

Case Study: KPN Partnership with CA Technologies Enables IT Transformation from Monitoring Components to Managing IT Services Across Multiple Domains

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About KPN



KPN facilitates personal contacts. Our technology enables the Netherlands to move forward. We do this on the basis of a strong vision, established in our everyday activities for more than a century

About KPN



Who are we?

KPN truly believes in technology and in the power of communication. We are KPN. We are the network that enables the Netherlands to move forward – the network that cares for the Netherlands.



What do we do?

KPN is the largest telecom and IT service provider in the Netherlands. Our network is Dutch to the core. We have a clear mission – to help the Netherlands move forward through that network.



Our organization

Our 14,000 employees are dedicated to providing our customers with the best products and services, using the latest technology.

Our Dedicated Team



When We Started...

KPN and CA Technologies



- KPN started with performance management in 2003 by introducing CA eHealth



- 2 years later we started using fault management by implementing CA Spectrum

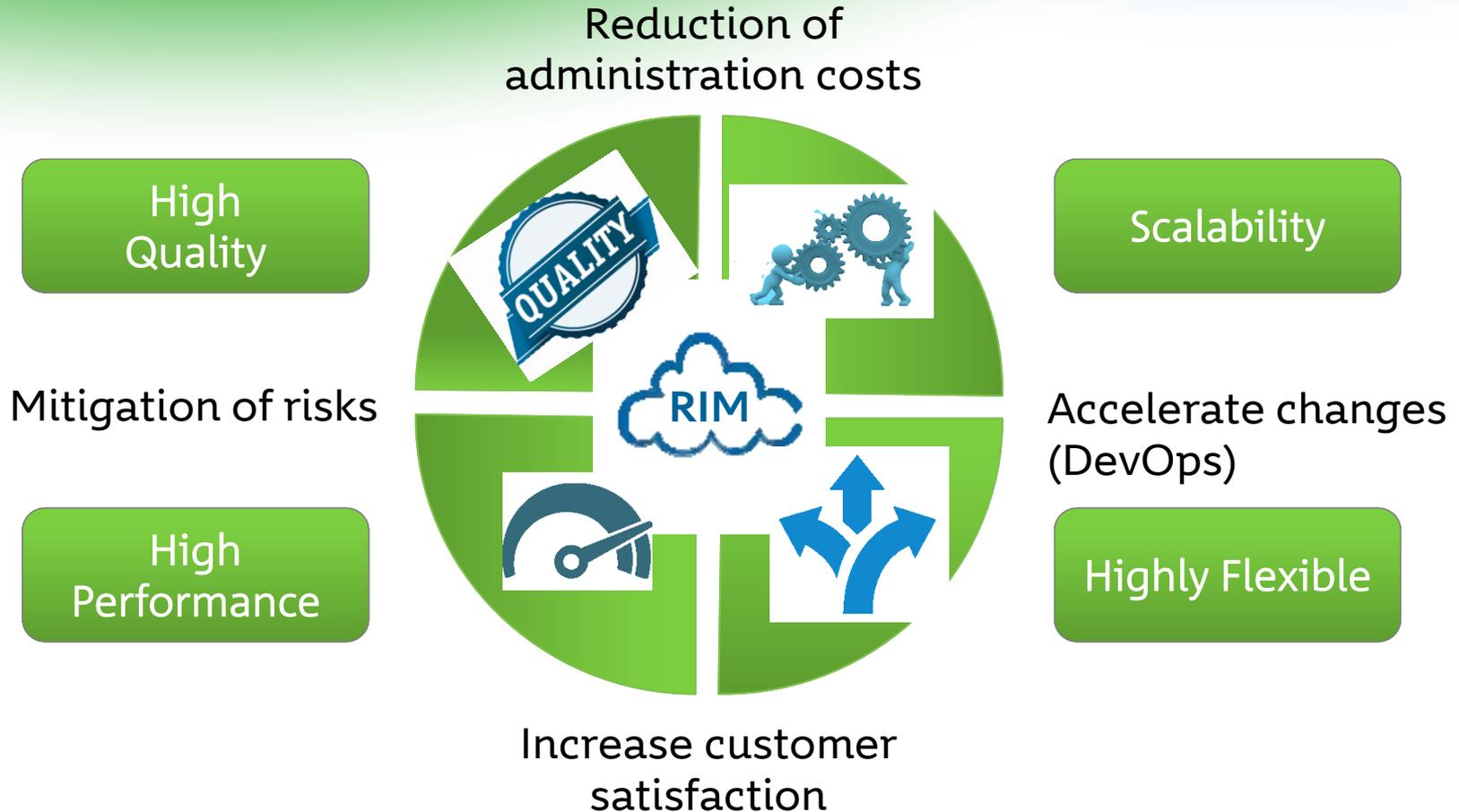
Component Monitoring

Virtual Platform

Designed in association with CA

High Availability Virtual
 Housing
Location Redundant
Physical-to-Virtual
Fully Managed

Advantages for our Customers



KPN's View on Service Assurance

Consequences of a traditional approach to IT operations

54 %

Service problems first detected by users

82 %

IT Organizations resort to cross-functional meetings to tackle problems regarding networked application service performance

80 %

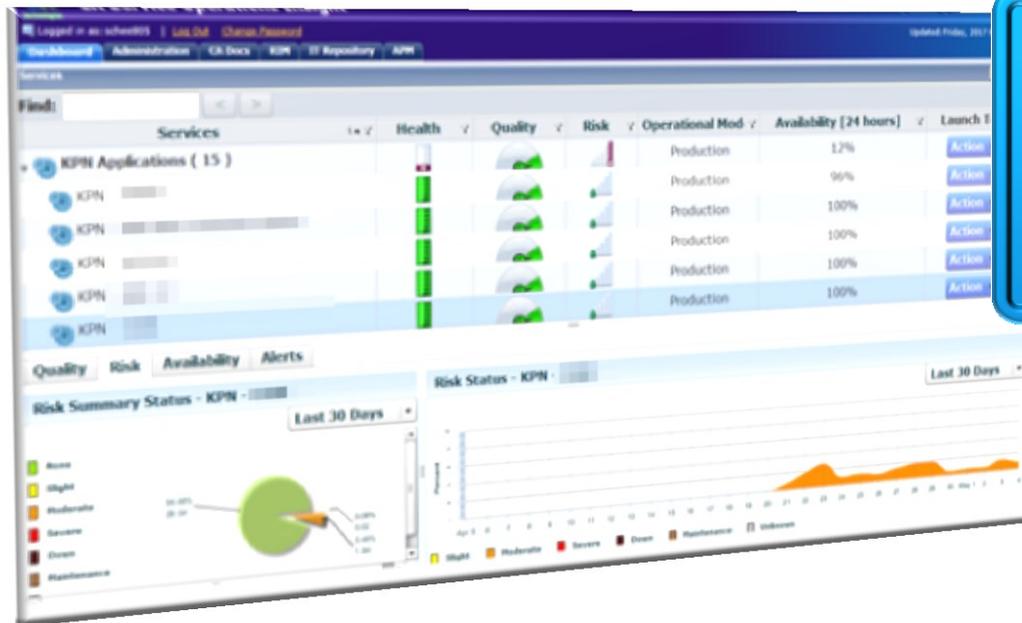
Portion of IT resources devoted to finding and fixing problems

Source: Jim Frey, Vice President of Research, Enterprise Management Associates

Intro of CA Service Operations Insight

The first start...

