giz

ORF SEE IT - Development of Regional Export Promotion Action Plan

IT Market Analysis Germany

April, 2014

Transform to the power of digital

Capgemini Consulting

IT Market Analysis Germany

Agenda

Germany – Country Overview

Germany- Key Economic Indicators			
	2010	**2011**	**2012**
Population (Mio)	81.8	81.8	81.2
GDP (Bn EUR)	2497.16	2609.90	2666.40
Real GDP/ Capita (in EUR)	29,100	30,000	30,200
GDP Growth	4.0%	3.3%	0.7%
Trade Balance of Payments (% GDP)	6.1%	6.2%	7.0%
Inflation Rate	1.1%	2.1%	2.0%
Unemployment Rate	7.1%	5.9%	5.5%

Source: Statistisches Bundesamt, Eurostat, OECD

Germany – ICT market overview (1/3)

Growing importance of Software and IT Services

	Total ICT market value by segment 2010 – 2014 (in € billion)				
Segment	**2010**	**2011**	**2012**	**2013**	**2014***
IT Equipment	14.3	14.2	15.1	15.1	15.0
Software	15.5	16.2	17.1	17.8	**18.7**
IT Services	33.1	34.2	34.9	35.8	**37.0**
Telecommunication Equipment	9.9	10.8	12.1	13.7	14.3
Telecom Services	47.4	46.7	46.4	45.4	44.7
Total ICT	**120.2**	**122.1**	**125.6**	**127.8**	**129.7**

	Total ICT market growth rates by segment 2011 – 2014 (in %)			
Segment	**2011**	**2012**	**2013**	**2014***
IT Equipment	-1.2%	6.7%	-0.2%	-0.6%
Software	4.9%	5.1%	4.6%	**5.0%**
IT Services	3.4%	**21.0%**	2.5%	**3.4%**
Telecommunication Equipment	9.3%	11.7%	13.0%	4.7%
Telecom Services	-1.6%	-0.5%	-2.2%	-1.6%
Total ICT	**1.6%**	**2.9%**	**1.8%**	**1.5%**

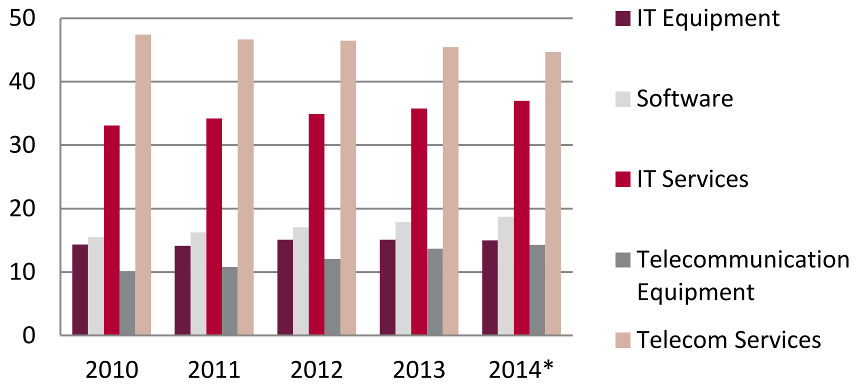
Source: EITO 2013

**Estimated values*

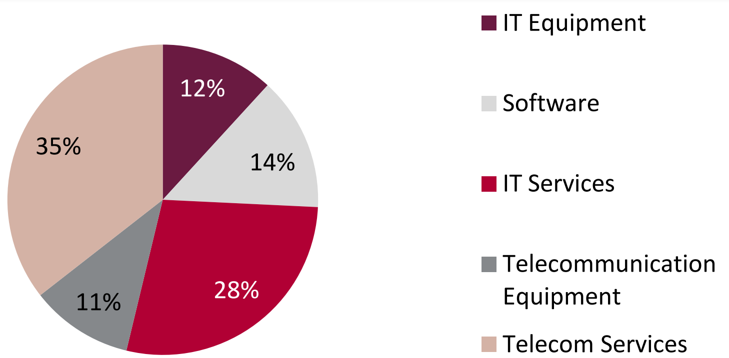
Germany – ICT market overview (2/3)

Software and IT Services as growing segments – Telecom Services remains the largest segment

ICT market value by segment (in € billion)



ICT market shares by segment (2013, in %)



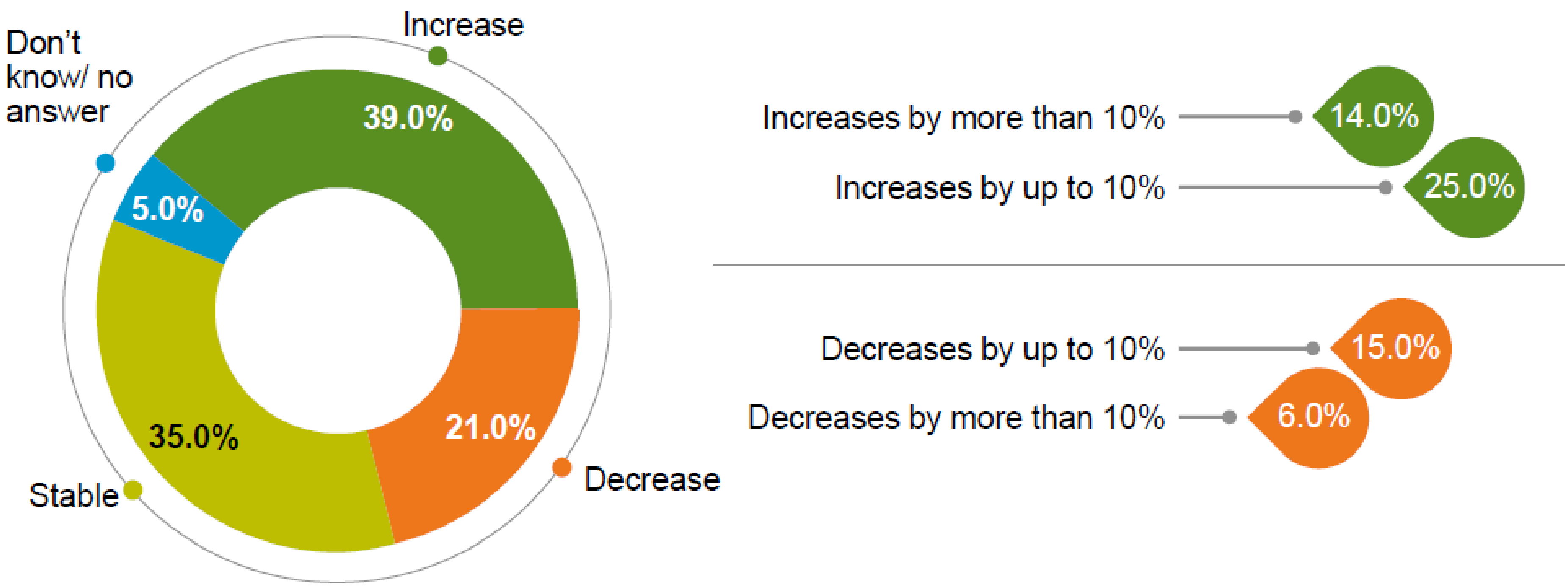
Source: EITO2013, BMBF, imago, BMWi, BITKOM, WEF

Overview

- 4.4 % of GDP expenditures are spent on ICT (2011)
- **Computer device penetration:**
  - 89.6 % of German households have at least one computer, global rank: 3
  - tablet and mobile penetration to increase significantly
- **Network readiness:**
  - Germany ranks 16th (global)
  - Broadband internet subscriptions: 32.5%, global rank: 12th, above EU average
  - Mobile broadband subscriptions: 34.8%, global rank: 31st
  - Smartphone penetration: 48.4%
  - Average bandwidth: 5 Mbps (2011)
- **IT-Mittelstand:** Important strength - Germany's SME-sector being highly innovative and dynamic

Germany - ICT market overview

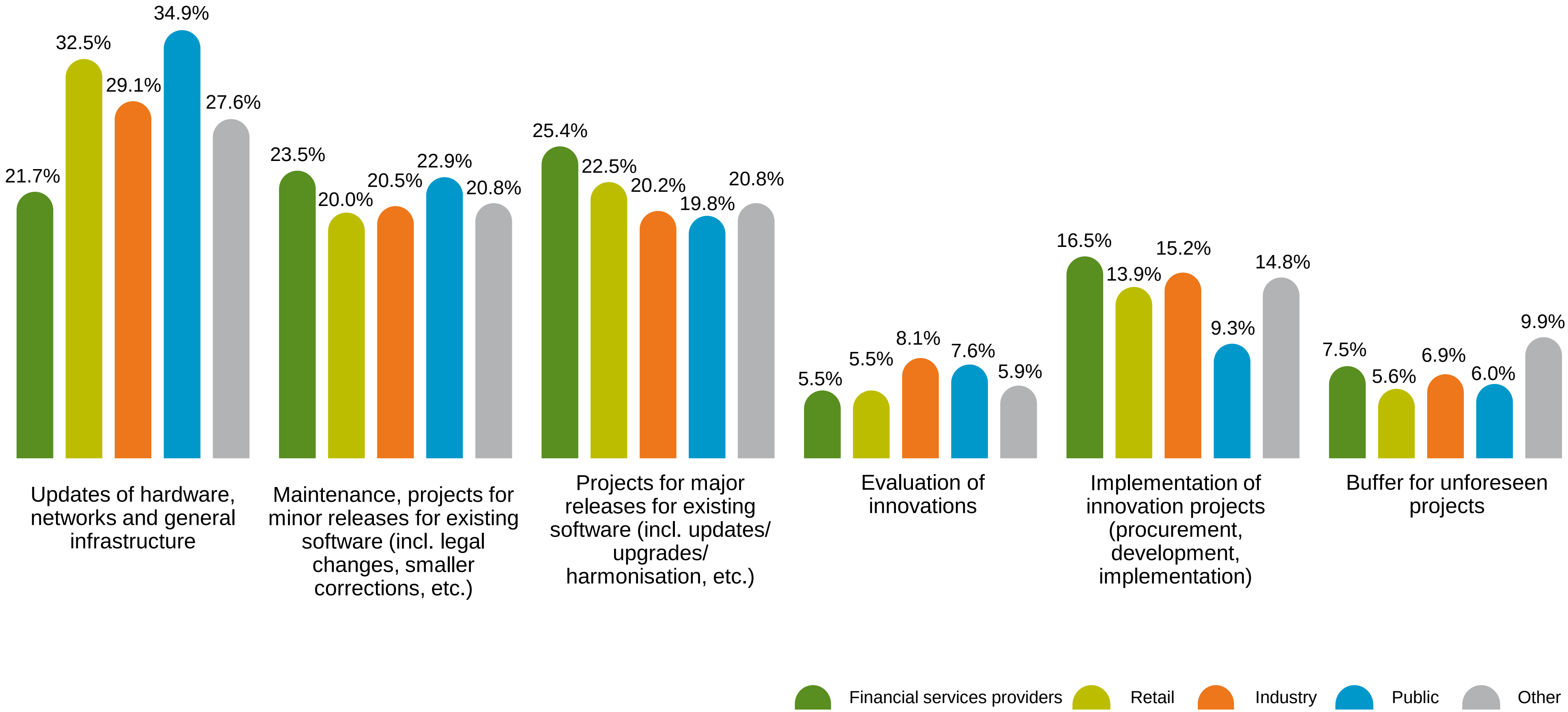
German Companies' IT Budgets: How will the 2014 IT budget change compared to the budget in 2013? (n = 100)



