

# Service-Oriented Architecture (SOA)

The platform for comprehensive  
process management:

The end of standard applications?

Munich, August 2008

Forward

## SOA – The platform for comprehensive process management

Service-oriented architectures (SOAs) are the design concept at the core of state-of-the-art software environments. Greater flexibility for business processes, shorter time to market for applications, better integration through open standards and close cooperation between IT and other departments – or business alignment – are the goals. The business finally gets the applications it needs. According to IDC, a leading market research firm, more than 80 percent of businesses will adopt the concept of SOA or at least parts of it over the next few years.

But there's more to SOA. It also provides the foundation for integrated process design and comprehensive process management. Both within an organization and beyond company walls, processes become more transparent, measurable, intuitive and, thus, more easily controlled. Vendor-neutral SOA governance processes control the introduction and design of a flexible architecture, thereby ensuring that goals are not just set, but also achieved.

# Goal of the Study

## SOA – the gentle IT revolution

The IT industry is experiencing exciting times right now. Revolution, transformation or evolution – you can call it what you want. But one thing is for sure: the entire industry is in a state of change. What exactly is at the root of this “hidden IT revolution”? What issues are confronting an entire industry? What are the characteristics of current and future IT landscapes in Germany?

This study provides insight to the IT landscape of German companies and, specifically, to SOA and BPM and the relevant IT concepts. The goal of this study is to answer the following questions:

- SOA – the end of standard applications?
- SOA and BPM –two sides of the same coin?
- SOA and governance – are they necessary?
- SOA, SaaS and IaaS – contradictions?
- BPM, BAM and BI – more transparency?

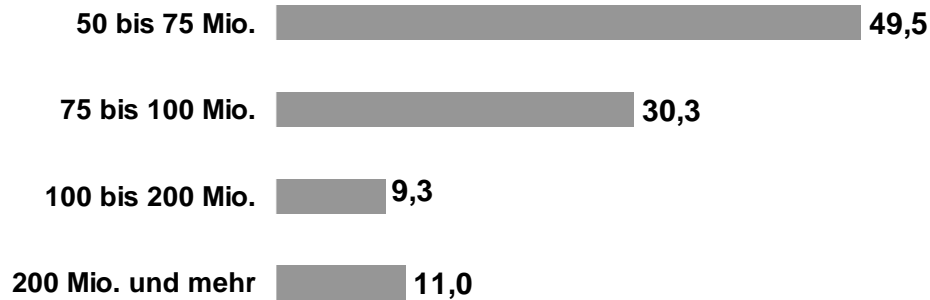
## Description of the Study

<b>Survey participants:</b>	Senior IT executives in German companies with at least €50 million in revenue
<b>Target audience:</b>	Senior IT executives
<b>Method:</b>	Telephone survey (CATI)
<b>Executing institute:</b>	ARIS Umfrageforschung, Hamburg
<b>Random sampling:</b>	Disproportionate random sampling, 181 surveyed
<b>Participant generation:</b>	Telephone screening
<b>Period of time:</b>	July 21,2008 to August 1, 2008
<b>Project management:</b>	COMPUTERWOCHE Market Research Matthias Teichmann