- Two domains into one single pane of glass
- Start with thinking about business services
- Separated monitoring teams needs to work together



Service oriented approach was requested by few large business market customers

Next Steps

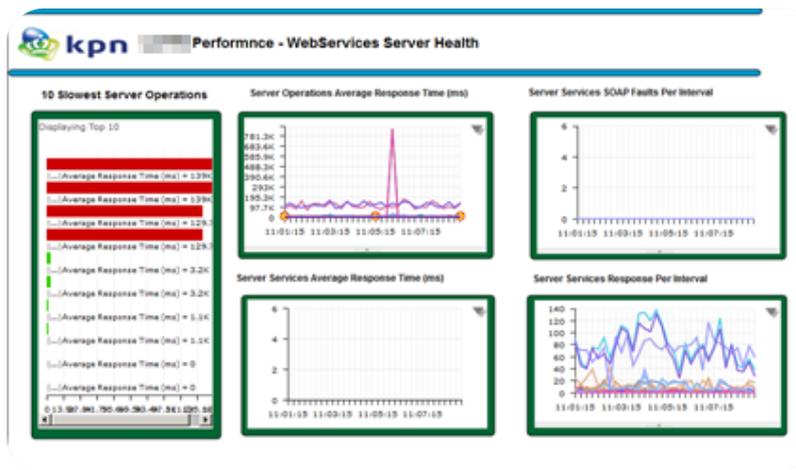
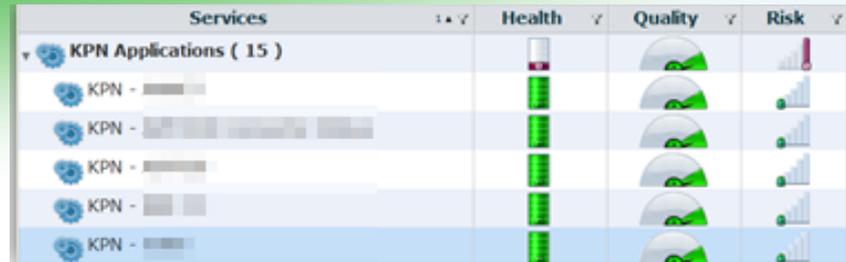
- Create cross-domain service model visualizations
- Measure service and customer impact analysis
- Provide proactive service quality and risk management analytics



- More comprehensive view of business services by introducing:
 - **CA Application Performance Management**
 - Monitoring applications
 - **CA Unified Infrastructure Management**
 - Server Monitoring
 - End to end monitoring