Source: Capgemini

Germany - ICT market overview

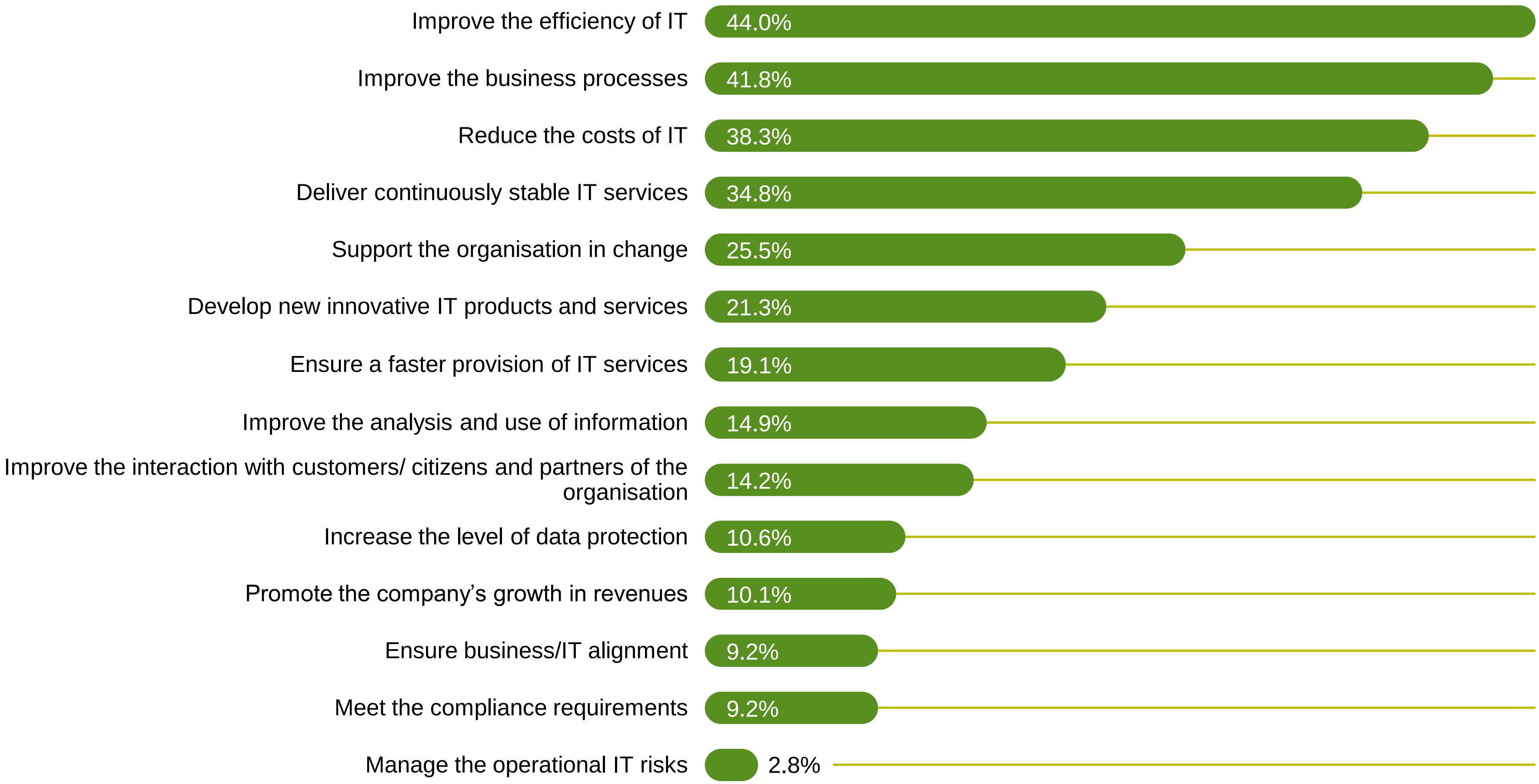
German Companies' IT Budgets: How is the budget allocated to the following areas? (n = 89)



Source: Capgemini

Germany - ICT market overview

IT requirements in 2014: What will be the key requirements on your company's IT in 2014? (n = 141)



Source: Capgemini

Germany - ICT market overview: Key trends

Key technology driver for digital transformation

Mobility | Cloud | Big data / Analytics | Social media

Customer Experience

Customer understanding
- Analytics-based segmentation
- Socially-informed knowledge

Top line growth
- Digitally-enhanced selling
- Predictive marketing
- Streamlined customer processes

Customer touch points
- Customer service
- Cross-channel coherence
- Self service

Operational Process

Process digitization
- Performance improvement
- New features

Worker enablement
- Working anywhere anytime
- Broader and faster communication
- Community knowledge sharing

Performance management
- Operational transparency
- Data-driven decision-making

Business Model

Digitally-modified businesses
- Product/service augmentation
- Transitioning physical to digital
- Digital wrappers

New Digital Businesses
- Digital products
- Reshaping organisational boundaries

Digital Globalization
- Enterprise Integration
- Redistribution decision authority
- Shared digital services

Digital Capabilities

- Unified Data & Processes
- Analytics Capability
- Business & IT Integration
- Solution Delivery

Source: Capgemini Consulting-MIT Analysis – Digital Transformation: A roadmap for billion-dollar organizations 2011

Germany - ICT market overview

IT key trends: How important will the following topics be for your company in the coming years?

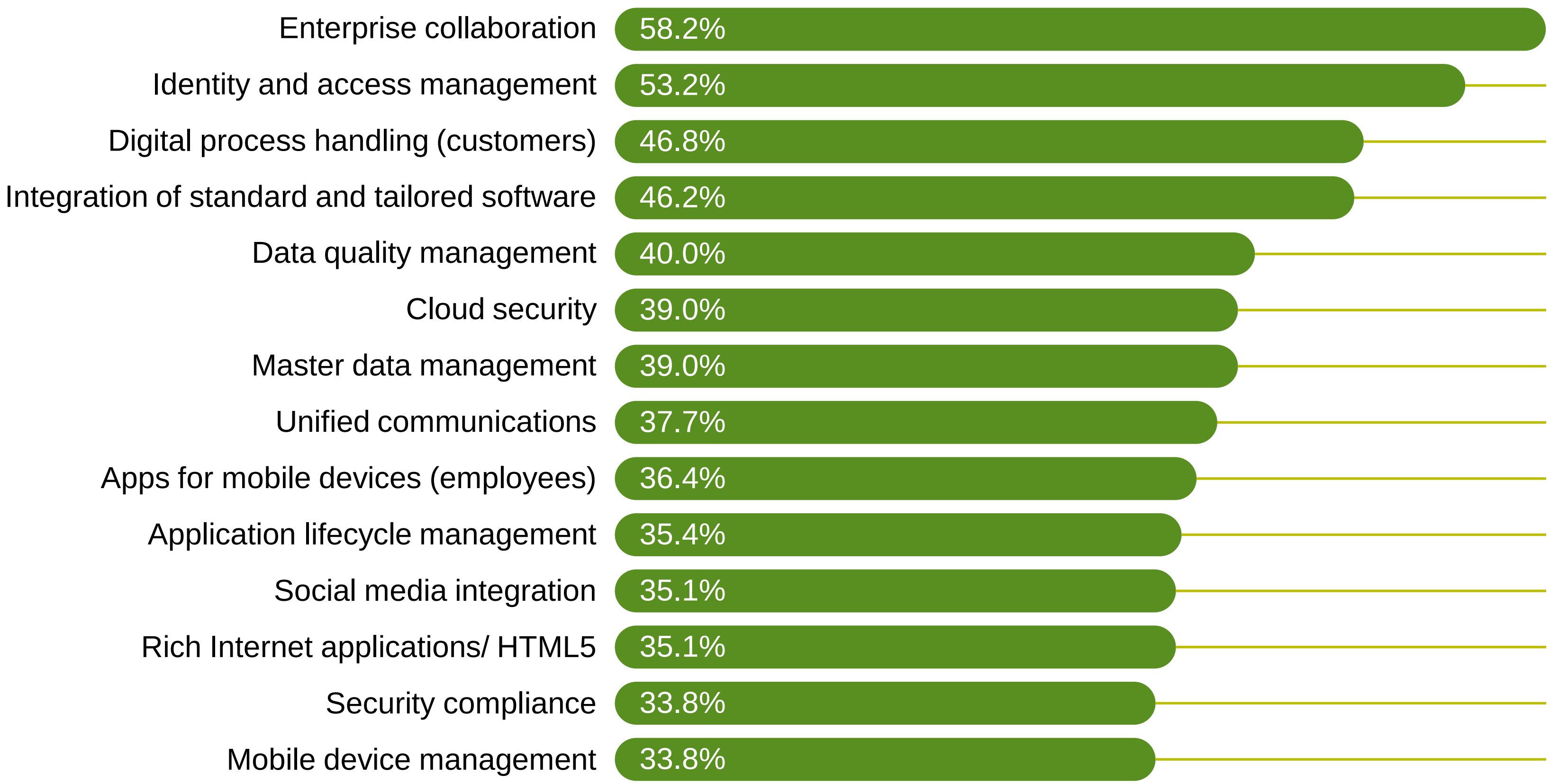
Top topics of 2014		Flops of 2014	
Business continuity	1.4	App store for customers/ citizens	3.9
Virtualisation	1.5	Bring your own device	3.9
Integration of standard and tailored software	1.8	Context-aware computing	4.0
Malware protection	1.8	App store for employees	4.2
Security compliance	2.0	Crowd sourcing	4.2

