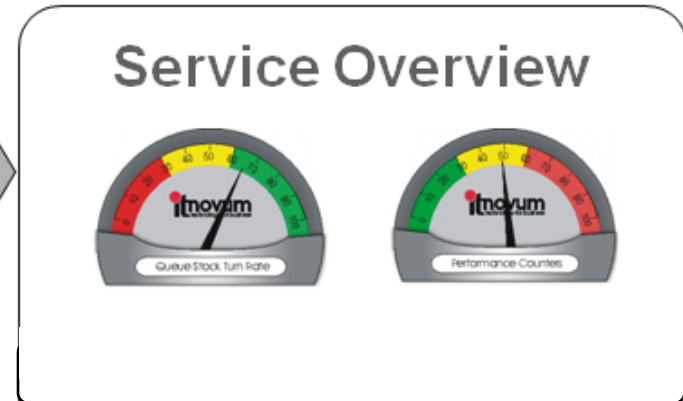


**Services**

Aggregations-Level	SLA	Puffer	Level*	Status
↑ Networking-Infrastructure	99,99 %	+ 20h:58m	1	-
↑ VoIP-Infrastructure	99,92 %	+ 35h:48m	2	-
↑ File-/Print-Services	99,75 %	+ 21h:49m	2	-
→ Email-Services	99,77 %	+ 1h:45m	1	⚠
↑ SAP-Services	99,95 %	+ 17h:32m	1	-
↑ Directory-Services	99,43 %	+ 28h:01m	1	-
↑ Blackberry-Services	99,47 %	- 2h:37m	2	⚠

\*SLA-Level 1: 99,75 % // SLA-Level 2: 99,5 %



# Complete and Comprehensive Service Management Built Using Open Source Exclusively

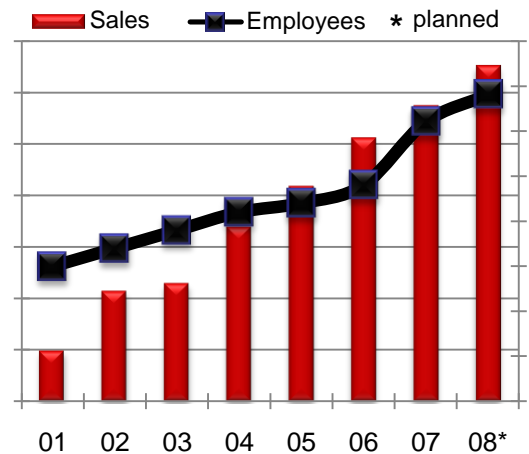
Speaker: Michael Kienle

# Agenda

- it-novum
- Systems management – overview
- Framework
  - Nagios
  - Integration with OTRS, I-doit, DokuWiki
  - Integration with commercial solutions
- Open source vs. commercial solutions
- Questions and answers

- 50 employees
- 26% growth per annum
- Customers from 100 to > 10,000 employees
- Branches in D-A-CH\*

- **IT solutions for the upper middle class & for companies**
  - Secure, reliable and economical IT
- **Complete value chain**
  - Consulting, planning, implementation, operation
- **In the external market since 1999**
  - Approx. 50% external sales, trend: increasing
  - Synergies & innovations due to group affiliation (700 Mil. Euros)
  - Partnerships & certifications
- **Focus & Expertise**
  - Open source developments in the systems management sector
  - Infrastructure optimization
  - Business intelligence / ERP
  - Corporate performance management based on SAP



\*Opening of Swiss branch: Q2/2009

# Business Sectors

## Corporate IT Management

### OpenSource

- System Management
- ITCOCKPIT / Nagios
- OTRS
- I-do-it

### Infrastructure optimization

- Storage management
- Security management
- Server virtualization
- Client virtualization
- Outsourcing