Monitoring Applications

CA Application Performance Management



Server Monitoring

CA Unified Infrastructure Management

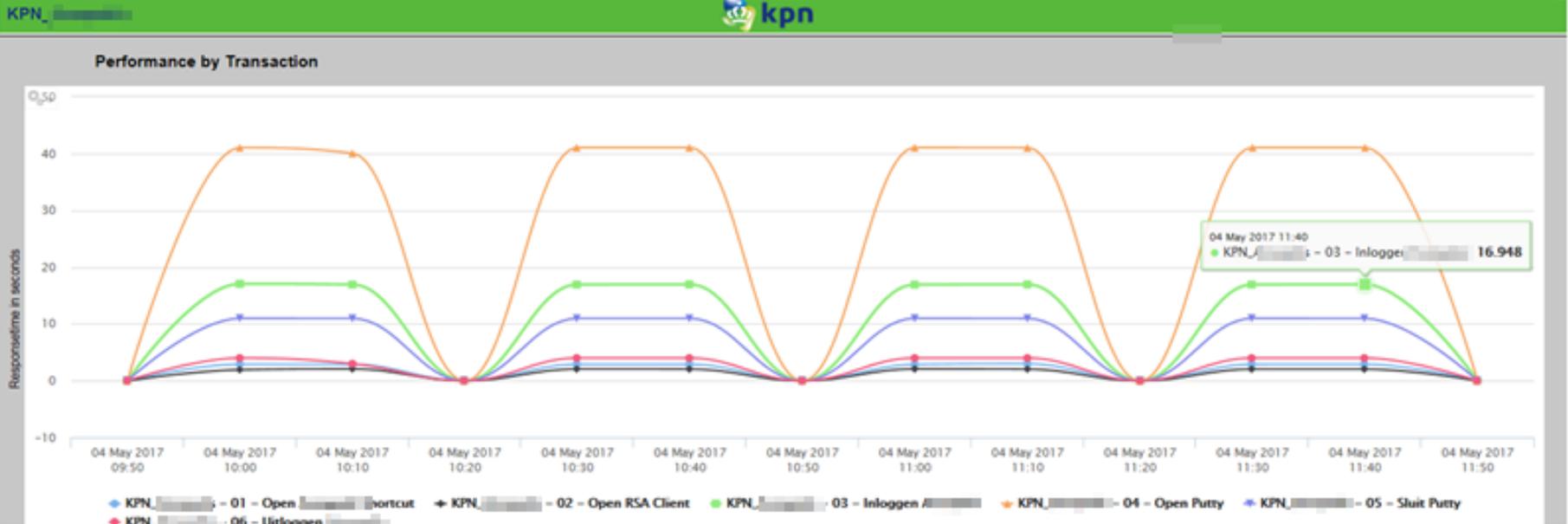
The screenshot displays the CA Unified Infrastructure Management (UIM) interface. The top navigation bar includes Home, Unified Dashboards, Reports, Design, Configuration, Schedule, CAB1, and SLM. The main window is titled "UnifiedServiceManager" and features a search bar and an "Actions" dropdown. The left sidebar shows a tree view of "Groups (43)", including EZE (3), KPN DC (0), KPN WS (34), and KPN WS AD (5). The main content area is divided into several sections:

- Details:** Shows information for host "w2368", including Name, Alias, IP Address, Dedicated: Host, OS Type: Windows, OS Name: WindowsServer-2008-R2, OS Version: 6.1.7601, OS Description: Service Pack 1 Build 7601, Origin: KPNWS, MAC Address: 00-00-00-00-00-00, and Bus Type: Robot. An "Alarms" section shows 1 alarm.
- Monitoring:** Contains two line graphs:
 - CPU Usage:** A line graph showing CPU usage percentage over time, with a y-axis from 0 to 100 and an x-axis from 11:00 to 11:00. The usage is consistently low, near 0%.
 - Processor Queue Length:** A line graph showing processor queue length over time, with a y-axis from 0 to 2 and an x-axis from 11:00 to 11:00. The queue length shows several peaks, reaching up to approximately 1.6.
- Disk Usage:** A table showing disk usage for C:\ and D:\ drives.