Basis: All respondents (n = 85); average values
Significance on a scale of 1 (very important) to 6 (completely unimportant)

Source: Capgemini

Germany - ICT market overview

IT key trends: Topics and technologies for which projects are planned or which are currently in implementation (1)

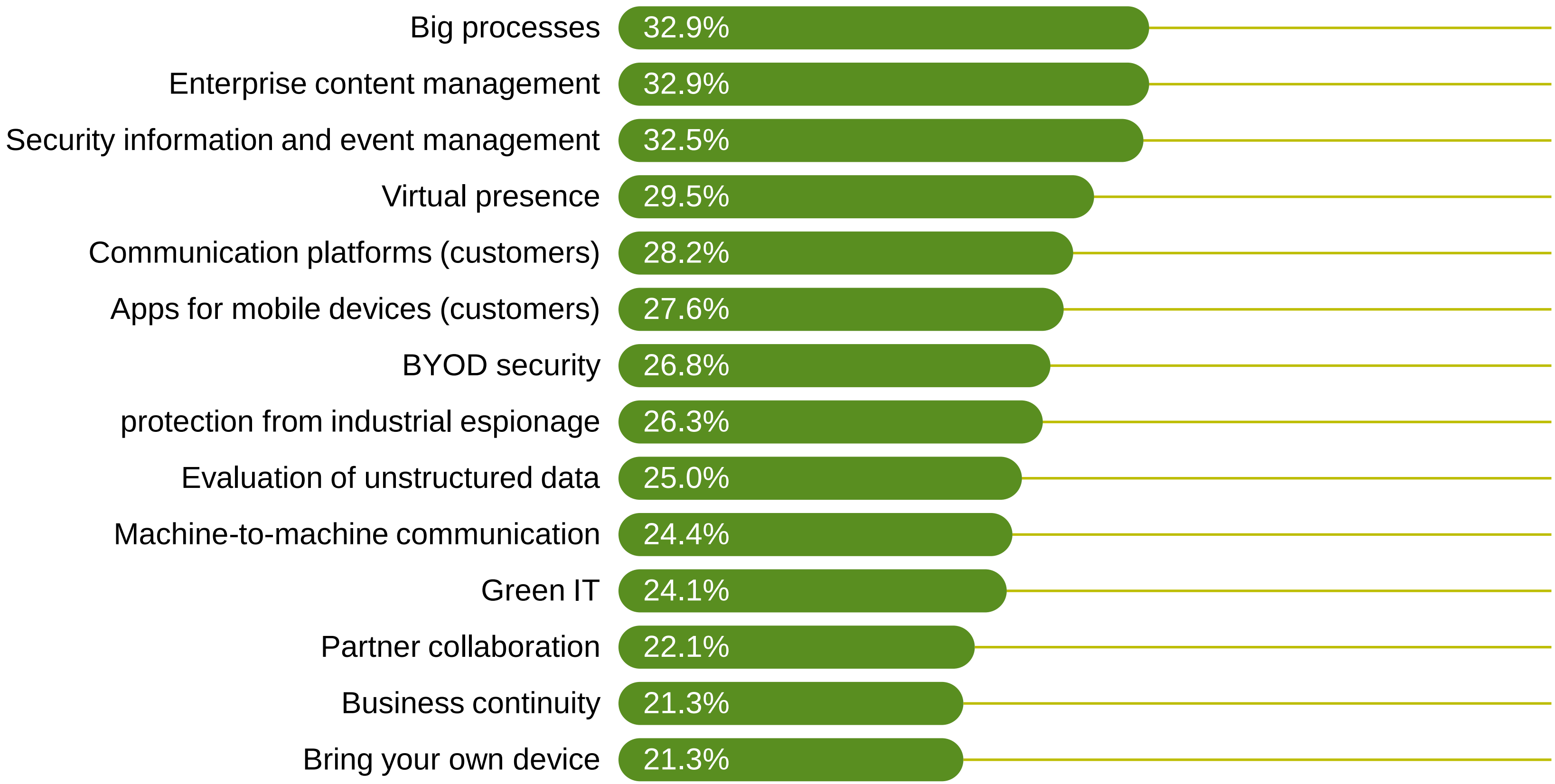


Source: Capgemini

Basis: All respondents (n = 85); project status: planned/ implementation underway

Germany - ICT market overview

IT key trends: Topics and technologies for which projects are planned or which are currently in implementation (2)

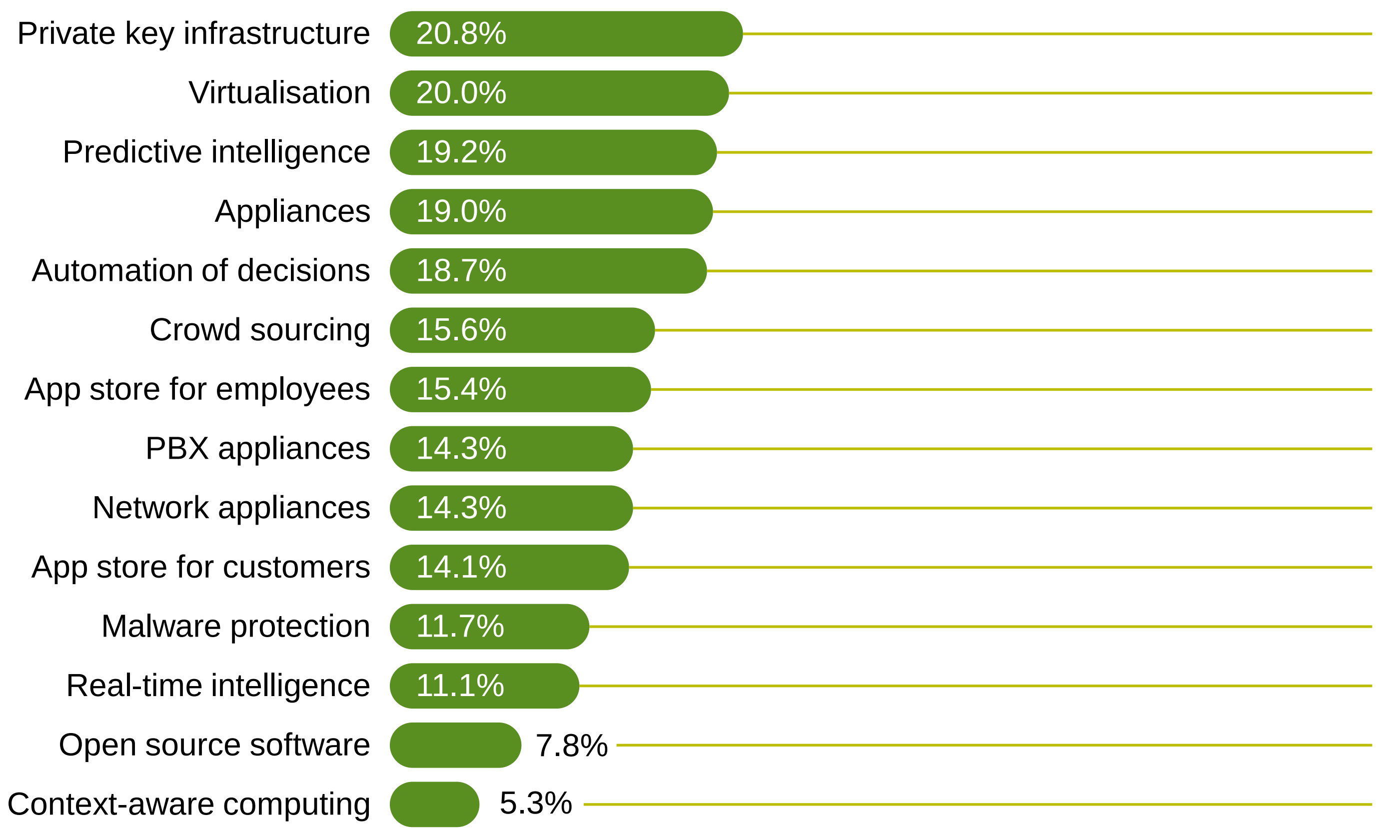


Source: Capgemini

Basis: All respondents (n = 85); project status: planned/ implementation underway

Germany - ICT market overview

IT key trends: Topics and technologies for which projects are planned or which are currently in implementation (2)