## Structure of Random Sampling: Company Size and Location

*Expressed as percentages*

### Size by revenue



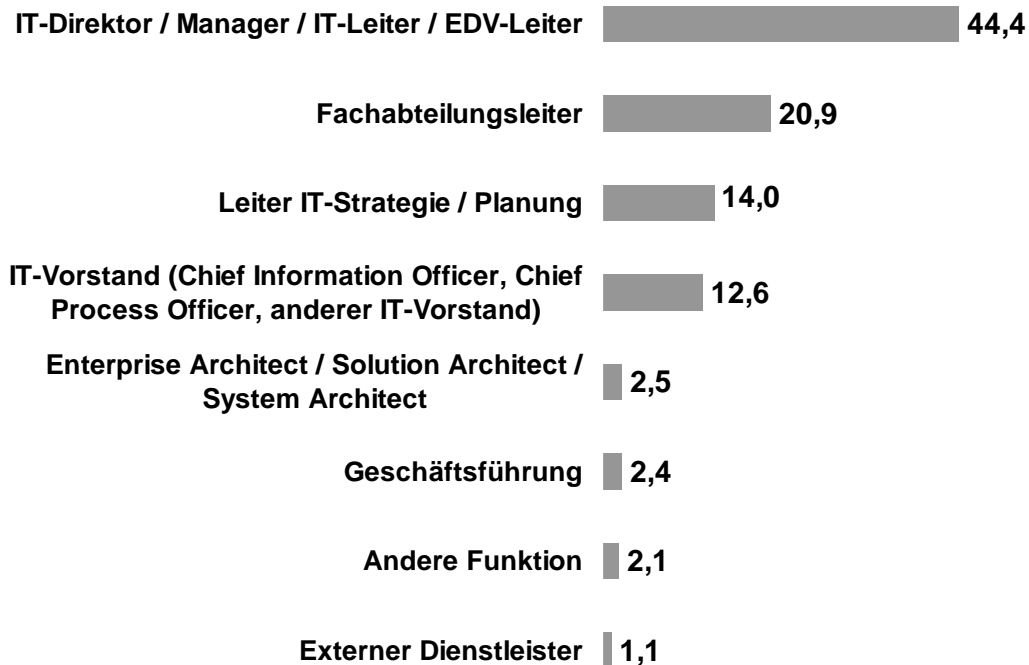
Ein Standort 33,0

Mehrere Standorte in Dtl. 31,8

Mehrere Standorte weltweit 35,2

## Structure of Random Sampling: **Function in Company**

*Expressed as percentages*



## Structure of Random Sampling: **Industry of Company**

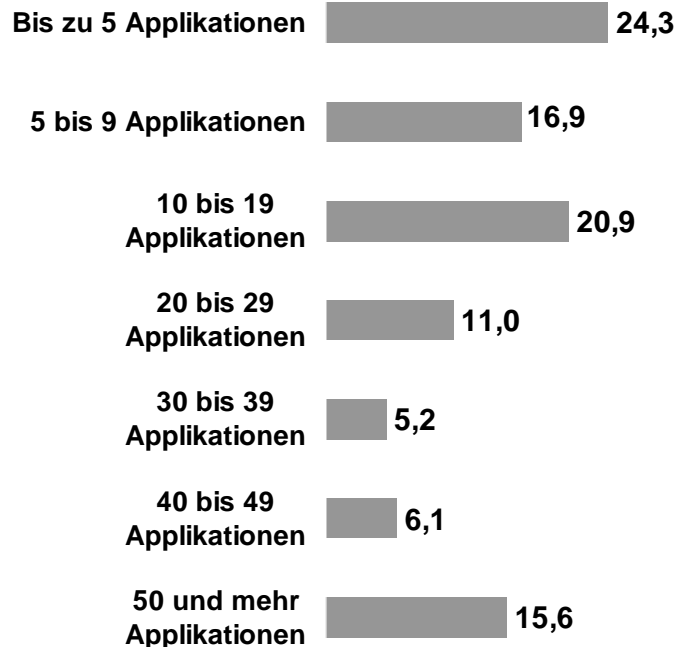
*Expressed as percentages*



## Structure of Random Sampling:

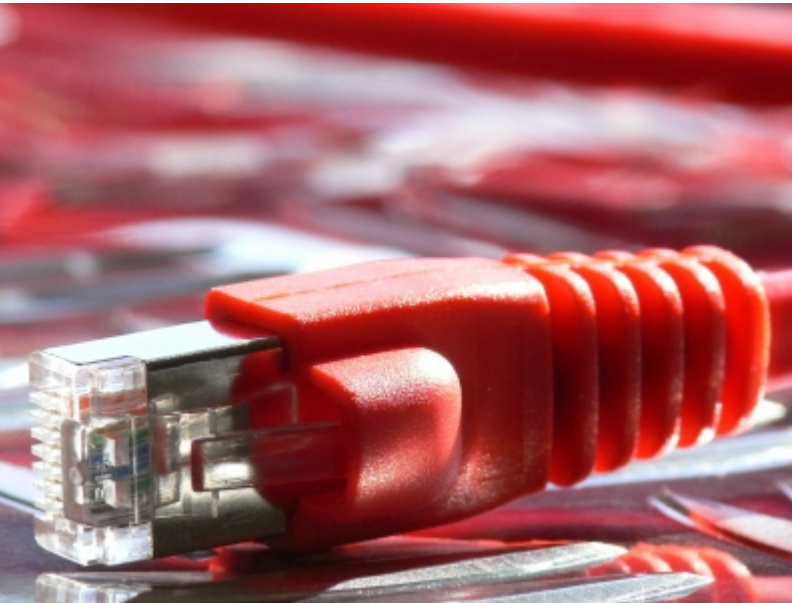
# Number of applications in use at company

*Expressed as percentages*



## Management Summary

- ❶ The flexibility of IT is of great to very great importance or at least medium importance to more than 90% of those surveyed.
- ❷ BPM is a “rising star”: One in five considers it high priority at present. 28% of those surveyed in IT function; 16% of those surveyed in upper management.
- ❸ There is disagreement between IT and business managers about the value of IT: IT execs consider it to be strategic, while the majority of business execs give it a more tactical role.
- ❹ SOA projects are not always referred to as SOA, but have a number of different names (architecture mgmt, BPM, etc.)
- ❺ SOA is the base architecture for business process management (60%)



# Service-Oriented Architecture (SOA)

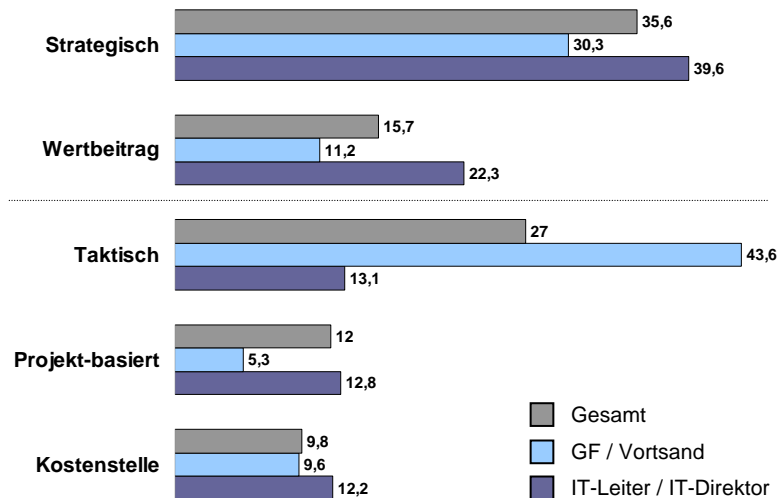
The platform for comprehensive process management:

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## Core Results

# Role of IT in the company

*Expressed as percentages*

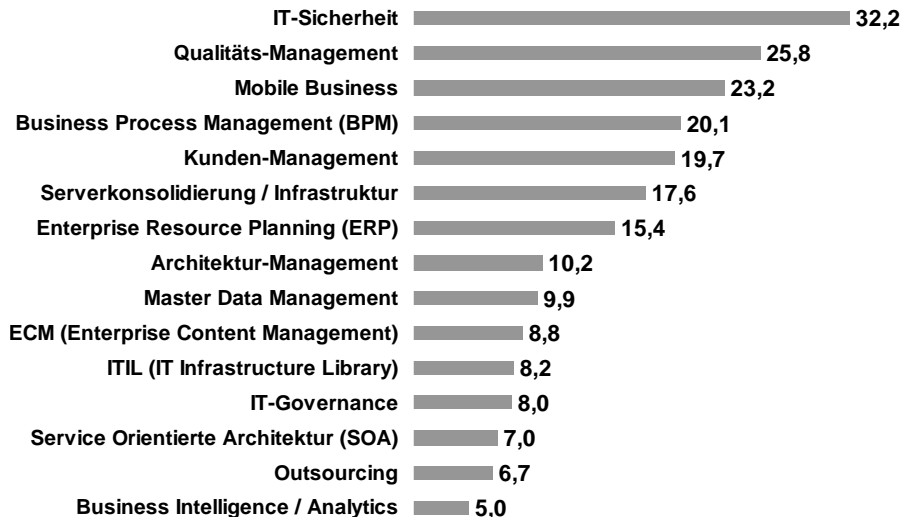


## IT field must work on clarifying of its role

- Lack of agreement about role of IT
- 40% of IT execs consider IT of strategic nature
- Just three in ten top execs agree. They see it more as a tactical tool (43%)
- Less than one-fifth on average believes that IT contributes to the value of the company.

