



Telco AI Assistant (TAIA)

From research to delivery: Challenges and Lessons Learned

Iwona Wojdan iwona.wojdan2@orange.com
Marcin Ziółkowski marcin.ziolkowski@orange.com

Motivations

As networks grow in scale and complexity, ensuring **reliability**, **agility**, and **quality of experience** for end users **poses increasing challenges**.

Traditional operational models, dependent on manual processes and fragmented expertise, struggle to adapt.

”

70% of business customers say their telecom provider should simplify the end-to-end experience of buying & servicing through digitalization.*

Orange aims to reach Level 4 on the TM Forum's Autonomous Networks scale.

Will Generative AI be a Key Enabler to reach Level 4 and beyond?

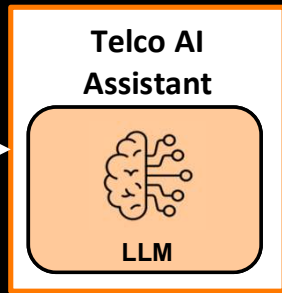
Telco AI Assistant

Early research project

I know
WHAT

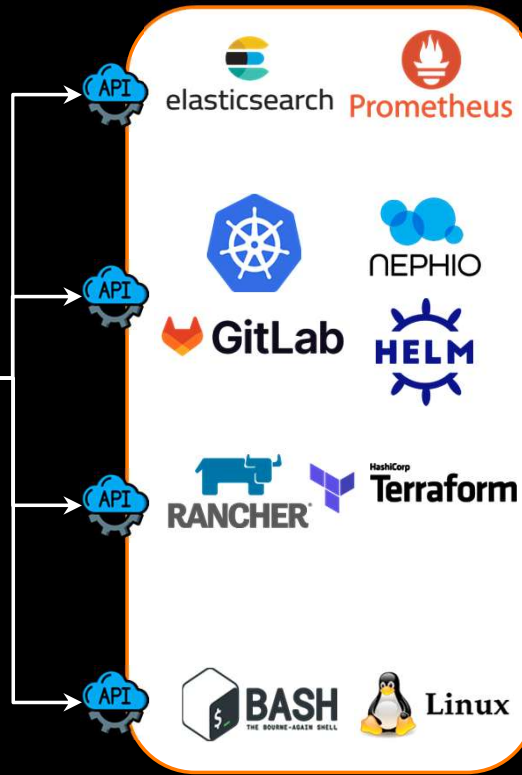


It knows
HOW

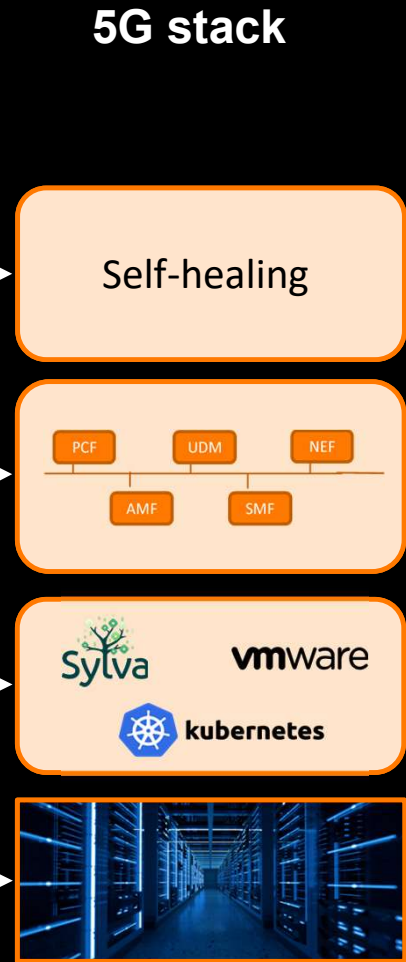


Admin:
writing intentions in human semantics

- Telco AI Assistant:**
1. Interpreting prompts
 2. Translating into machine scripts / APIs calls
 3. Executing proper tools



Tooling zone



Orange Telco Cloud

Role

Observability and maintenance stack

Network Function layer

Virtualization Infrastructure

Hardware Infrastructure

Research to Delivery Path



Needs Identification **Innovation & Minimal PoC** **Use case Clarification** **Architecture & Demo** **Internal Promotion** **External Outreach** **Ad Hoc Presentations**

Telco transforms to more distributed and complex networks. Operators seek the possibilities to reach Level 4 of automation (TM Forum).