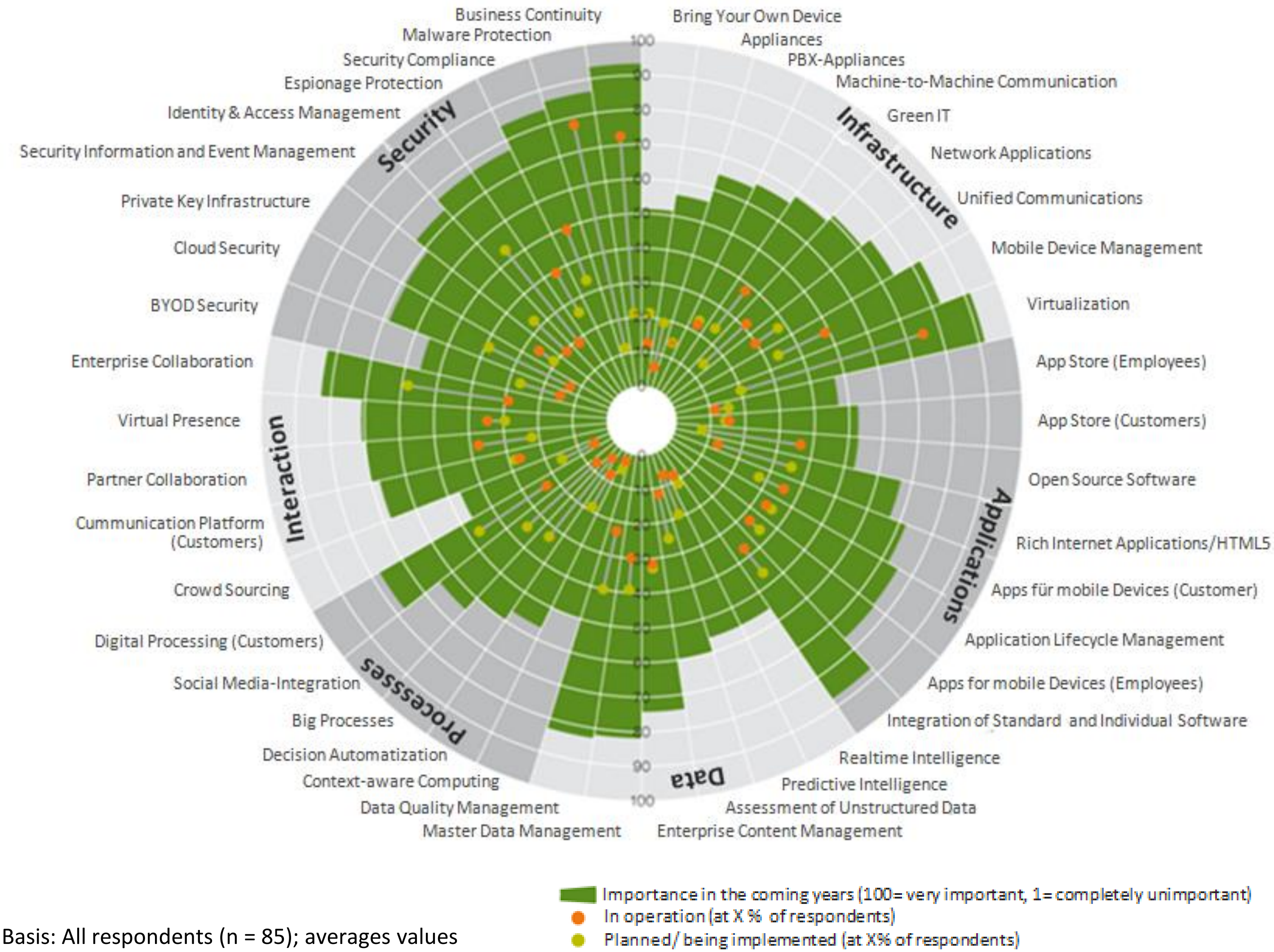


Source: Capgemini

Basis: All respondents (n = 85); project status: planned/ implementation underway

Germany - ICT market overview

IT key trends: Significance and degree of implementation



Source Capgemini; Basis: All respondents (n = 85); averages values

Germany – ICT market overview (3/3)

ICT Framework & Policy: Legislation

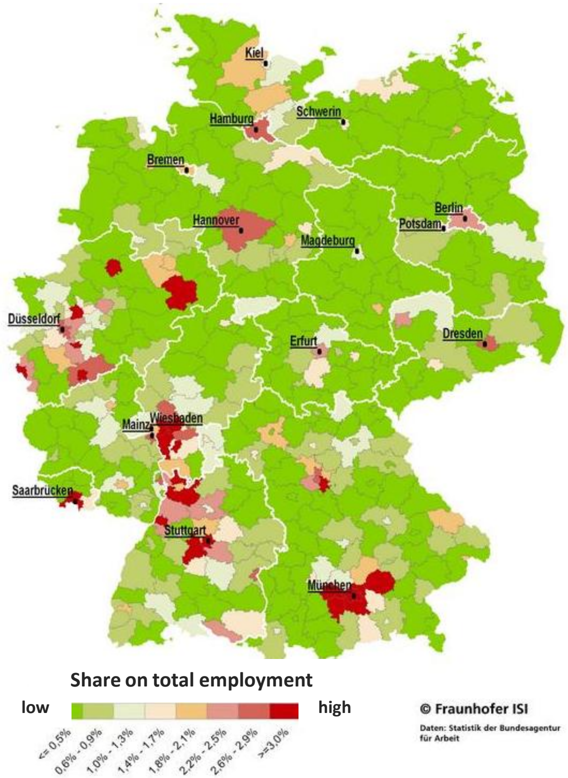
- Supranational strategy – „Innovation Union 2020“: German ICT strategy is based on the digital agenda for Europe
- Sector strategy – „Deutschland Digital 2015“:
  - New growth and jobs through digitalization: Improving competitiveness of enterprises by **promoting education, employment and entrepreneurship**
  - Digital networks of the future: **Broadband strategies, frequency policies, and internet governance**
  - Trustworthy and **secure digital world**: Ensuring data security / copyright / IP security
  - Research and development for a digital future: **Promoting R&D in ICT**
  - Education, media competency and integration: **Basic, further and continuing IT education**
  - Digital solutions for societal challenges: Promoting **e-health, green IT, e-government, e-justice**
- E-Government law: Implemented in 2013, aims to promote government use of ICT
- Cross-sector strategy – “New High-Tech-Strategy 2020”: focuses on five key topics: climate / energy, healthcare / nutrition, mobility, security and communication

Source: BMBF, imago, BMWi, BITKOM

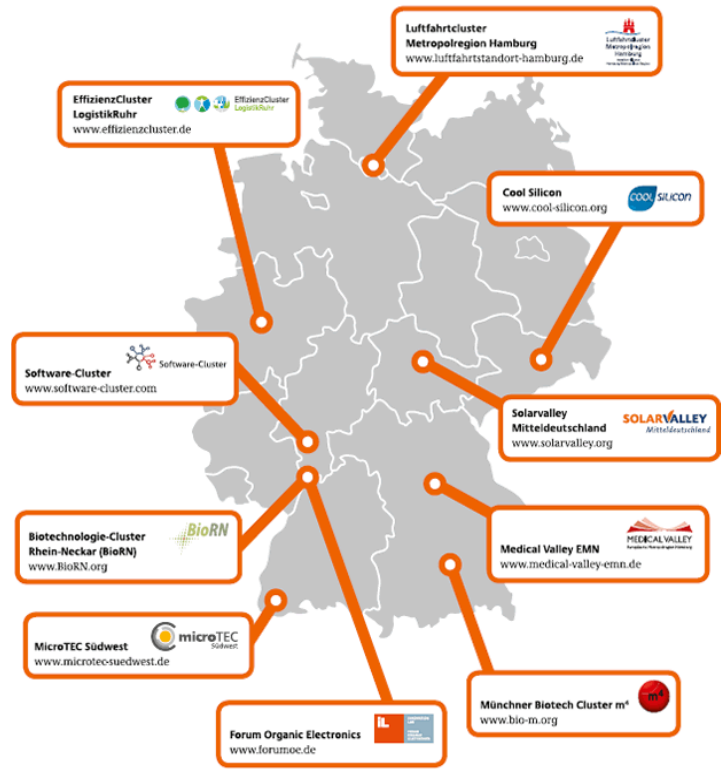
Overview: German ICT Market

ICT Framework & Policy: Clusters are being used as a strategic tool for IT Sector Promotion in Germany

Share of Software- and IT Services in total employment 2010



Germany's Top Clusters (BMBF competition)



Quelle: Bundesministerium für Bildung und Forschung (BMBF), 2010

Source: EU Commission, Pro Inno, BMWi

Germany – ICT market key players

Rank	Company	German Revenue in € million	Global Revenue in € million	Staff Germany
1	Deutsche Telekom AG	26,400	58,700	68,564
2	Vodafone D2 GmbH	9,545	54,965	12,000
3	Hewlett-Packard GmbH	6,380	112,600	9,523
4	T-Systems International GmbH	6,200	9,200	25,623
5	Telefónica O2 Germany GmbH & Co. OHG	5,035	62,837	5,000
6	IBM Deutschland GmbH	4,450	82,539	20,000
7	E-Plus Mobilfunk GmbH & Co. KG	3,236	n/a	4,500
8	Ingram Micro Holding	3,169	n/a	1,276
9	Samsung Electronics GmbH	3,028	110,412	400
10	Microsoft Deutschland GmbH	2,800	54,001	2,700
11	SAP AG	2,347	14,233	16,172
12	United Internet AG	1,875	2,094	4,375
13	Atos Deutschland	1,700	8,500	10,000
14	Finanz Informatik Gmbh & Co. KG	1,453	n/a	5,077
15	Computacenter AG & Co. oHG	1,407	3,286	5,000

Source: computerwoche.de

Agenda

1. ICT Market Overview
2. **Software Market**
3. IT Services Market
4. IT Outsourcing
5. Key Success Factors for Exporting