Disk	Usage	Status
C:\	83.88 %	✓
D:\	44.55 %	✓

End-to-End Monitoring

CA Unified Infrastructure Management

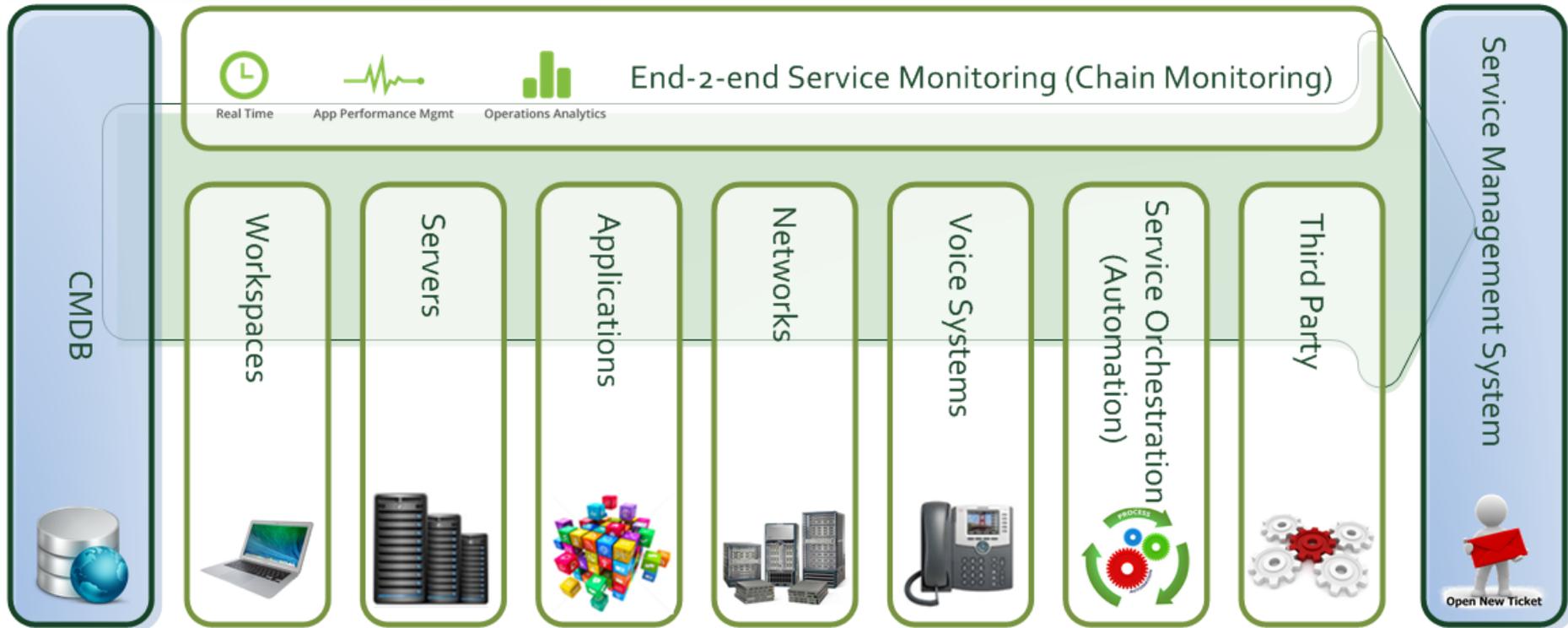


Performance by Transaction

Transaction Name	04 May 2017 09:50	04 May 2017 10:00	04 May 2017 10:10	04 May 2017 10:20	04 May 2017 10:30	04 May 2017 10:40	04 May 2017 10:50	04 May 2017 11:00	04 May 2017 11:10	04 May 2017 11:20	04 May 2017 11:30	04 May 2017 11:40	04 May 2017 11:50
KPN_... - 01 - Open Acropolis Shortcut		2.91	2.89		2.89	2.89		2.88	2.98		2.89	2.91	
KPN_... - 02 - Open RSA Client		1.94	2.08		2.06	2.05		2.08	2.05		2.05	2.05	
KPN_... - 03 - Inloggen Acropolis		17.05	16.93		16.93	16.95		16.92	16.96		16.93	16.95	
KPN_... - 04 - Open Putty		41.02	40.02		41.02	41.02		41.02	41		41.02	41.03	
KPN_... - 05 - Sluit Putty		10.97	10.96		10.96	10.96		10.96	10.95		10.97	10.96	
KPN_... - 06 - Uitloggen Acropolis		4	3		4	4		4	4		4	4	