Build a quick prototype to showcase the idea of GenAI utilization to direct supervisors.

Select an impactful scenario for a domain-focused PoC.

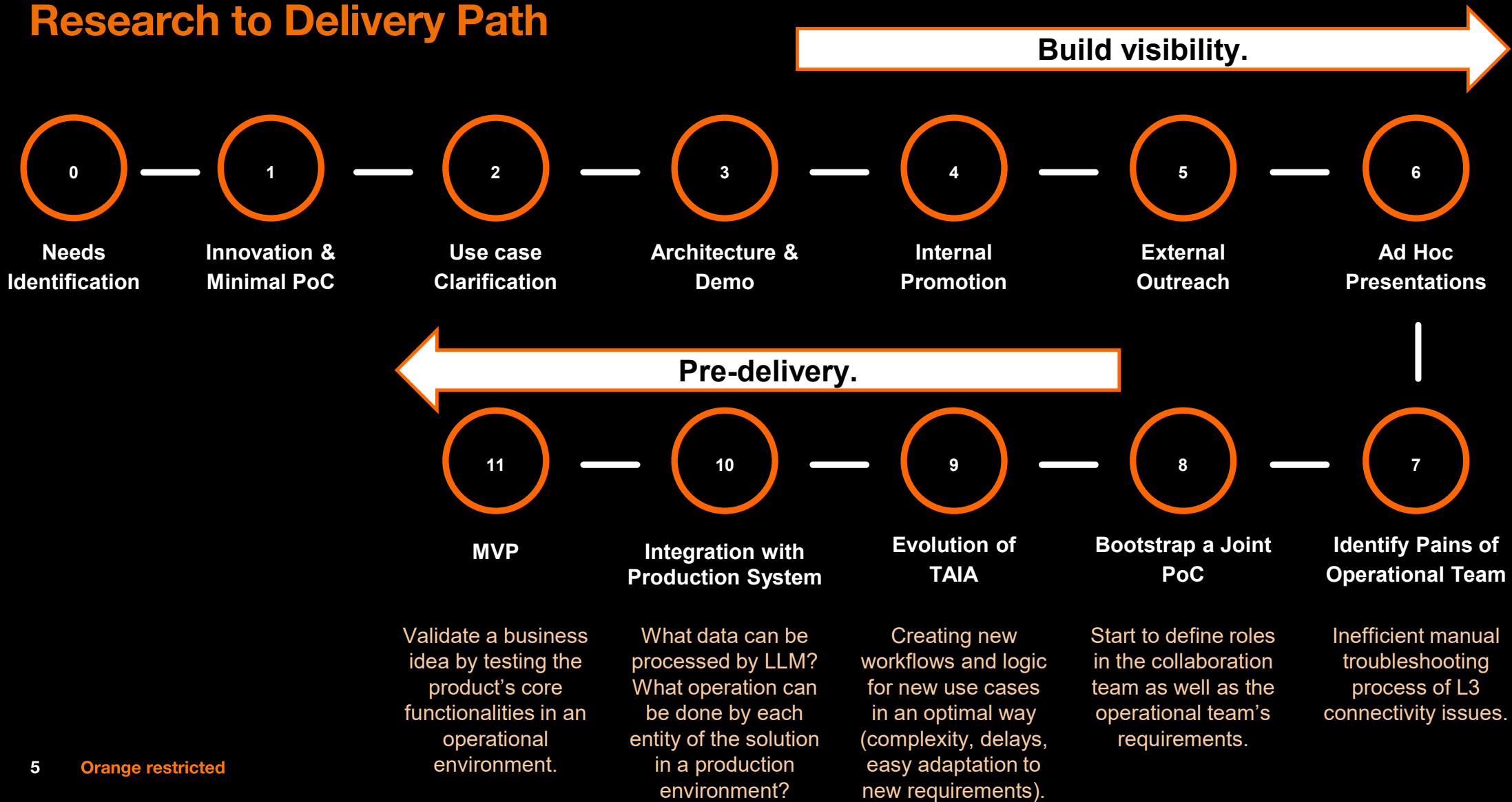
Design the best-fitting architecture for a defined use case and prepare a demonstration.