### Enterprise Content Management

- Document management
- Archiving
- SAP

### Business Intelligence

- Enterprise Resource Planning
- SAP



business partner



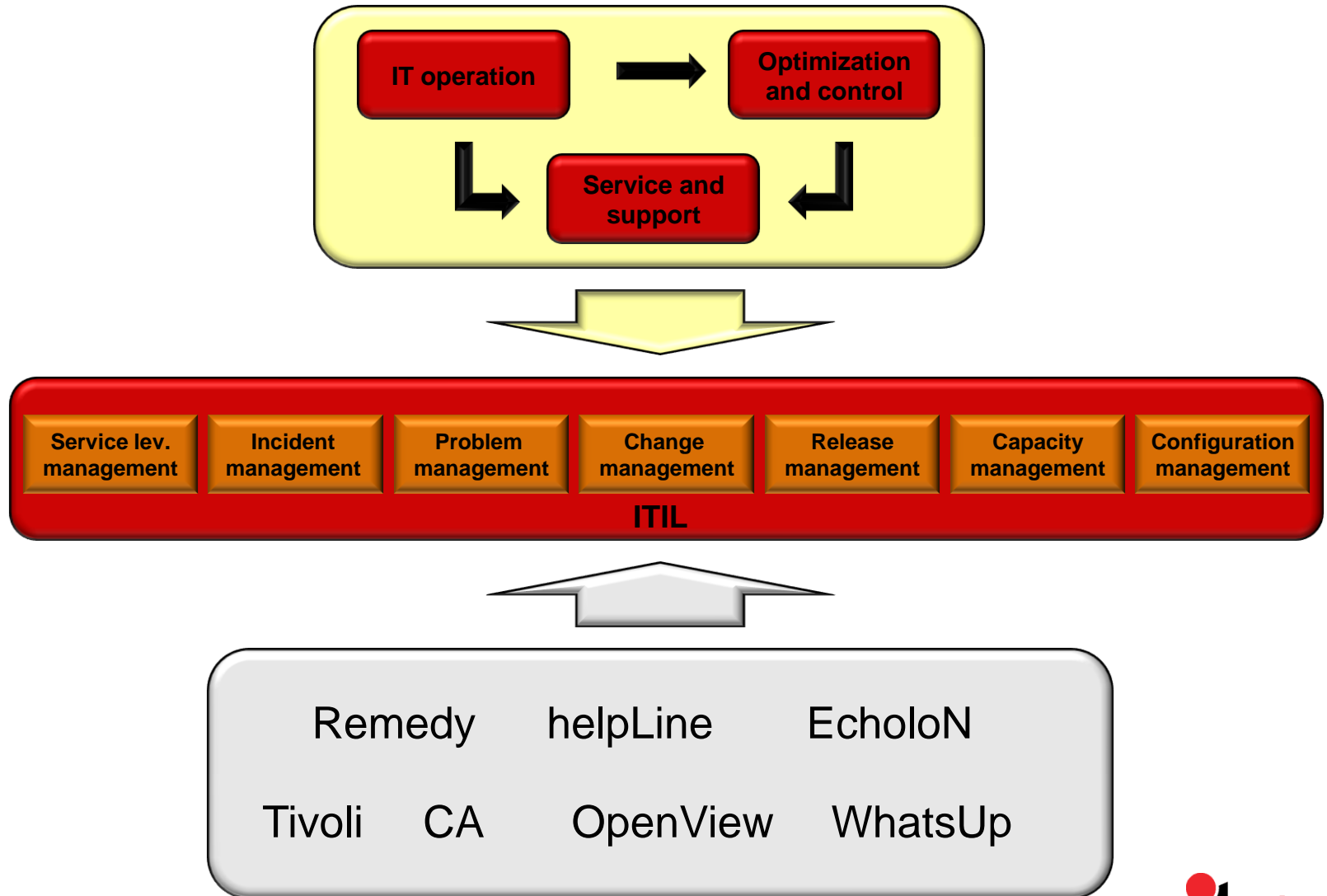
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# IT Challenges



# IT Service Management - Commercial



# ITSM – Commercial Challenges

## Large expenses

- Licensing and maintenance
- Operating costs
- Expansion with SLA, BPM, End-2-End, etc.
- Employee training

## Dependence on the manufacturer

- In-house development and enhancement rarely possible
- Adaptation to third-party systems is difficult

## Frequently long project duration

**→ Comprehensive monitoring rarely possible**



# Systems Management - Practical

## **Automatic detection of errors and bottlenecks**

- Eliminates routine controls
- Quickly identifies errors and corrects them proactively
- Performance management (trend detection)

## **Comprehensive and intelligent monitoring**

- Of all applications (ERP/SAP, Exchange, Oracle, etc.)
- Infrastructure (LAN/WAN, Server, RZ, etc.)