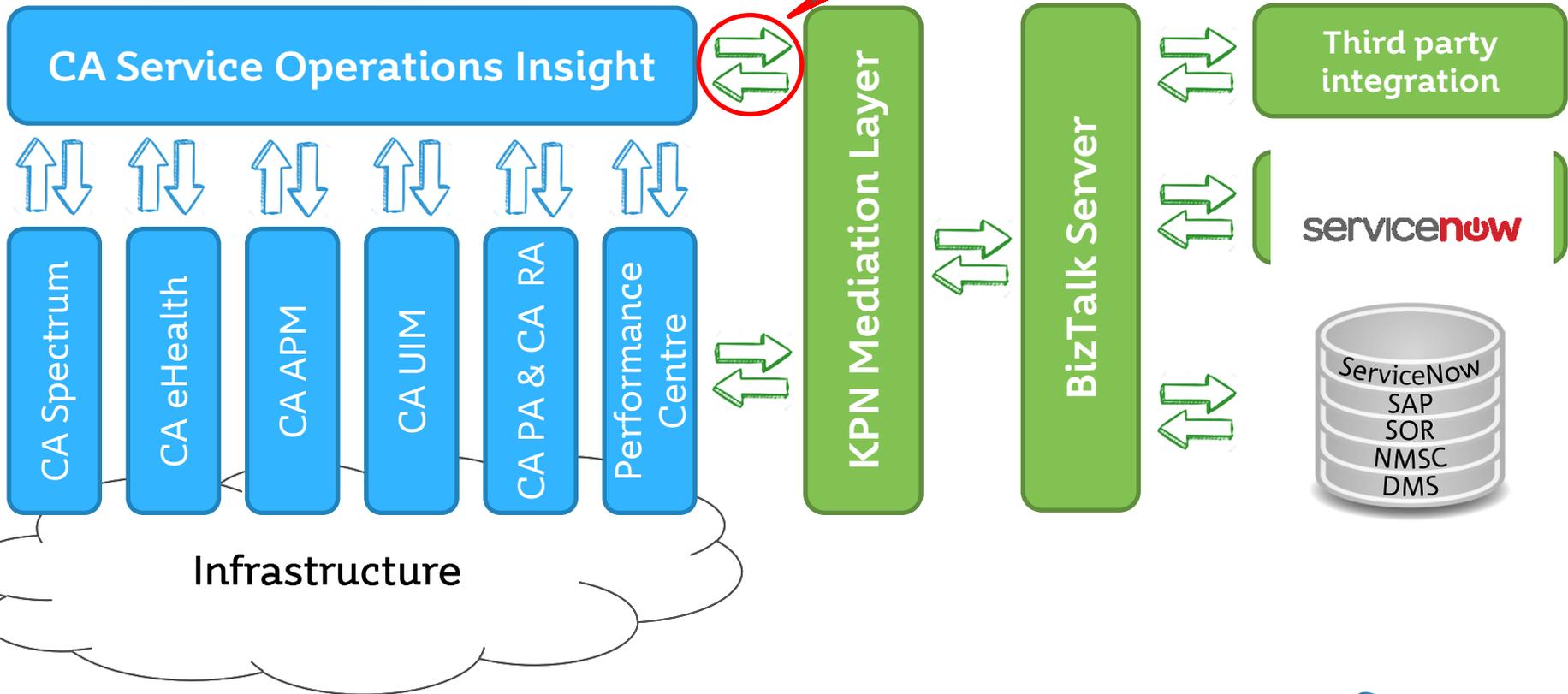
Functionality We Deliver Today

Functional building blocks



Today's Integrated Solution

Designed together with CA



Facts & Figures

Monitored by KPN



Infrastructure

- routers / switches / firewalls / wi-fi access points



Application Performance Management

- CA APM agents
- applications (end-to-end customer experience)