Present to management, showcase at the internal conferences, and seek cooperation.

Present at the industry conferences, publish a scientific paper.

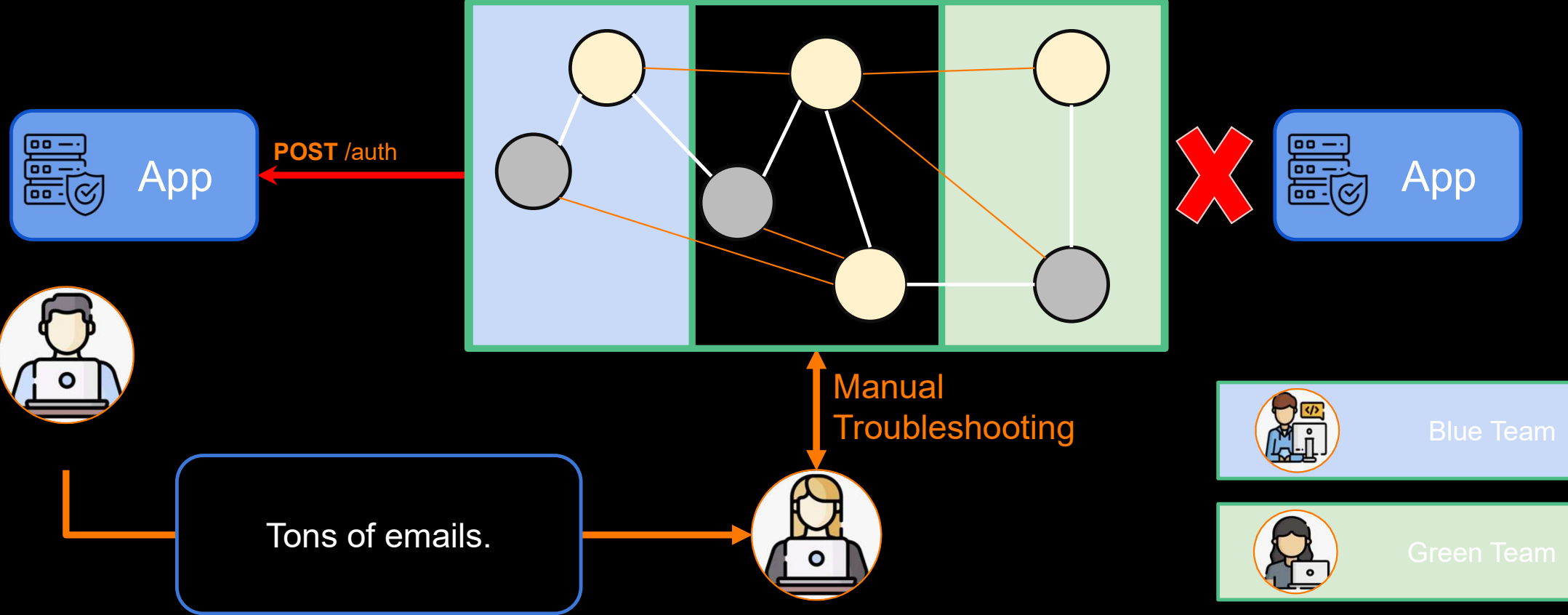
Be open to presenting the idea multiple times to the interested people to bootstrap cooperations.