# Current priorities with regard to IT infrastructure and organization in companies

*Expressed as percentages*

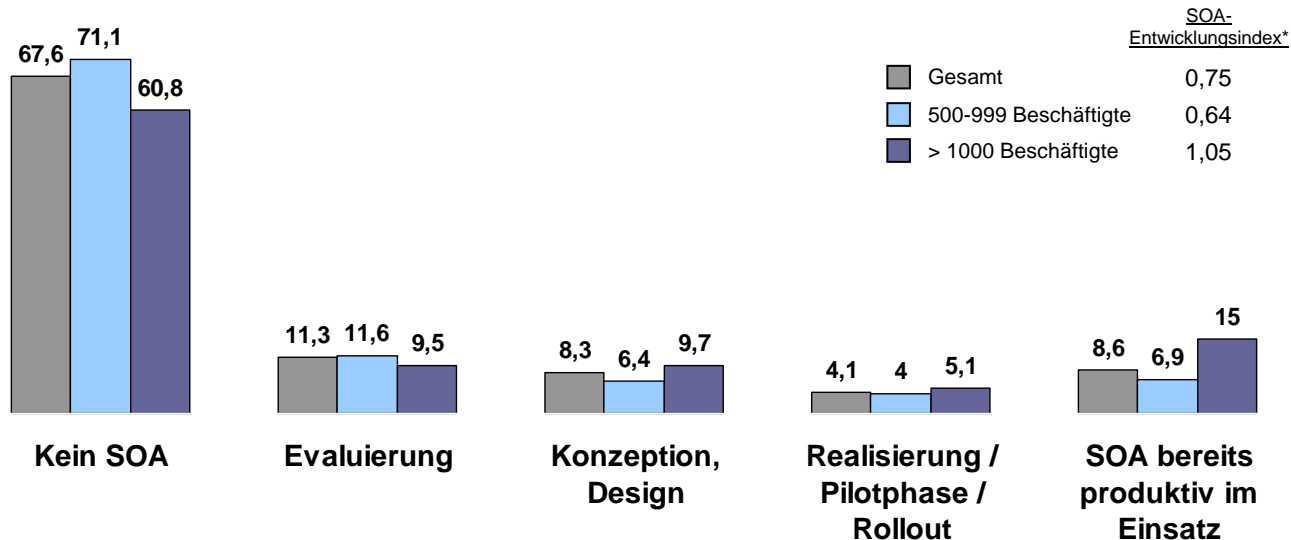


## Security is key. Process management front runner.

- IT security has been the number-one topic for companies for years.
- SOA is a high priority for 7%, architecture management for 10%. This shows that SOA projects are not always referred to as such, but have many different names.
- BPM is the “rising star”: One in five considers it high priority at present. 28% of those surveyed work in IT function; 16% of those surveyed in upper management.

# SOA implementation stage

Expressed as percentages



## SOA: From concept to production

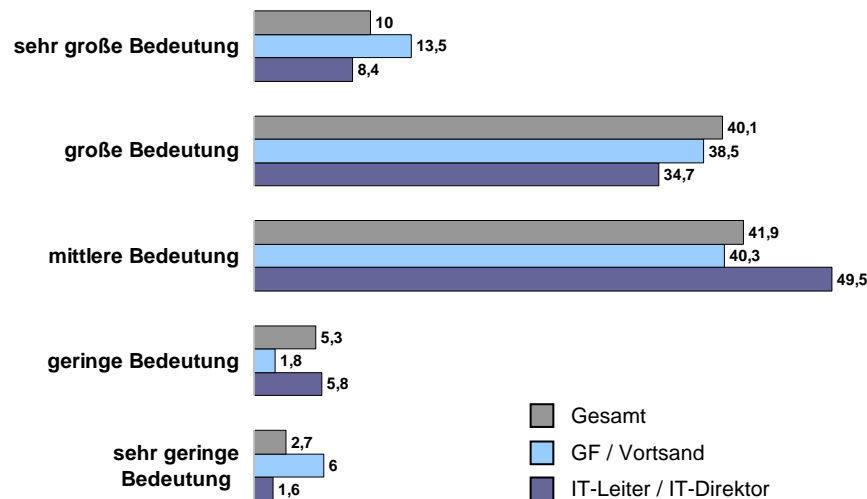
- Approx. 25% of the participants are currently conducting SOA projects. Half of these projects are in the evaluation stage. The other half are in the planning or realization stages.
- SOA is most widely established in large companies. Smaller firms are gaining speed (see “Evaluation”)
- 40% of the participants employ up to 9 different applications, 15% employ 50 or more applications: The higher the number of apps, the more widely spread SOA is.

\* SOA implementation stage:

No SOA (0), Evaluation (1), Planning / Design (2), Realization / Pilot / Roll out (3), Up and running (4)

# Importance of “improving flexibility of IT landscape” to companies

*Expressed as percentages*

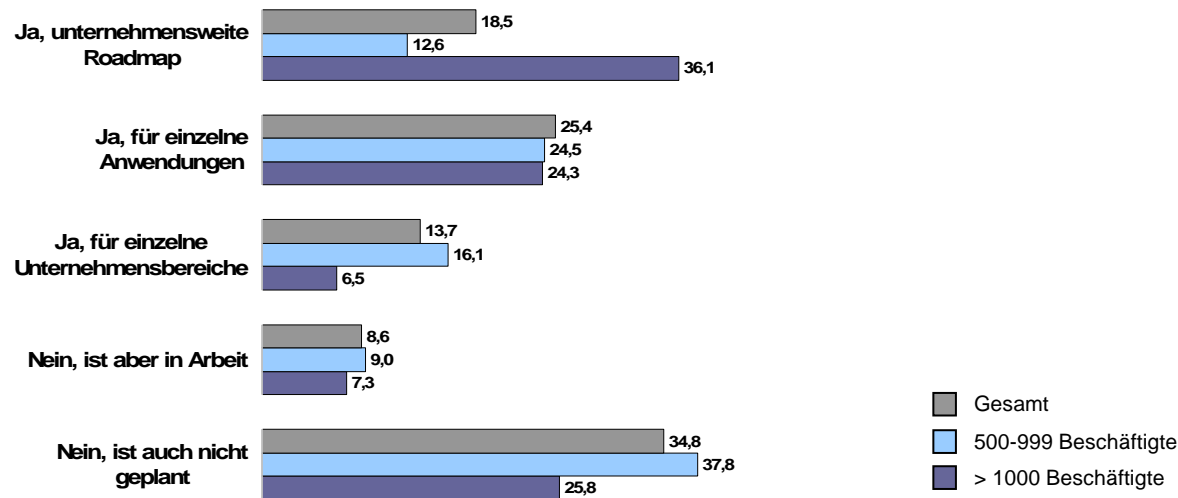


## Everyone wants flexibility

- Flexibility of IT is of great to very great importance or at least medium importance to more than 90%
- IT and top management agree on this
- The goal: Flexible IT at the core of agile business processes
- IT heads are below average in rating the creation of flexible IT with very great importance or great importance. They are more involved in the operational side of IT than in strategic planning.