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Germany – Software market

Strong growth of Applications D&D – Applications have the highest software market share

	Total software market value by segment 2010 – 2014 (in € billion)				
Segment	**2010**	**2011**	**2012**	**2013**	**2014***
System Infrastructure Software	3.8	3.9	4.0	4.1	4.3
Applications D&D	3.8	4.0	4.2	4.4	4.7
Applications	7.9	8.4	8.9	9.3	9.7
Total software	**15.5**	**16.2**	**17.1**	**17.8**	**18.7**

	Total software market growth rates by segment 2011 – 2014 (in %)			
Segment	**2011**	**2012**	**2013**	**2014***
System Infrastructure Software	2.1%	3.5%	3.2%	4.0%
Applications D&D	4.3%	6.0%	5.7%	6.0%
Applications	6.5%	5.5%	4.7%	5.0%
Total software	**4.9%**	**5.1%**	**4.6%**	**5.0%**

Source: EITO 2013

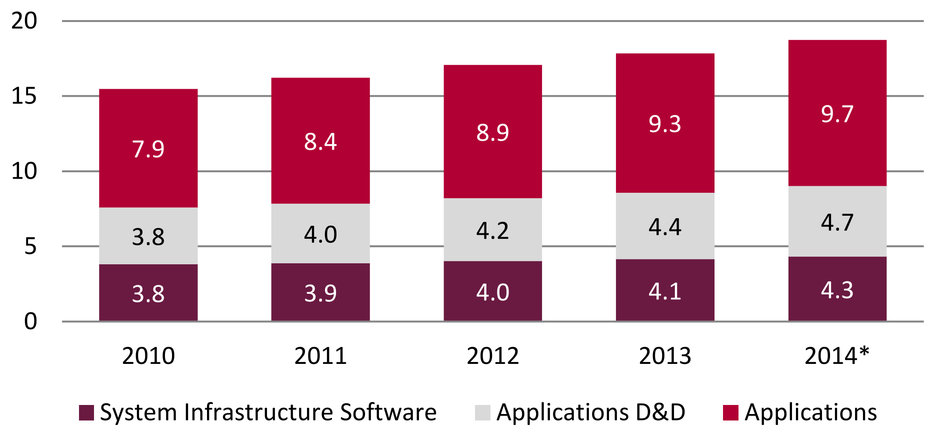
**Estimated values*

Germany – Software market

Strong growth of the total software market (20% since 2010) – Applications as growth driver

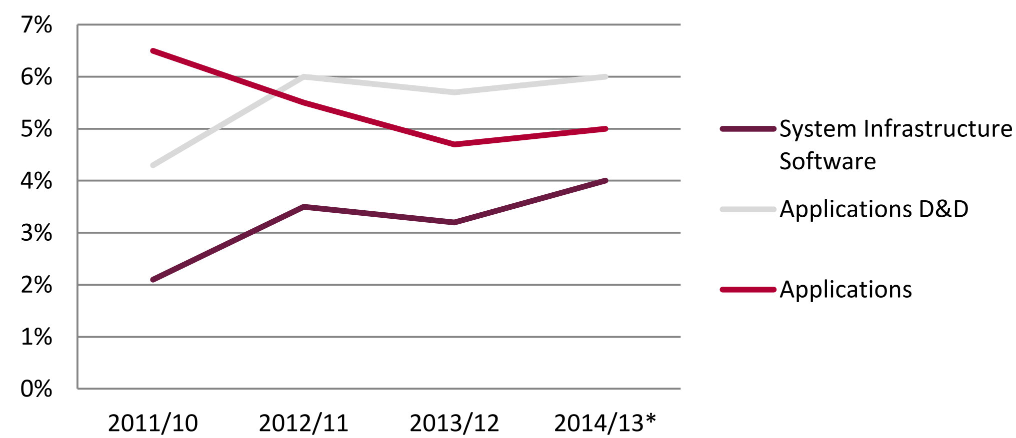
Software market value by segment

2010 - 2014 (in € billion)



Software market growth by segment

2010 - 2014 (in %)



Source: EITO 2013

*Estimated values

Capgemini Consulting

Germany – IT Software market key players

Top 10 leading providers of software in Germany 2011 (in € million)

Rank	Company	Natio-nality	2010	2011	Growth 2010/11
1	SAP (incl. Sybase)	DE	1,450	1,553	7%
2	Microsoft	US	615	685	11%
3	Dassault Systemes	FR	180	212	18%
4	Adobe Systems	US	132	140	6%
5	Siemens PLM Software (former UGS)	DE	113	130	15%
6	Oracle (incl. Sun Microsystems)	US	108	117	8%
7	Autodesk	US	92	98	7%
8	CompuGroup (incl. Lauer-Fische)	DE	76	96	26%
9	PTC	US	81	96	19%
10	Infor	US	80	86	8%

Source: PAC

Germany – Software market

Key Market Trends (1/3)

- Software is the main growth driver in the German ICT market: 4.6% (2013)
- Approximately **33,000 companies** in Germany active in software development
- The **system infrastructure subsegment** is growing by ca. 4% which can be mainly attributed to increased sales of virtualization technologies, storage and security applications
- Spending on **application deployment and development tools** (ADDT, e.g. automation and management tools for datacenter, databases, and business analytics) increased by 6.6% due to:
  - Efforts to better manage costs
  - Improve IT efficiency through automation
  - Provide analytics / intelligence for business operations
- New analytics technologies: Hadoop, In-Memory, NoSQL
- Dynamic growth in data and the need for more effective **data management** are promoting the demand for **storage applications**, such as backup software applications, storage security, storage virtualization, and archiving software

Source: EITO 2012, 2013, Gartner, Cio.de, BITKOM, Capgemini, Ovum

Germany – Software market

Key Market Trends (2/3)

- Perennial hot topic **IT security**: increasing spending on security applications in order to cope with security challenges such as malware, identity theft, data loss, and cyber crime
- Spending on **enterprise applications** such as ECM, CRM and SCM and collaboration technologies is likely to experience a stable growth
- Enterprise collaboration platforms are an important topic
- Usage of **OSS** is clearly on the increase, global rank: 4th
- **Integration of standard and individual software** is an important topic: M&A, SOA, integration of social media applications
- Data quality and master data management
- **Mobile computing / mobile applications** play an increasingly important role for the German software market; Enterprise mobile apps use will accelerate, and HTML5 is likely to have a substantial impact on the market
- **Social media** have become a hot topic within the German software market: integration, social media analytics, social CRM applications, etc.

Source: Gartner, Silicon.de, BITKOM, Capgemini

Germany – Software market

Key Market Trends (3/3)

- **InMemory technology** (e.g. SAP HANA) still at a very early stage
- **Vertical drivers** of the German software market: automotive, financial services, machinery, health
- Distinctive market feature: **importance of SMEs** (demand & supply side)
- Should the euro-crisis recur this might have negative implications on the German software market, slowing down its growth rate (strong interdependence with European markets)
- In the mid-term, a significant share of Germany's software market growth will come from the implementation of **cloud services** offerings especially:
  - Software as a Service (SaaS), Infrastructure as a Service (IaaS)
  - Cloud-based application development is set for explosive growth
  - Development of proprietary cloud solutions was strongly on the rise in 2013 among German companies
- **Agile and lean development** proliferates quickly
- **Key future capabilities:** HTML5, Python, Ruby, CSS3, location based computing

Source: Gartner, Silicon.de, BITKOM, Capgemini, WEBDESE

Agenda

1. ICT Market Overview
2. Software Market
3. **IT Services Market**
4. IT Outsourcing
5. Key Success Factors for Exporting

Capgemini Consulting

Germany – IT Services market overview (1/2)

Projects and Outsourcing dominate the IT Services market value

	Total IT Services market value by segment 2010 – 2014 (in € billion)				
Segment	**2010**	**2011**	**2012**	**2013**	**2014***
Projects	8.0	8.3	8.5	**8.7**	**9.0**
Outsourcing (excl. BPO)	12.5	13.0	13.3	**13.8**	**14.3**
Support & Deploy	6.4	6.5	6.5	6.5	6.6
BPO Services	6.1	6.4	6.5	6.8	7.1
Total IT Services	**33.1**	**34.2**	**34.9**	**35.8**	**37.0**

	Total IT Services market growth rates by segment 2011 – 2014 (in %)			
Segment	**2011**	**2012**	**2013**	**2014***
Projects	3.6%	2.5%	2.2%	3.0%
Outsourcing (excl. BPO)	3.7%	2.7%	**3.2%**	**4.0%**
Support & Deploy	1.4%	0.6%	0.2%	1.0%
BPO Services	4.5%	1.6%	**3.9%**	**4.8%**
Total IT Services	**3.4%**	**2.1%**	**2.5%**	**3.4%**

Source: EITO 2013

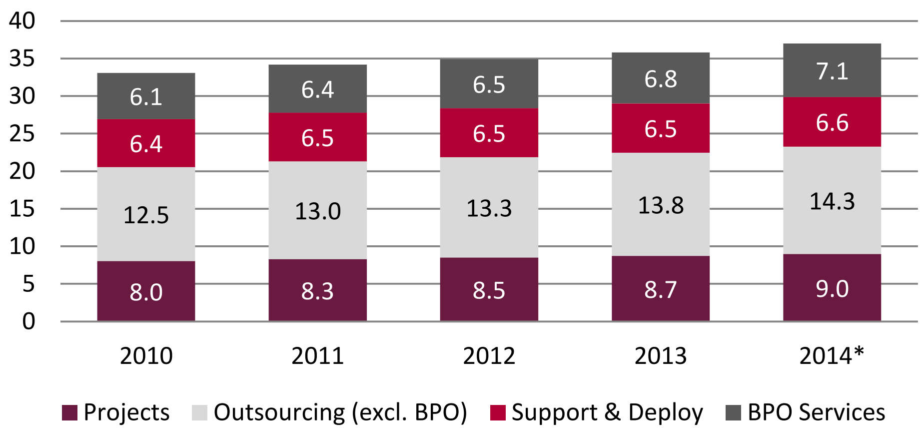
**Estimated values*

Germany – IT Services market overview (2/2)