Servers

- Monitoring KPN data center servers

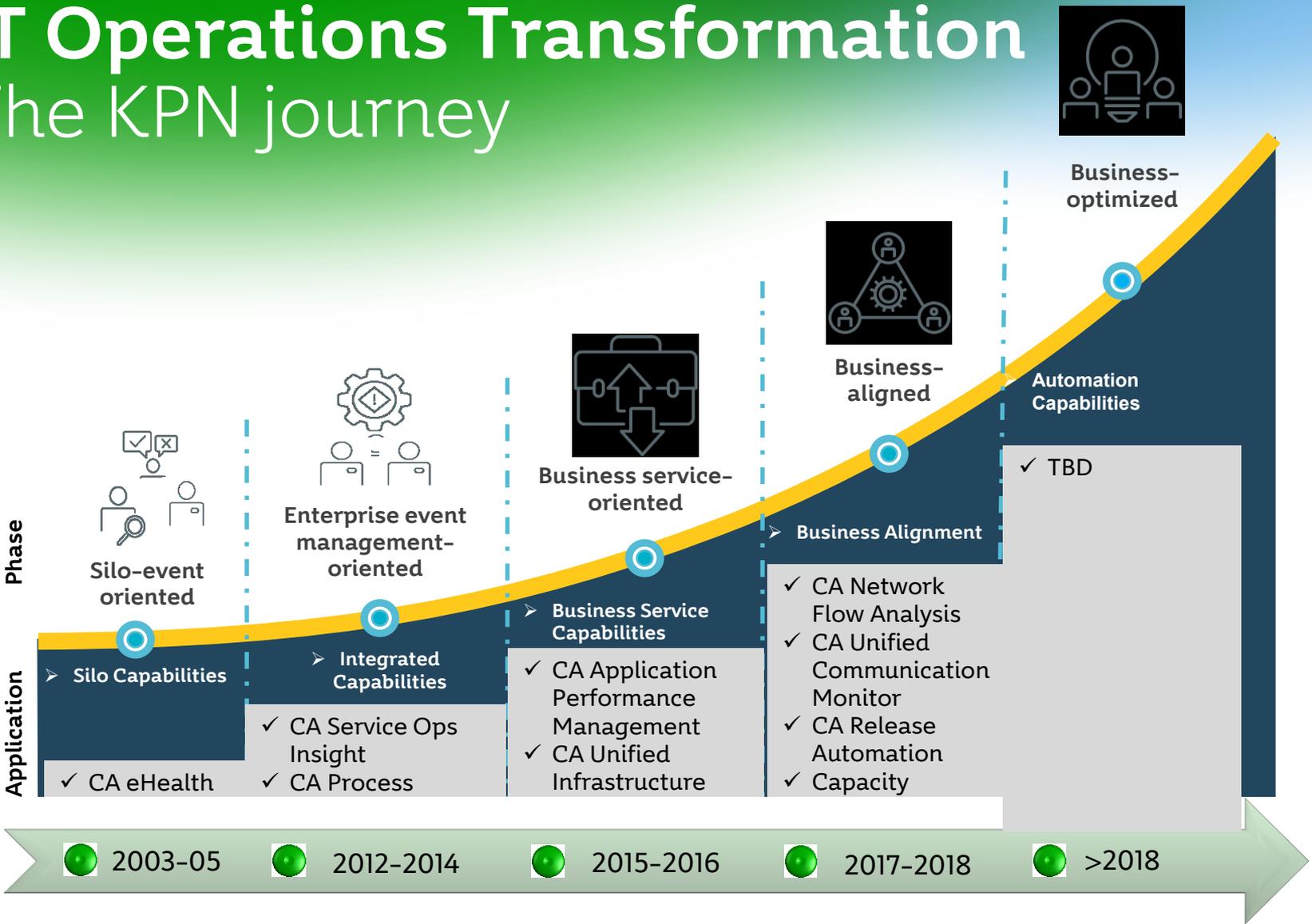


Miscellaneous

- Cameras / voice loggers / highway signaling / storage devices
- IP phones / SBCs / signposts

IT Operations Transformation

The KPN journey



KPN and CA Technologies

Next steps

- **Strategic collaboration:**
 - KPN operational workload shifts to CA Application Management Services
- **The expected growth on the following domains:**
 - CA Service Operations Insight
 - CA Unified Infrastructure Management
 - CA Application Performance Management
 - CA Spectrum
- **New applications**
 - Capacity Manager
 - CA Release Automation
- **Replacements**
 - Transition to CA Performance Management from CA eHealth



**ANY
QUESTIONS?**