# Existence of a road map for improving flexibility of IT landscape

*Expressed as percentages*

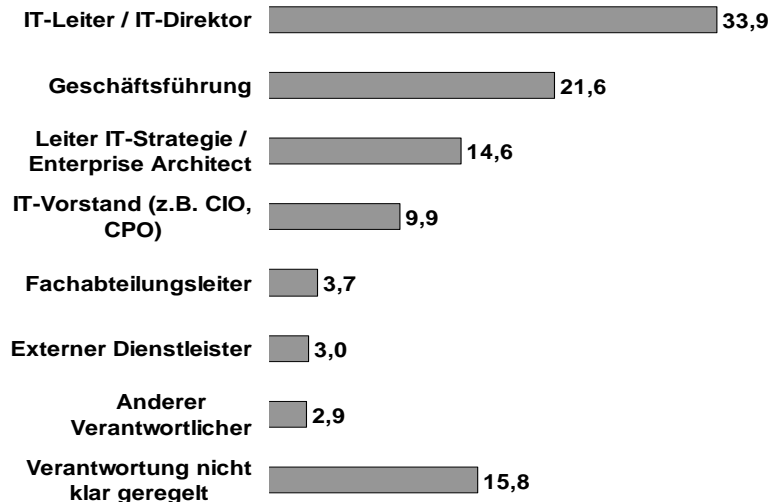


## Road map: Well on its way

- Well over 50% of those surveyed have a road map for improving the flexibility of their IT
- IT and upper management agree on the necessity of a road map
- Two out of three large companies are driving IT modernization
- Upper mgmt. and business departments lean towards modernization of individual apps and areas of co., while CIOs consider the company in its entirety.

# Ownership of IT modernization projects

*Expressed as percentages*



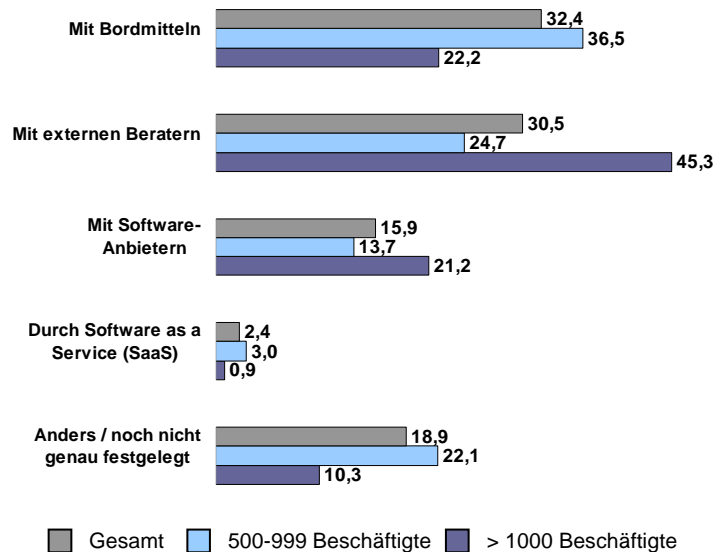
## Who holds the scepter?

- IT heads in one-third of the surveyed companies are responsible for the implementation of a road map
- Just over 3% of companies have a Chief Process Officer whose area of responsibility includes project ownership
- At one-sixth of companies ownership of IT modernization is not clearly defined. This is particularly true of small and medium-sized firms. Clearer definitions exist at companies where IT plays a strategic role.

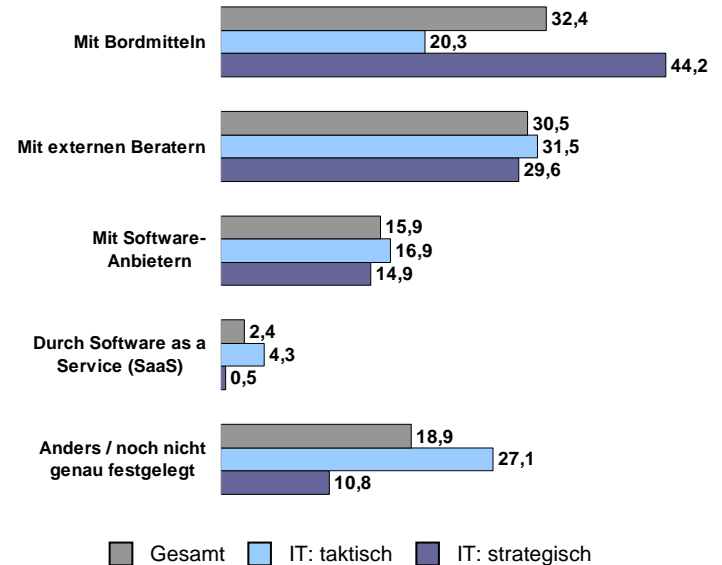
# Road map implementation

According to company size

*Expressed as percentages*



According to role of IT

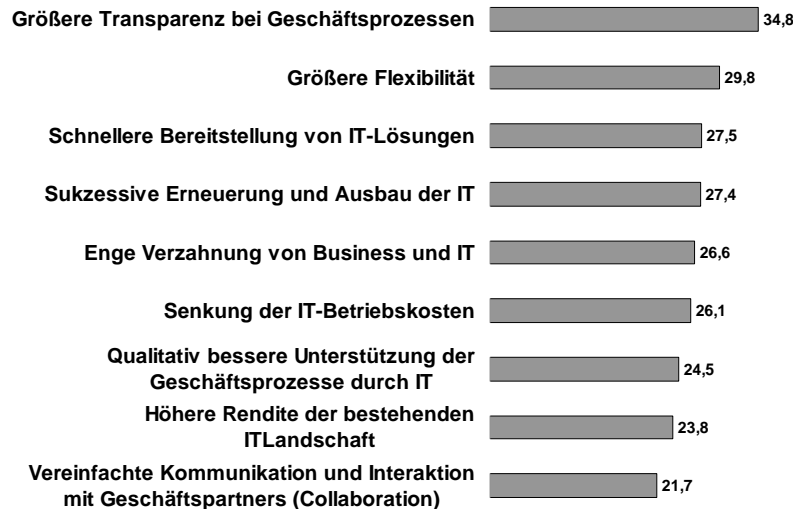


## Who implements the road map?

- The larger the company, the more consultants are used.
- The more strategic the role of IT is in a company, the greater the likelihood of the company conducting modernization projects is to use its own resources.
- Note: The smaller the company, the more common it is to use the concept of SaaS for implementing the road map.