Strong growth pattern of Outsourcing (excl. BPO) and BPO Services

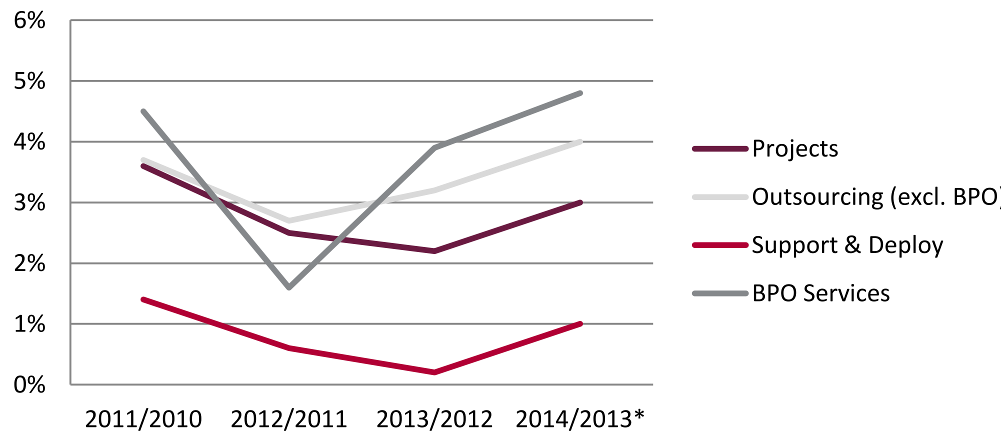
IT Services market value by segment

2010 - 2014 (in € billion)



IT Services market growth by segment

2010 - 2014 (in %)



Source: EITO 2013

*Estimated values

Capgemini Consulting

Germany – IT Services market key players

Top 10 leading providers of IT services in Germany 2011 (in € million)

Rank	Company	Natio-nality	Revenue 2010	Revenue 2011	Growth 2010/11	Market share 2010/11
1	IBM	US	2,758	2,774	1%	8.2%
2	T-Systems	DE	2,640	2,686	2%	7.9%
3	HP	US	2,090	2,193	5%	6.5%
4	Atos (proforma incl. SIS)	FR	1,436	1,582	10%	4.7%
5	Accenture	US	660	726	10%	2.1%
6	Fujitsu	JP	675	660	-2%	1.9%
7	SAP (incl. Sybase)	DE	600	636	6%	1.9%
8	CSC (incl. iSOFT)	US	485	498	3%	1.5%
9	Capgemini (incl. CS Consulting)	FR	416	482	16%	1.4%
10	Computacenter	UK	416	440	6%	1.3%

Source: PAC

Germany – IT Services market

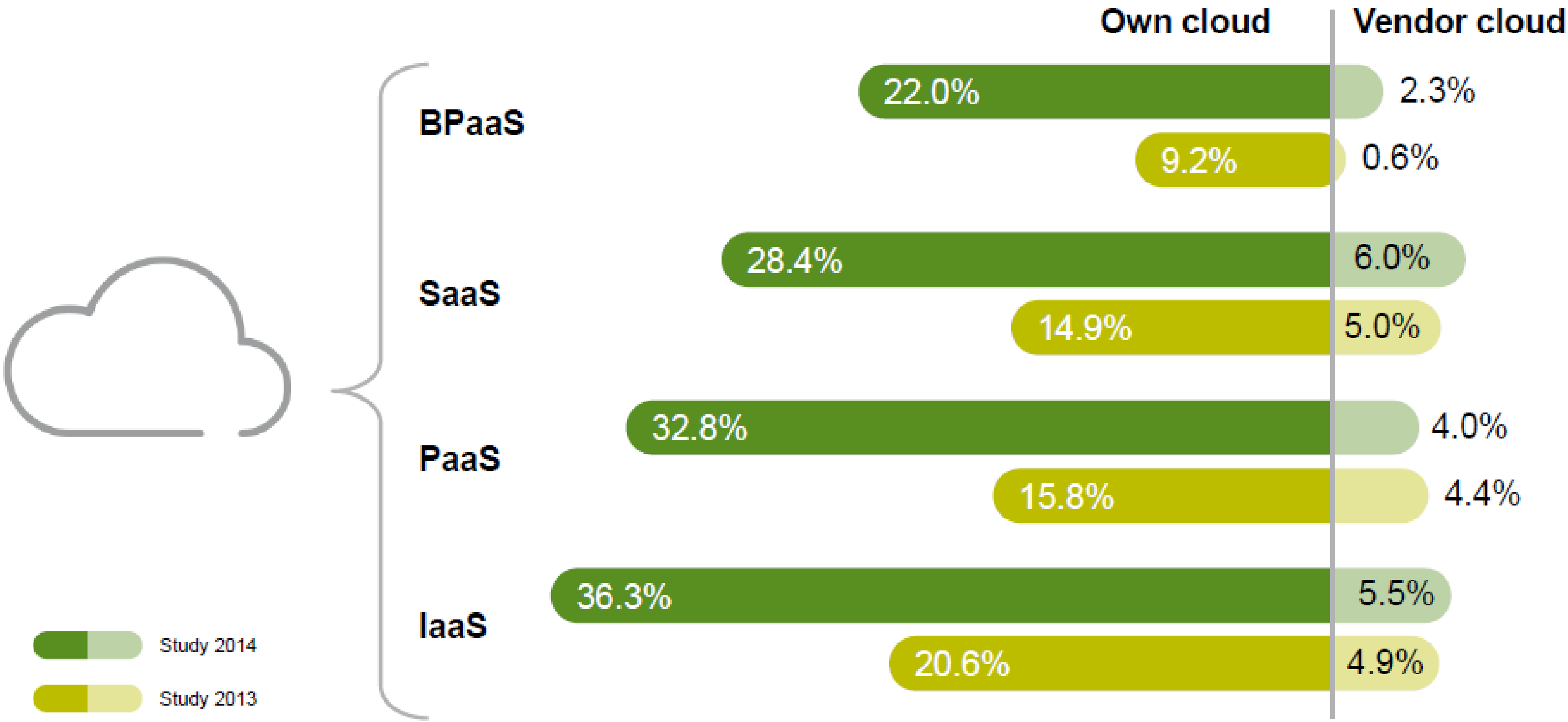
Key Market Trends (1/4)

- German IT services market is the **EU's second largest** with 36 EUR billion market volume in 2013 and projected growth of 3.4% for 2014
- German companies continue to invest in projects and third-party services to implement **virtualization, automation and cloud technologies**
- Drivers for IT projects: **efficiency, cost reduction, innovation**, **company agility**, governance, risk management, compliance
- **Initiatives for reducing IT costs** include: consolidation, standardization, virtualization, open source, outsourcing and offshoring
- **Outsourcing** continues to be the major growth driver of the IT services market
- **BPO Services** segments experience dynamic growth rates with 3.9% in 2013
- Demand for hosted application management and hosted infrastructure services
- Growth leaders: BPO – customer care, finance and accounting, procurement; Application Management

Source: Capgemini, CIO.de, EITO 2012, 2013, PAC, BITKOM

Germany – IT Services market

Cloud: What percentage of the overall services do you draw from the cloud?



Source: Capgemini

BPaaS = Business Process-as-a-Service | **SaaS** = Software-as-a-Service | **PaaS** = Platform-as-a-Service | **IaaS** = Infrastructure-as-a-Service
Basis:All respondents (2014: n = 93; 2013: n = 127); averages values

Capgemini Consulting

Germany – IT Services market

Key Market Trends (2/4)

- Key topics:
  - Data quality and master data management
  - Social-media-integration and analysis
- Special feature of the German market: **IT subsidiaries** of large German companies, which act as independent companies and IT services providers
- Impact of increasing competition and cost pressure:
  - Continuing market consolidation (M&A)
  - Big players will dominate the market
  - **Smaller companies will have to specialize on niches (verticals)**
  - **Industrialization of IT services (standardization, modularization, automation)**
  - **Increasing usage of offshoring**

Source: CIO.de, Gartner, Capgemini

Germany – IT Services market

Key Market Trends (3/4)

- Standardization of technologies & processes will lead to stronger **specialization and modularization within the IT services value chain**. Consequence: Big IT service providers **“outsource outsourcing”** → potential for SEE IT companies to position themselves as specialist partners
- Introduction of more **offshore and nearshore resources** in order to reduce costs
- Market players:
  - Global players
  - Major regionals (e.g. T-Systems)
  - Indian firms
  - Captives
  - Second-tier (up to € 500 million turnover)
  - Large specialists

Source: CIO.de, Gartner, IDC

Germany – IT Services market

Key Market Trends (4/4)

- **Internationalization**: new competitors, global sourcing, global supply, global support
- **Vertical drivers**: manufacturing industry, banks, insurances, retail, public sector
- Industrialization of IT (modularization, standardization, automation) is quite advanced;
- New requirement: **agility**: faster development of new applications and faster customization and modification of existing applications
- IT service providers are trying to develop the **SME market segment**

