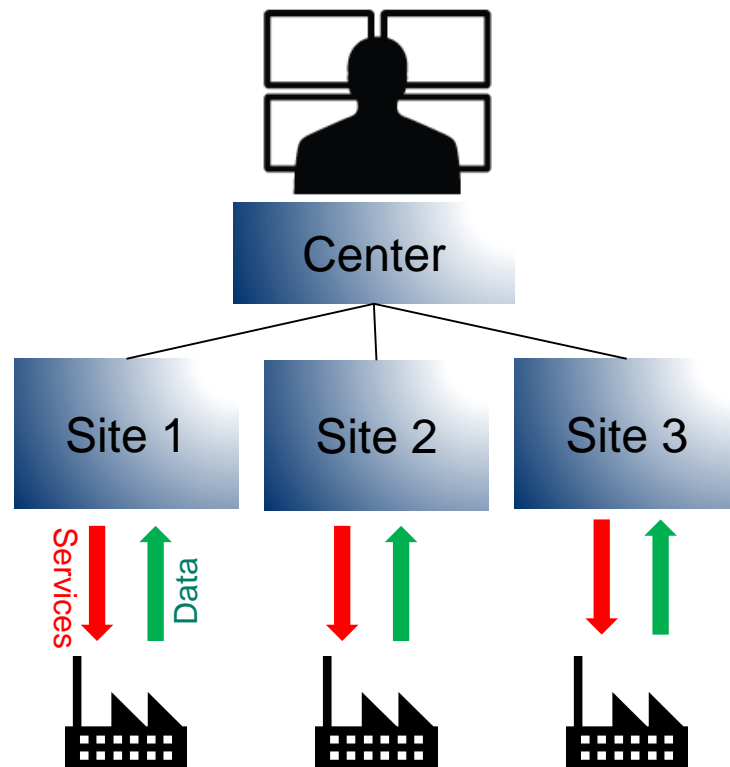


## Shell Secure Plant, start 2013

- Global Managed Service (Shell & Cisco)
- Monitoring and pro-active action

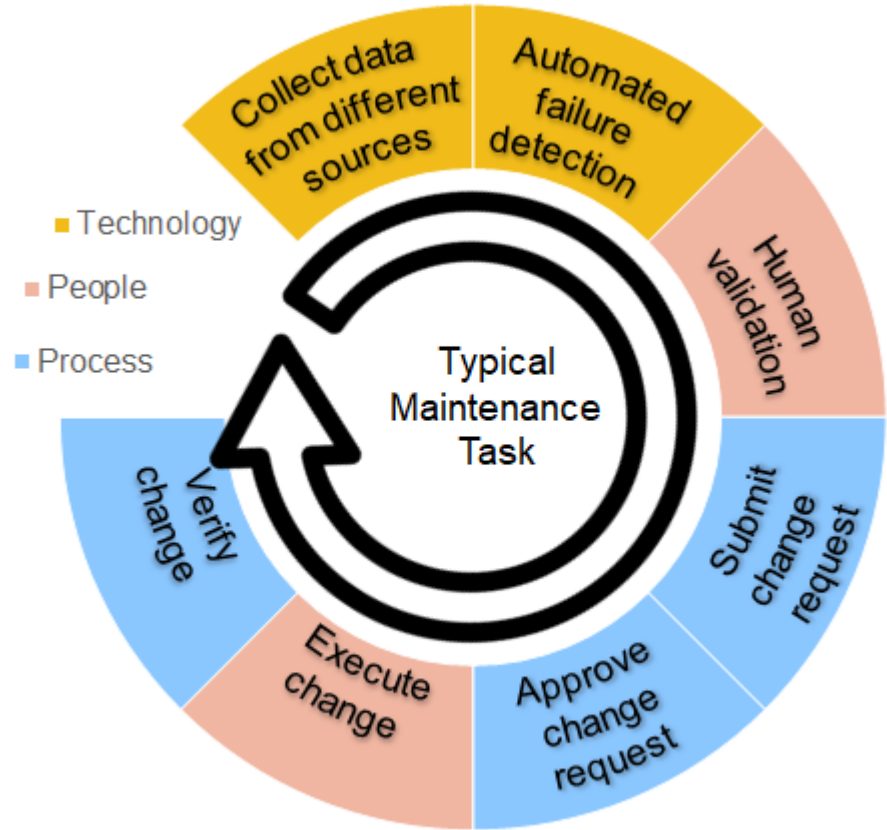
# Ingredients for success – what our customers taught us

1. Real time data collection of all asset types
2. Performance overview in a single dashboard
3. Cutting edge IT&OT functionality
4. Rock solid technical infrastructure