# The most important goals when implementing flexible and agile IT

Top 10\*; Expressed as percentages



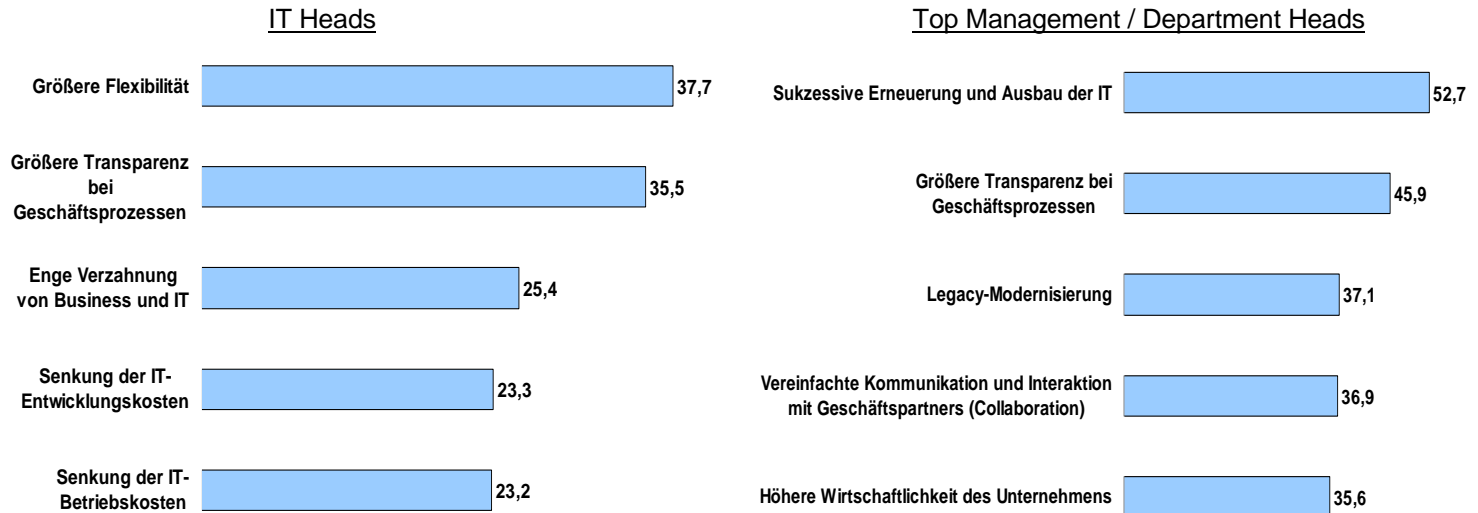
## IT has a purpose: Why companies modernize IT– Part 1

- Transparent, flexible processes is the goal of business and IT decision makers
- Modernization of IT is pursued in order to improve flexibility
- End the application bottle neck: Shorten application time to market

\* Choice of 13 possible goals when implementing flexible and agile IT. Filter: SOA is pursued in company

# The most important goals when implementing flexible and agile IT: IT heads vs. top management

Top 5 from each category\*; Expressed as percentages



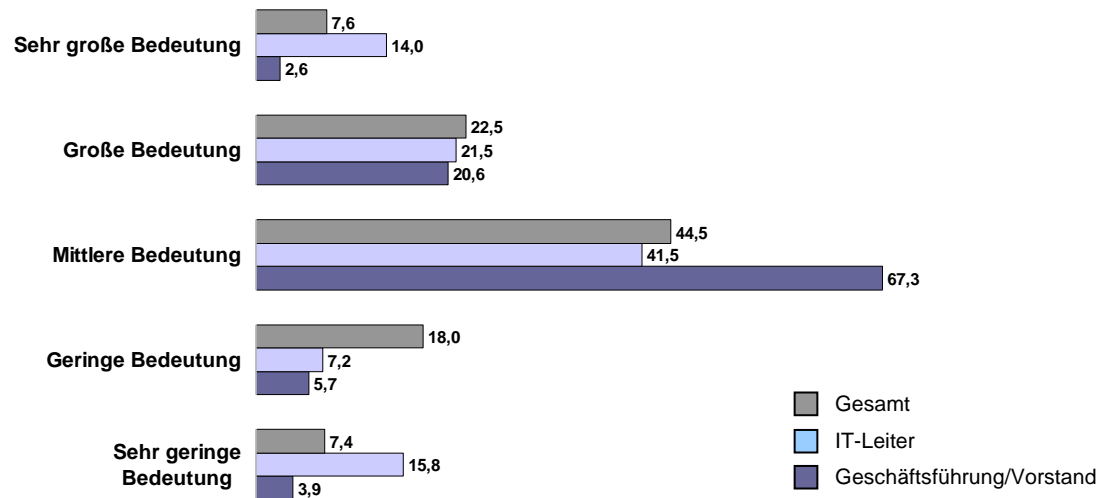
## IT has a purpose: Why companies modernize IT– Part 2

- Lower IT costs is a desired by-product, but not in top 5
- 25% of IT heads hope for closer cooperation between IT and business, while just 9% of business decision makers have the same hope. Dialog is needed here!
- Note: The more important the role of IT, the stronger the focus on optimization of business processes
- Top management would like to improve collaboration, which is a prerequisite for internationalization

\* Choice of 13 possible goals when implementing flexible and agile IT. Filter: SOA is pursued in company

# Importance of IT governance to successful implementation of SOA

Expressed as percentages



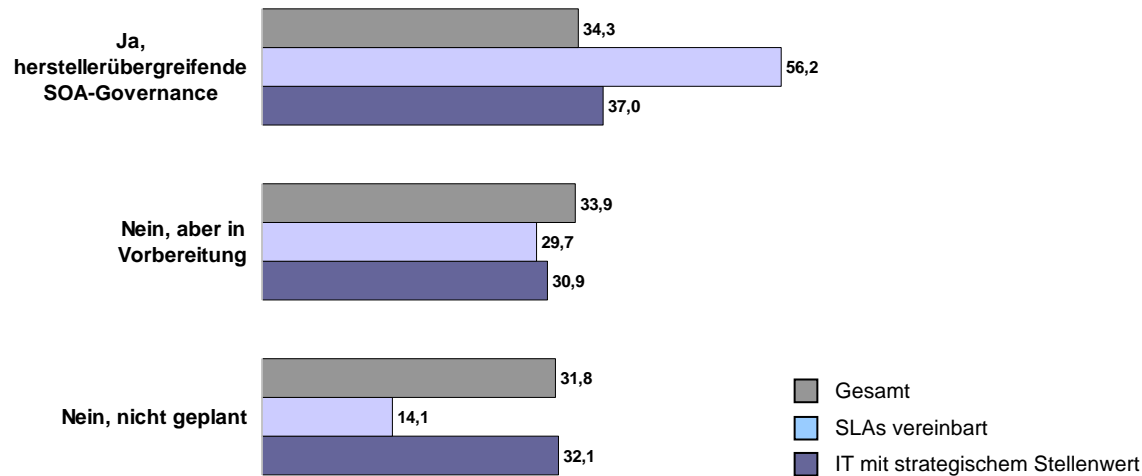
## Business drives IT governance

- 75% of those surveyed who pursue SOA consider governance of medium to very high importance to the success of SOA implementation
- Governance is a high-priority topic for business decision makers.
- The importance of governance (bigger teams, distributed roles and responsibilities, more need for communication) is greater the larger the company is
- Note: When IT has a strategic role, governance is considered of greater importance