Source: Computerwoche.de, Gartner

Agenda

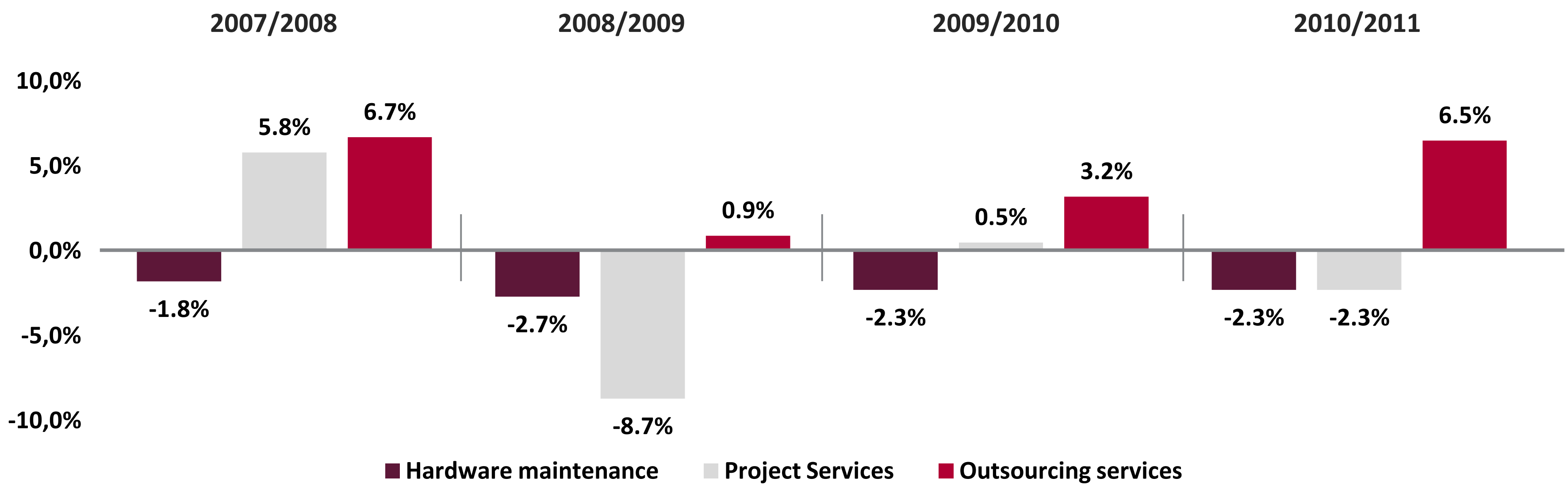
1. ICT Market
2. Software Market
3. IT Services Market
4. **IT Outsourcing**
5. Key Success Factors for Exporting

Germany – IT Outsourcing market

Even in the middle of the crisis the outsourcing segment still managed to achieve a slight growth

Outsourcing market growth in comparison to other sub segments

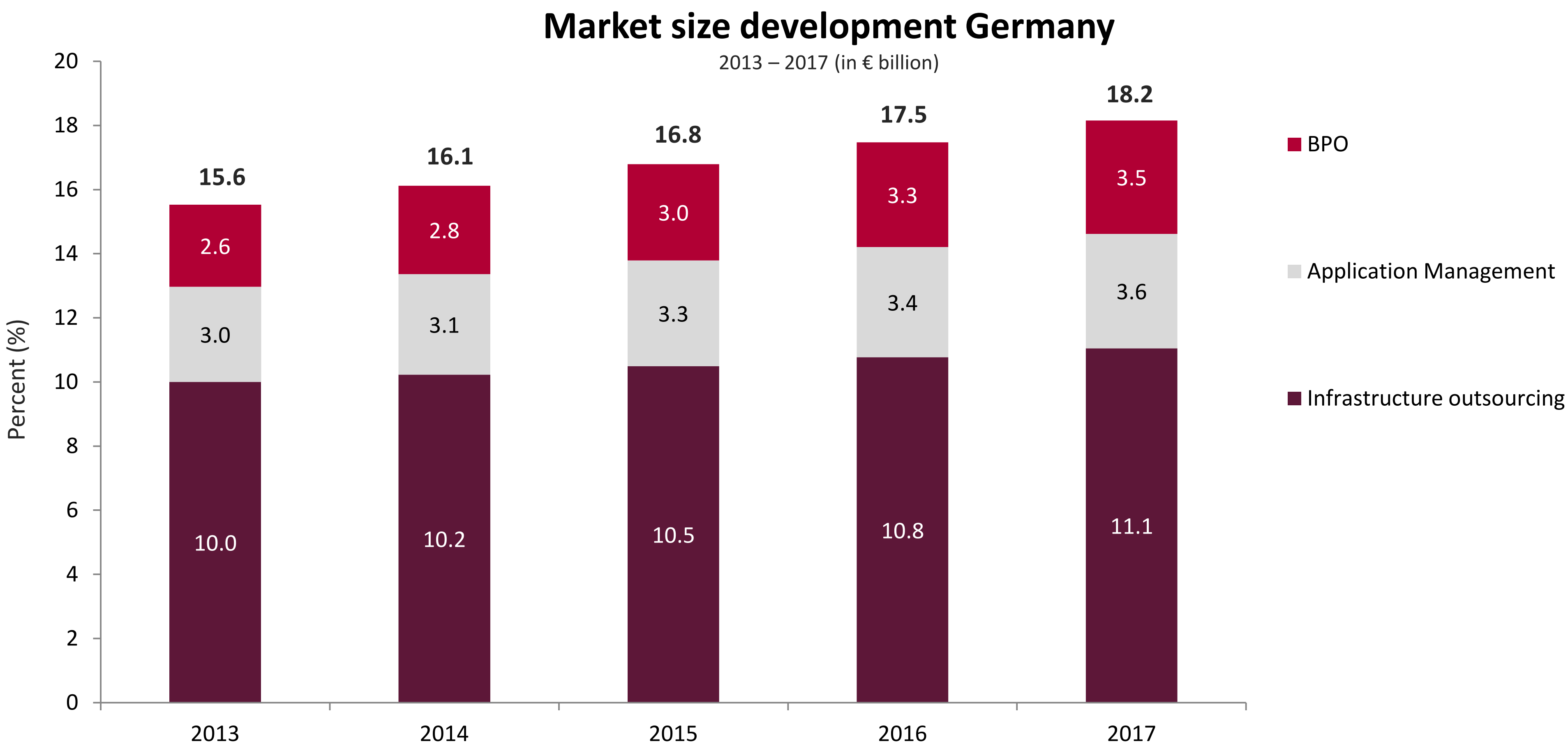
2007 – 2011 (in %)



Source: EITO 2012, Gartner

Germany – IT Outsourcing market

The outsourcing market is projected to grow by 4.2% CAGR during 2013 – 2017:
BPO (6.72%) and Application Management (3.75%) outpace Infrastructure Outsourcing (2.02%)



Source: PAC

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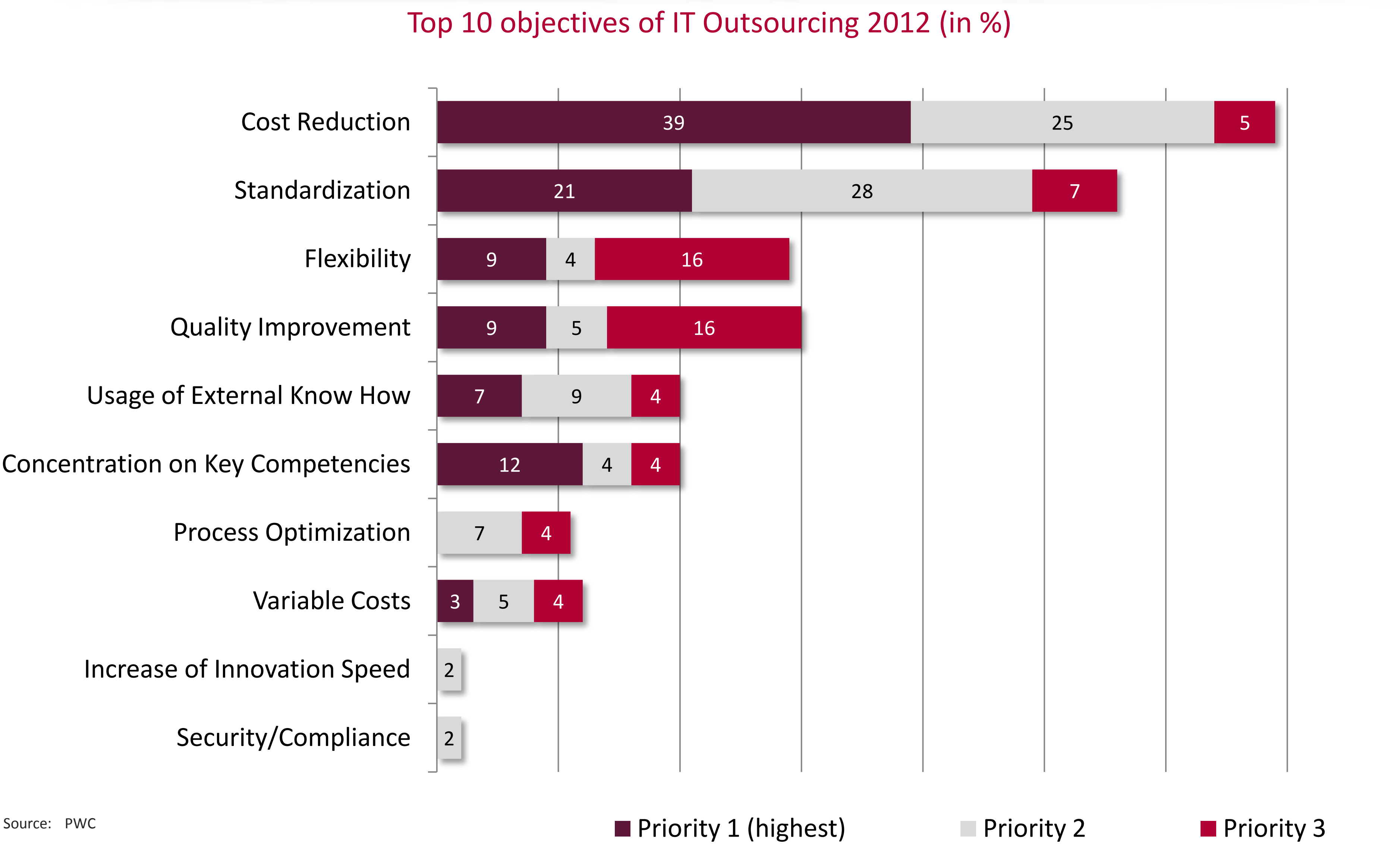
Germany – IT Outsourcing market