## **Automatic event processing**

- Integration into ticket system (tracking, escalation, etc.)
- Event management and event correlation

## **Comprehensive documentation and reporting**

- Handbooks, technical data, emergency plans, etc.
- Active SLA monitoring and reporting

## **Goal**

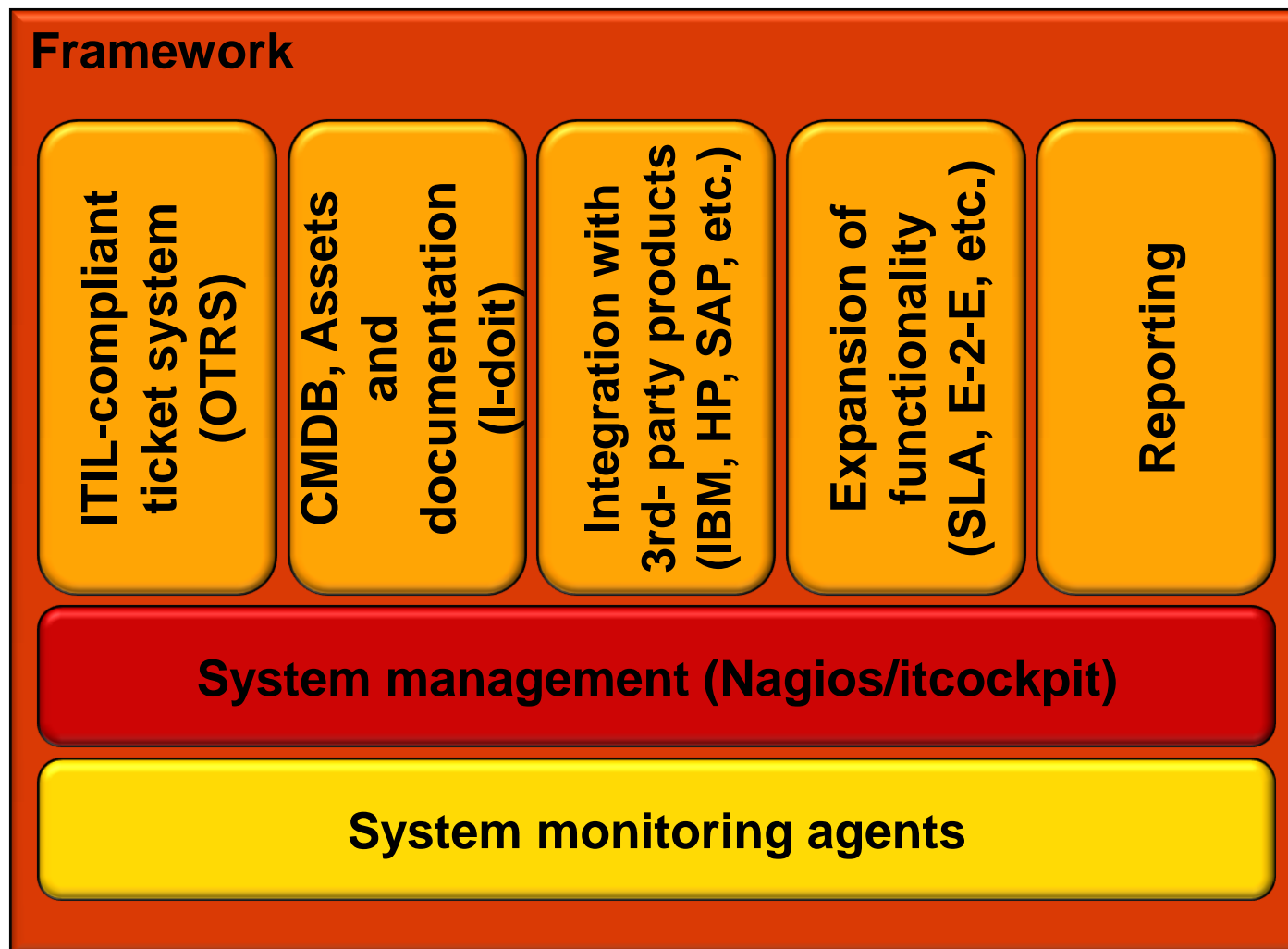
- Increasing availability and reducing risk
- Increasing stability and reducing cost

➔ **SOLUTION: Open Source Framework**

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# Systems Management Framework



# Nagios – Monitoring, Alerting, Reporting

## Nagios – Systems monitoring

- Systems, service and network monitoring
- Plug in-based architecture
- Powerful and flexible notification system
- Web interface for information on operating states, logs and reports
- Open source (GPL v2)
- Any platform can be monitored

## Advantages

- In-house extension of the source code
- Short project duration

## Disadvantages

- Missing web interface for system configuration
- Not multi-client capable
- Number of checks/minute is limited