Research to Delivery Path



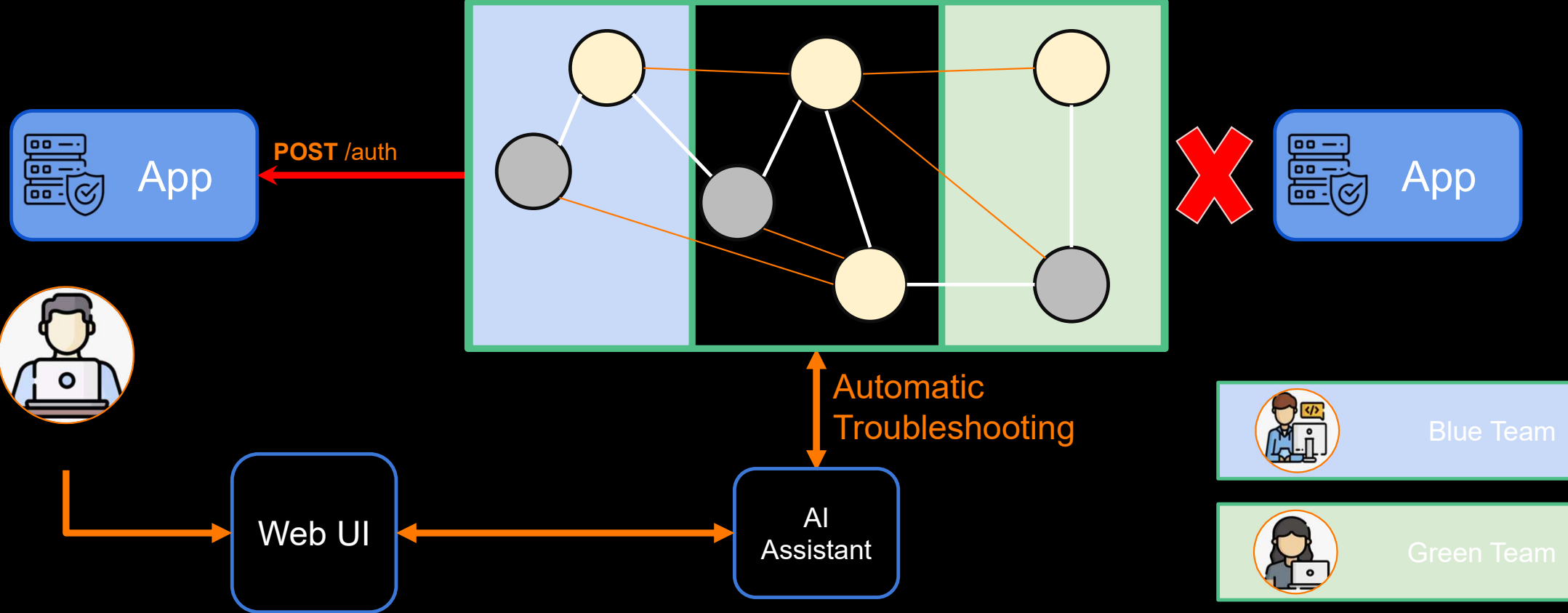
TAIA for Operational Team

For Troubleshooting L3 Connectivity Issues



TAIA for Operational Team

For Troubleshooting L3 Connectivity Issues



TAIA for Operational Team

Added Value

Faster Problem Resolution

Response time – reduced to seconds
RCA completed in minutes

Cost Reduction

Cost per RCA -> 12k tokens, 0.025\$

Enhanced User Experience

Reduces operational effort,
improve diagnostic
consistency

Availability 24/7

Expanded Number of
System Users

Thank you