Filter: SOA is pursued by company

# Implementation of vendor-neutral SOA governance

*Expressed as percentages*



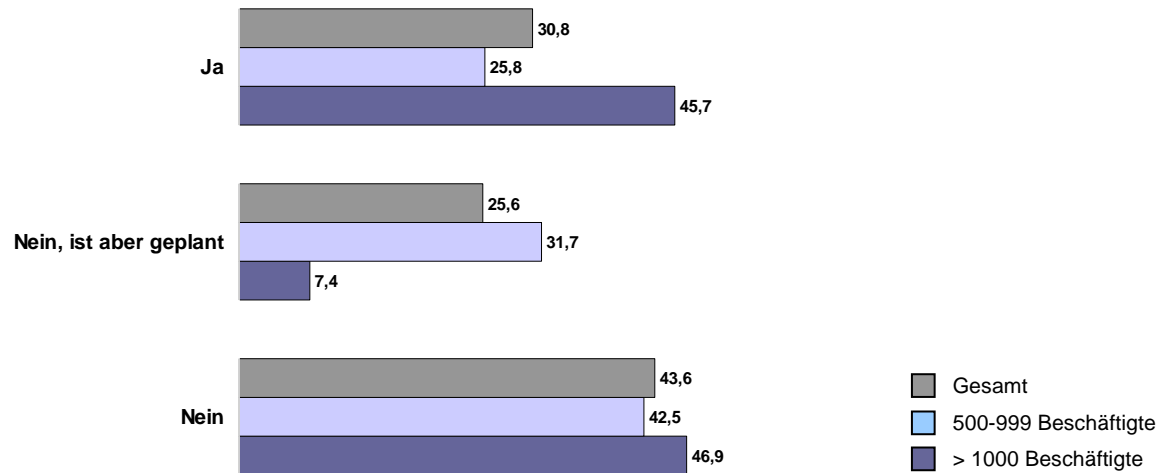
## SOA governance implemented

- One-third of companies who pursue SOA has implemented SOA governance
- One-third is planning to implement it
- The more strategic the role of IT, the more established governance is

*Filter: SOA is pursued by company*

# Service-level agreements (SLAs) between IT and business units

Expressed as percentages

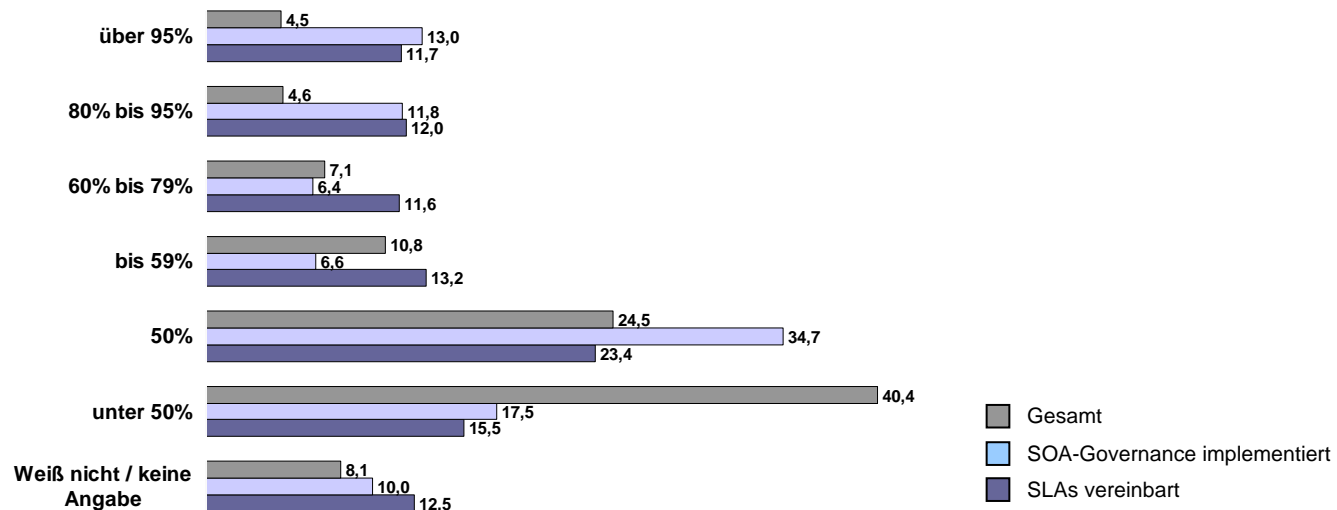


## SLAs are still a scarce commodity

- Just under one-third of the surveyed companies have defined SLAs in place
- One-third plans to introduce SLAs
- The larger the company, the more common the existence of SLAs. In these cases, services from multiple partners must be coordinated with each other.
- Note: The more strategic IT is considered, the more SLAs are defined or planned (over 60%). Where IT is used in a tactical role or as a cost center, the percentage of those with SLAs drops to about 40%.

# Current goal achievement with SOA projects

Expressed as percentages



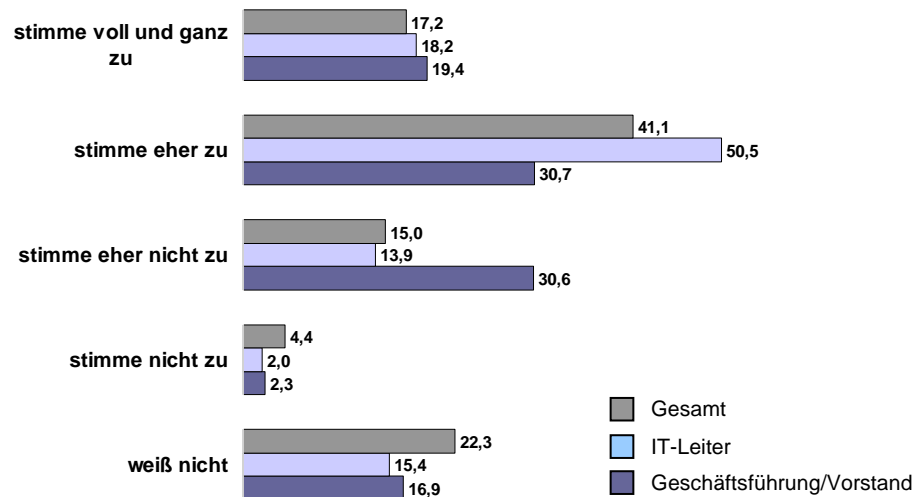
## SLAs and governance are critical to meeting SOA project goals

- 40% of the participating companies meet less than 50% of their SOA goals
- Smaller firms do better (fewer apps, ERP vendor takes care of architecture)
- When IT and/or SOA governance is/are established, the level of goal achievement rises considerably
- When SLAs have been defined, the level of project goal achievement also rises
- **Note: If you can't measure it, you can't assess it (Norton/Caplan)**