# i-doit – Document What You Have & Do

## i-doit – ITIL-compliant IT documentation

- Recording of technical data, contracts, handbooks, emergency plans
- Workflow depiction
- Dynamic linking & dependencies
- Rights and roles
- Licensing management
- Inventorying

## Advantages

- History
- Real-time status requests
- User-independent depiction of objects and tasks

## Disadvantages

- Workflow depiction is complex
- Extensive planning and configuration

# OTRS - Build Your Own Solution

## OTRS – Open ticket request system

- 55,000 installations in 26 languages worldwide
- Relieves your service team of routine tasks
- Intelligent escalation and notification mechanisms
- Customer self service
- Unique knowledge base
- Universal, role-based permissions concept
- Integrated service-level reporting

## Advantages

- ITIL-compliant
- Very flexible and expandable

## Disadvantages

- ITIL-compliant customization for companies doesn't work out of the box
- No direct interface to systems management

# IT Service Management – Open Source

Business view

**Business service monitoring**



Business service dashboard



SLA monitoring



BP monitoring

**Event management and correlation**

Service lev. management

Incident-management

Problem management

CCMDB

Change management

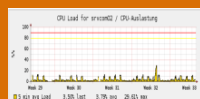
Release management

Capacity management

Configuration management

Technical view

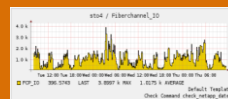
**Monitoring**



Quick values



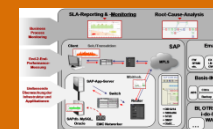
Status



Performance data



End-2-End monitoring



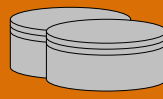
Process integration



Server



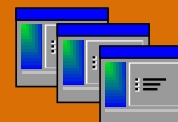
Networks



Databases



Middleware

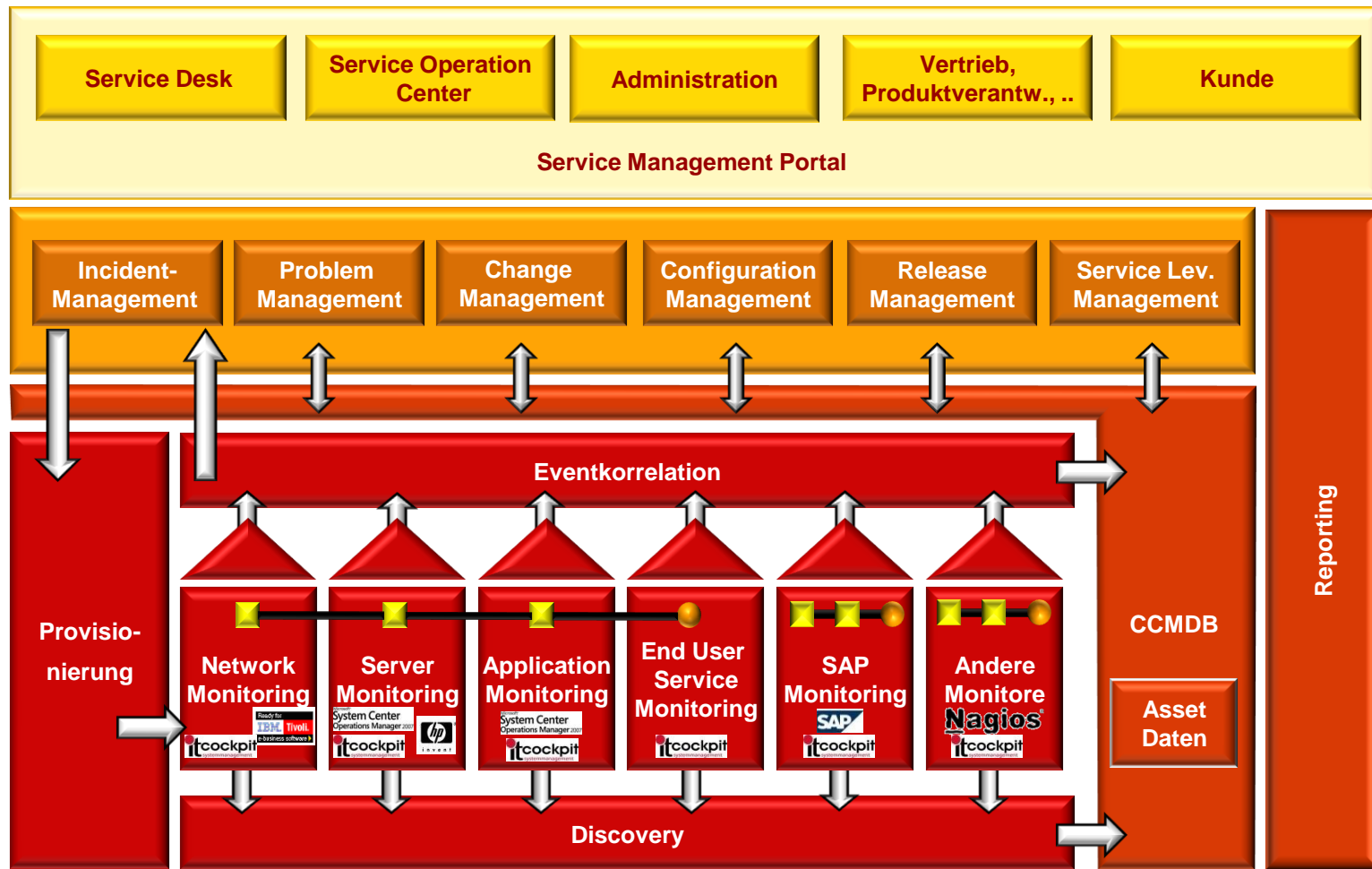


Applications



Integration

# Big Picture: Systemsmanagement































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# Added Value of an OS Framework vs. Commercial Solutions

Requirement	CommercialSW	OS Framework
No licensing costs		
Low and/or optional maintenance costs		