# More than just technology

*Bringing people, process and technology together for digital transformation*

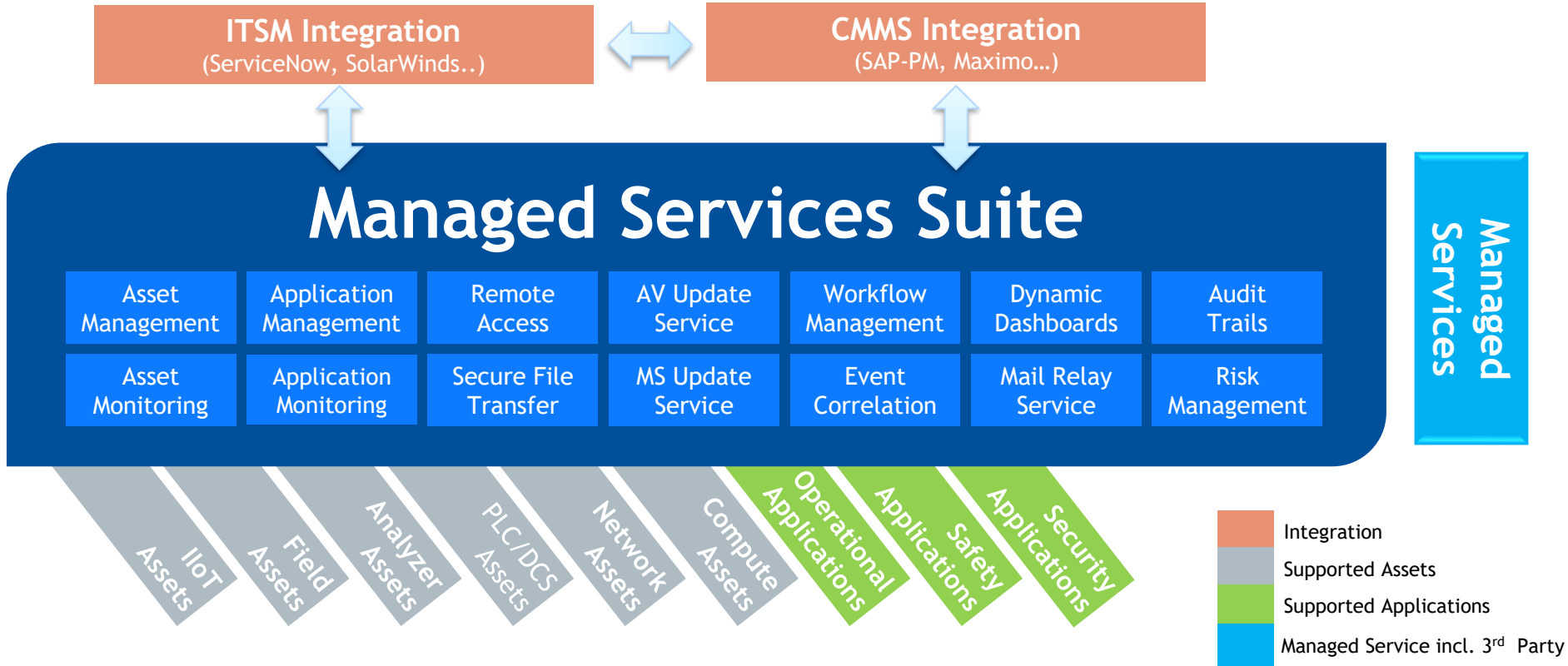


And now... we proudly present

# Yokogawa's Managed Service Suite



# Managed Service Suite Overview



# KEY TAKEAWAYS

1

Asset and maintenance information is present but not used or compatible

2

Most shutdowns can be prevented

3

Incorporate people process and technologies to be successful

4

Asset management and predictive maintenance essential for autonomy

5

You can start today!

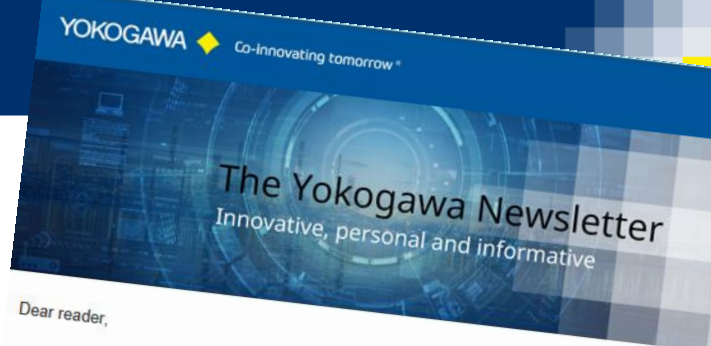


# Additional reading

## Curious?

Visit [yokogawa.com/nl/mss](https://yokogawa.com/nl/mss) for more information.

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Dear reader,  
This is the newsletter of Yokogawa Nederland with news, customer stories, inspiring information and webinars about industrial automation.



**How do you stay on top of your business?**  
This can only be achieved by regularly investing in innovation and improvement. Gido van Riet: 'For Shell Moerdijk the maintenance stop is the time to do that'. Find out how much time has been saved and efficiency improved!

**Shell case study**



**Service Engineer for 28 years: 'no working day is the same'**  
Many companies have their measuring instruments calibrated, but often do not know the reason behind it. Why are calibrations important? Gerrie van Kessel shares his field service experiences.

**Read the interview**



**The 4 pros and cons of an online HAZOP**  
Before 'the new normal', meetings were often planned face-to-face, but now we work remote wherever possible. Safety specialist A... talks about the effects on safety...

**Thank you for your attention**  
More information?  
Please contact  
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