Filter: SOA is pursued by company

# Agreement with statement “SOA is the base infrastructure of BPM”

*Expressed as percentages*

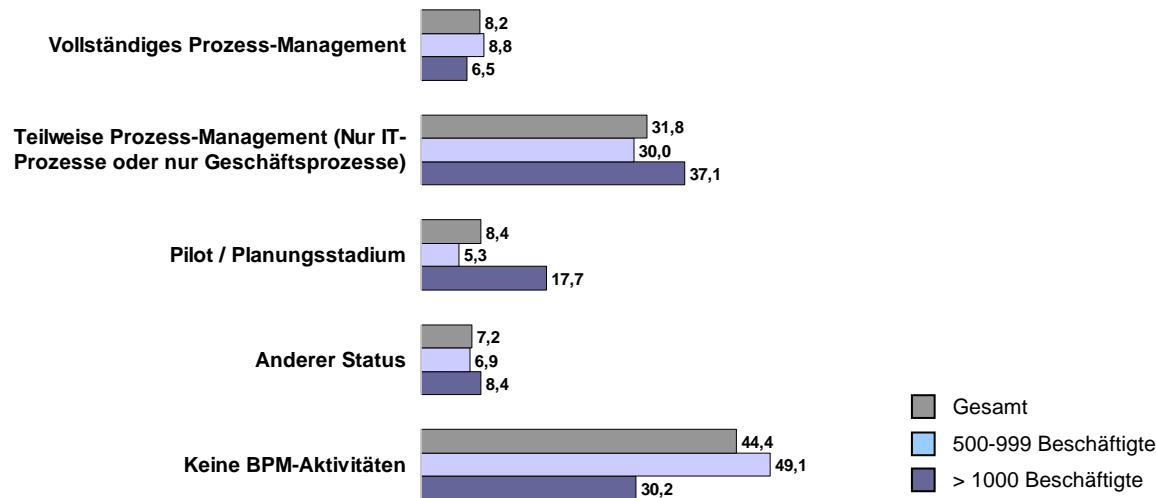


## SOA and BPM go hand in hand

- Approx. 60% consider SOA to be the platform for BPM (agree completely or agree mostly)
- IT is the driver of BPM 80% of the time because of knowledge of what the tools can do
- Awareness of the often “rocky” reorganization of a company to a process-based one hinders agreement of business management (50%)

# Current implementation of business process management (BPM) in companies

*Expressed as percentages*

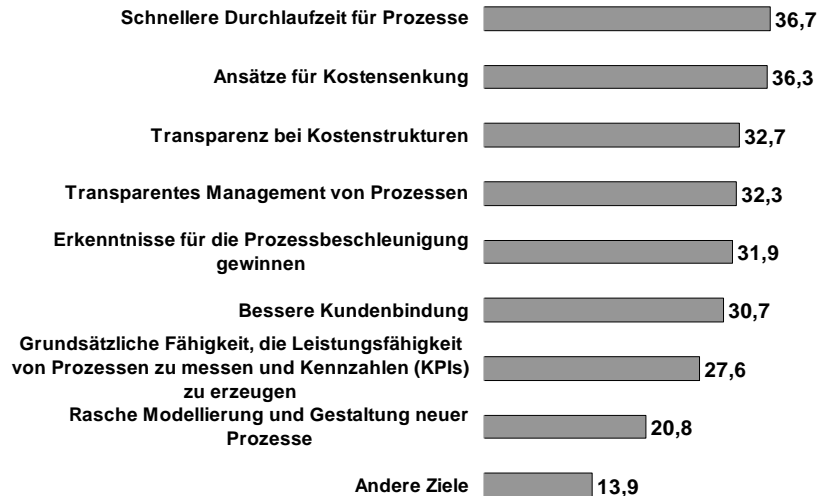


## Large companies drive BPM

- Some 40% have implemented BPM throughout or for process fragments
- ITIL is the de facto standard for IT processes, thus broader proliferation of BPM here
- Large companies drive BPM activities more than others. They aim to improve transparency and manage/automate end-to-end processes (many participants, many interfaces and silo structures)

# Companies' most important strategic goals with BPM

*Guided question, expressed as percentages*



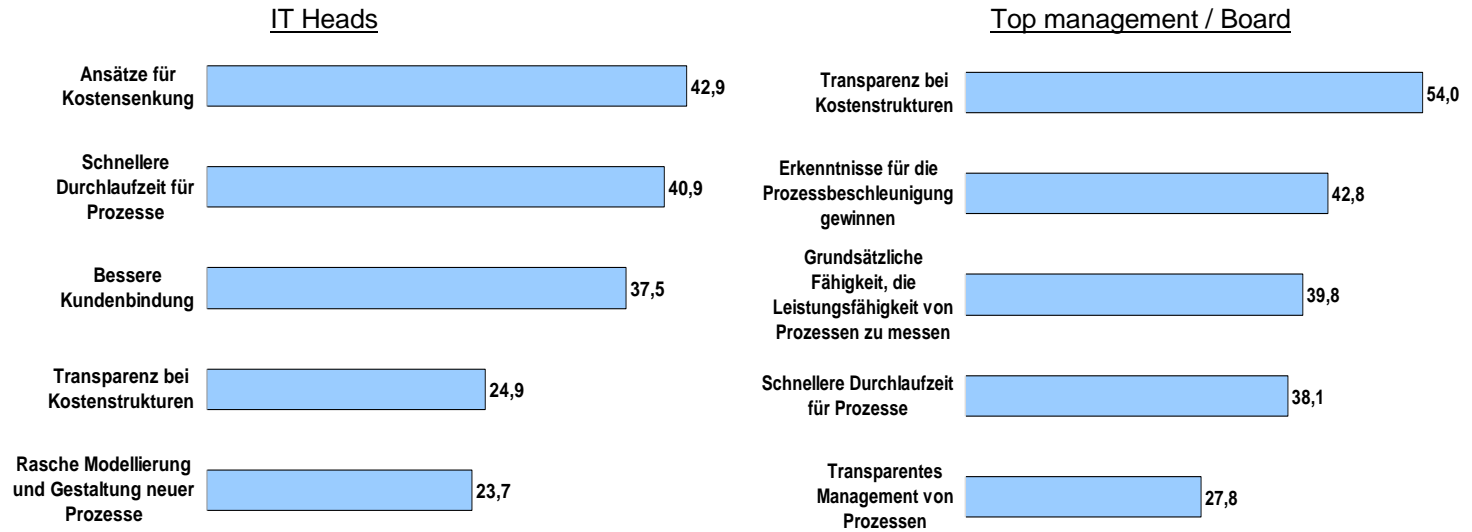
## Shorter time to market

- Shorter development processes result in faster innovation cycles
- Shorter order processing times lead to faster invoicing and thus improved cash flow
- Knowledge of business processes reveals process gaps and savings potential
- Process knowledge reveals process automation potential