Entire IT can be monitored comprehensively (no licensing cost)		
Extension with SLA, business processes and End-2-End monitoring		
Multi-client capable		
Independent of manufacturer		
In-house development of agents possible (customer-specific applications)		
Short project duration		
Masters for host / creation of services / templates		
In-house expansion of source code		
Can be adjusted to any number of third-party systems		
Lower training expenses		
Easily understandable		



possible



possible with additional licensing costs and/or much effort



impossible

# Open Source

**“..You can try to avoid open source, but it’s probably easier to get out of the IT business altogether...”**

According to Gartner, in 2011 at least 80% of commercial software will contain significant portions of open source code.

Starting in 2010, no large company can any longer refuse to use open source.

# Review & Summary

## **Cost savings because of independence from manufacturer**

- through open source

## **Expansion of functionality**

- through open source frameworks, such as ITCOCKPIT
- through additional integration of plug ins
- through customer-specific project solutions

## **Short project duration**

- through simple and powerful solutions
- through a competent partner!

# Conclusion

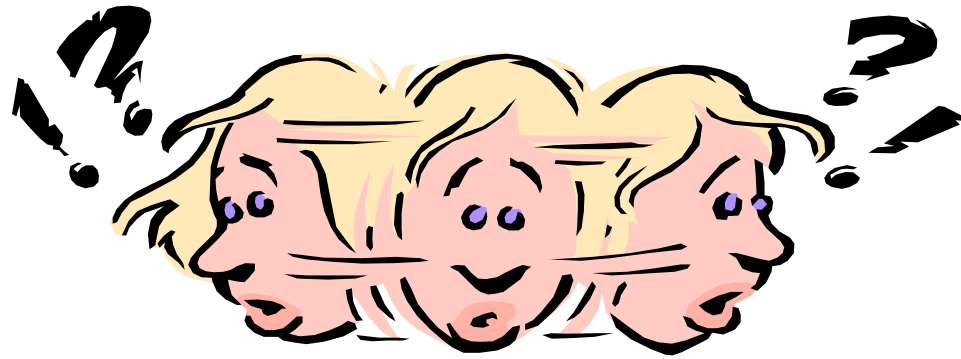
- **Open source does not need worry about being compared with commercial solutions.**
  - Immediate added value on introduction
  - Integration into existing IT environment (HW / SW)
  - Integration into existing mgmt processes
  - Many powerful functional add-ons (SLA, BPM, E2E, DokuWiki, OTRS, etc.)
  - ITIL-compliant expansion for ticket system and cmdb-like applications
  - Increases your IT's added value
  - Reduces your business risk

## **Attention: OPEN SOURCE TRAP !!!**

- ➔ Expense (one-time/ongoing) is underestimated
- ➔ Professional partner and support is advisable

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# Questions and Answers

# Thank You Very Much!



## Your contact

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