*Filter: BPM implemented in company*

# The most important strategic goals for BPM: IT head vs. top management/board

Guided question; Top 5 answers\*; Expressed as percentages



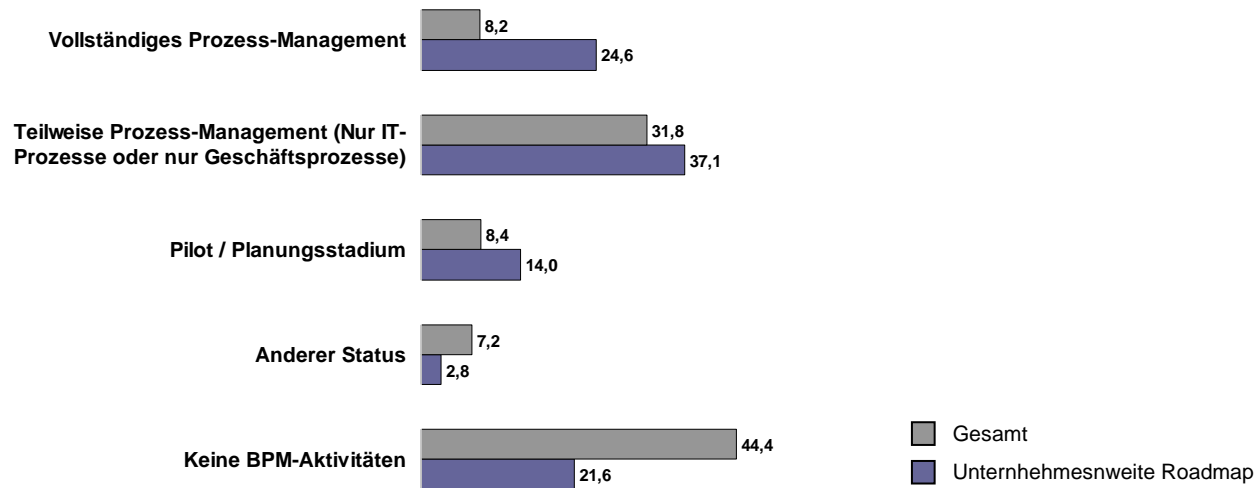
## Cost structure vs. processing times

- The highest priority to half of all surveyed business managers is cost structure transparency
- IT heads see BPM more as a way to cut IT costs
- Fast process modeling is not a top-5 goal among business management
- Note: IT must make itself heard to communicate the potential for process design with BPM.
- BPM hurdles: Business says: no defined KPIs. IT says: Employees aren't familiar with processes!

\*Filter: BPM implemented in company

# Implementation of BPM, when creation of flexible IT road map exists for entire organization

*Expressed as percentages*



## BPM is anchored in the road map

- Companies that have a road map for IT modernization have more advanced BPM
- A road map is more frequently defined when IT plays a strategic role

# Use of “software as a service” (SaaS) as reference model for applications and services

*Expressed as percentages*

## All surveyed

Wird bereits gemacht 9,8

Ist geplant 23,1

Nein 67,0

## Company-wide road map

Wird bereits gemacht 20,6

Ist geplant 20,1

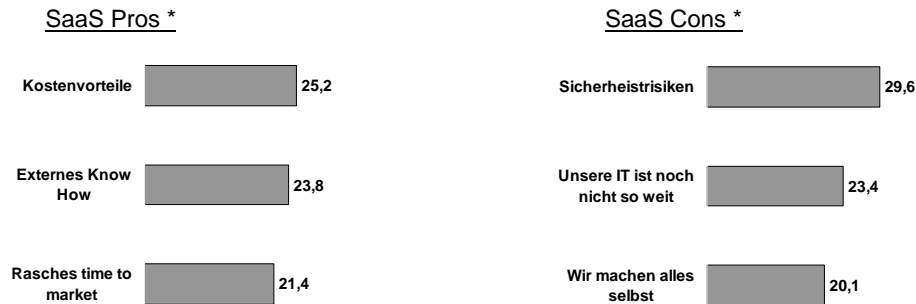
Nein 59,4

## Software as a service is in its infancy

- SaaS is a suppliers' market
- Companies are accepting the concept. One-quarter expects to be able to implement new functionality quickly with it.
- Small companies are more open to SaaS (50 % include it in their plans)
- Companies with an IT modernization road map use SaaS more or include it more in their plans than those without a road map.
- Note: SaaS is well suited for implementing and trying out new functions. Existing IT should be prepared for it (standards and security, availability)

# Pros and cons of “software as a service”

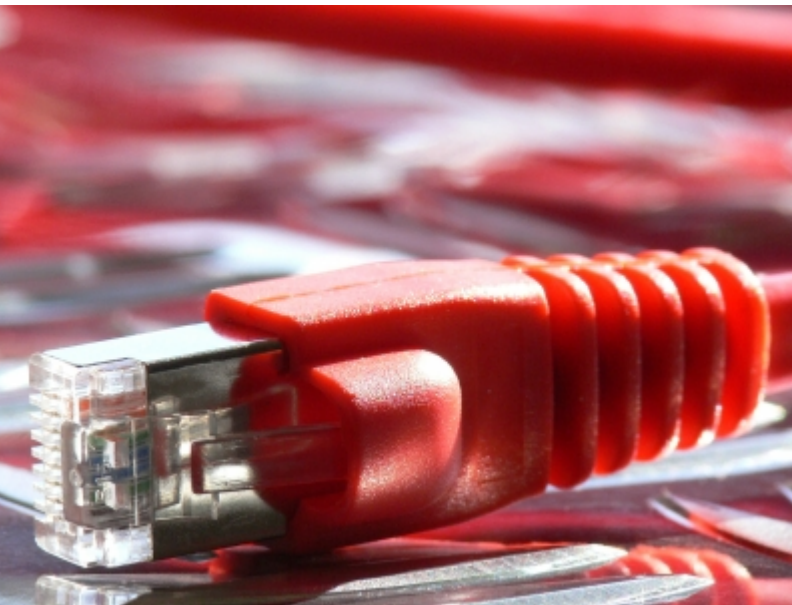
*Guided question, Top 3 answers, Expressed as percentages*



## Cut costs, so where's the security?

- For all those surveyed, lowering costs is the main reason to use SaaS.
- IT heads have the highest percentage with 34%.
- 24% of upper management/board considers “implementation of new functions” to be the top reason.
- SaaS simplifies access to external know-how and enables fast change of vendors
- The more strategic the role of IT, the more cost benefits are considered a reason for using SaaS.
- While the main con of SaaS for IT people are security risks (43%), business management says: “We do everything ourselves “ (28%) and “our IT is isn't ready yet “ (26%).

Those were the core results of the study



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Thank you for your attention

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