Source: PWC

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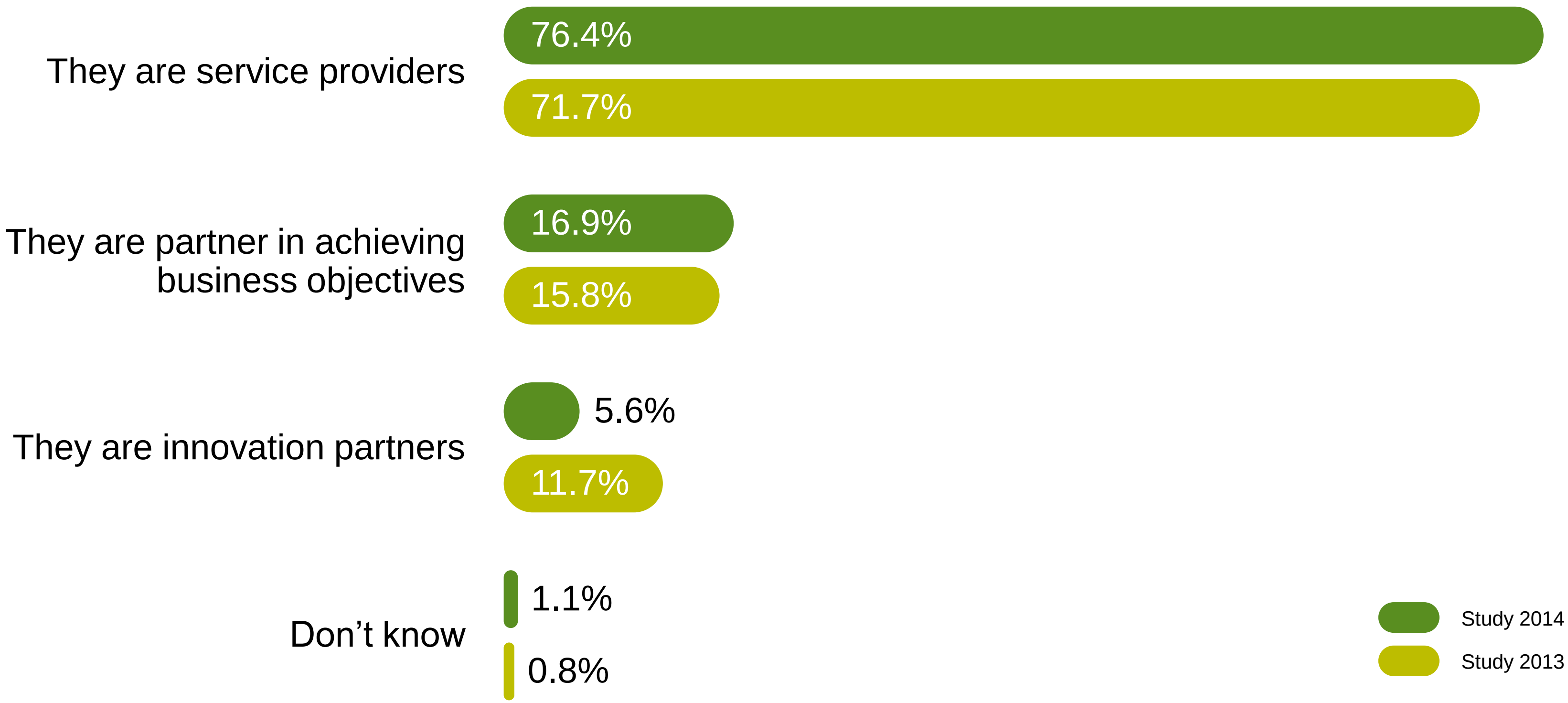
Germany – IT Outsourcing market

What is the role of the most important outsourcing partners of your IT organization? (n = 124)



Source: Capgemini

Germany – IT Outsourcing market key players

Top 10 leading providers of outsourcing services in Germany 2011 (in € million)

Rank	Company	Natio-nality	Revenue 2010	Revenue 2011	Growth 2010/11	Market share 2010/11
1	T-Systems	DE	1,863	1,919	3%	12.6%
2	IBM	US	1,575	1,568	0%	10.3%
3	HP	US	1,280	1,380	8%	9.0%
4	Atos	FR	1,143	1,268	11%	8.3%
5	Fujitsu	JP	325	320	-2%	2.1%
6	Amadeus IT	ES	290	315	9%	2.1%
7	Computacenter	UK	252	277	10%	1.8%
8	Accenture	US	240	262	9%	1.7%
9	CSC	US	240	240	0%	1.6%
10	First Data Corp	US	170	176	4%	1.2%

Source: PAC

Germany – IT Outsourcing market

Key Market Trends (1/4)

- Market volume outsourcing (2013): **€ 15.6 billion**; 44.8% of overall IT services market volume
- Outsourcing likely to remain the **most dynamic and fastest growing market segment within IT services**
- A majority of companies in Germany believes that in **ten years, a major part of IT services will be delivered by external companies** and will only be integrated by their own staff
- **Projected growth rate** for the next five years (starting in 2013) is 4.2%
- **Resilience & anticyclical growth pattern**: stable growth for next years projected
- Overall: **interest in outsourcing is increasing** among German companies and the market segment is becoming more mature
- **Demand of SMEs** for outsourcing is increasing, however the largest part of outsourcing services for companies in Germany are provided by **local partners**
- **Heavy users**: financial services, telecommunication, insurance, retail, manufacturing
- **Freelancers are an integral part of organizations**, in financial services almost 30% of IT services come from freelancers
- **Top 3 outsourcing goals**: cost reduction, standardization, increasing flexibility

Source: Capgemini, PAC, Gartner IDC, Cio.de, Silicon.de, IT Sourcing Europe

Germany – IT Outsourcing market

Key Market Trends (2/4)

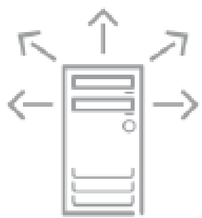
- Usually the largest part of outsourcing services for companies in Germany are provided by local companies
- Trend towards multi-vendor-sourcing: 53% of outsourcing customers rely on multi sourcing; usually two competing vendors are contracted in parallel
- Intense competition and price erosion
- Slow but continuing trend towards globalization of outsourcing (offshoring)
- Characteristic **cycles concerning vertical integration**
- IT service providers become drivers of innovation
- Market drivers: **cost reduction, standardization, and increasing flexibility**; changes in the motivation for outsourcing from pure cost cutting to increasing flexibility (resources) and concentration on core business

Source: Gartner, Silicon.de, Computerwoche.de

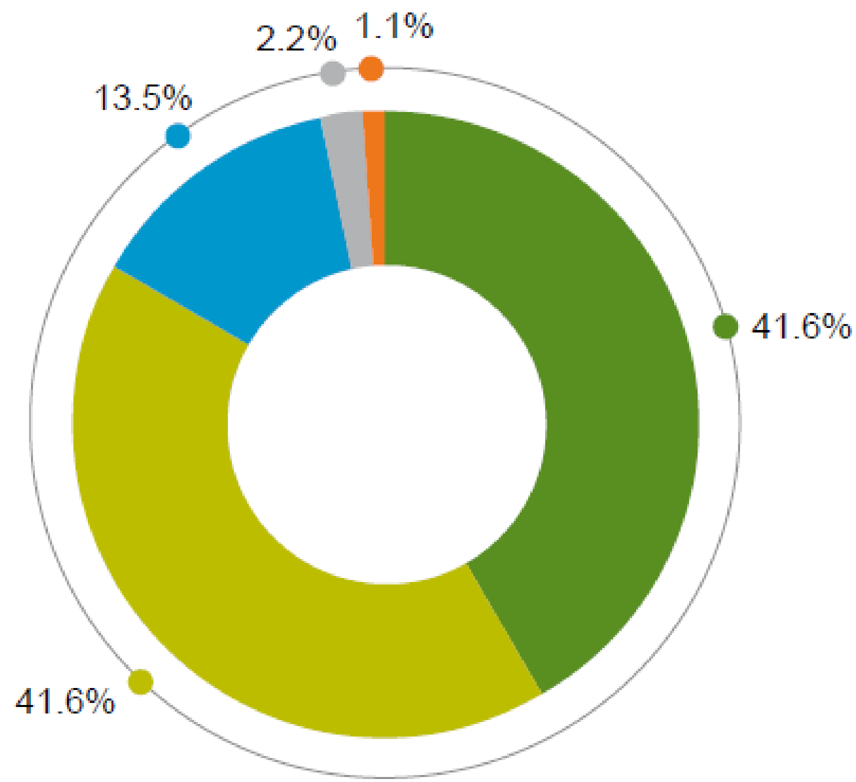
Germany – IT Outsourcing market

Multi-vendor sourcing: To what extend do you agree with the following statement?

- Fully agree
- Rather agree
- Neither agree nor disagree
- Rather disagree
- Fully disagree



Multi-vendor sourcing requireds new governance models.



Source: Capgemini

Germany – IT Outsourcing market

Key Market Trends (3/4)

- Important driver: **skills shortage** (“IT-Fachkräftemangel”)
- **Cloud computing will have a substantial impact** on the outsourcing market: technology, delivery, governance, contracts, pricing, controlling
- Demand for cloud models will be fueled by:
  - Cost efficiency
  - Flexibility
  - Scalability
- Outsourcing of **software testing** becomes an important topic

Source: Capgemini, Computerwoche.de

Germany – IT Outsourcing market

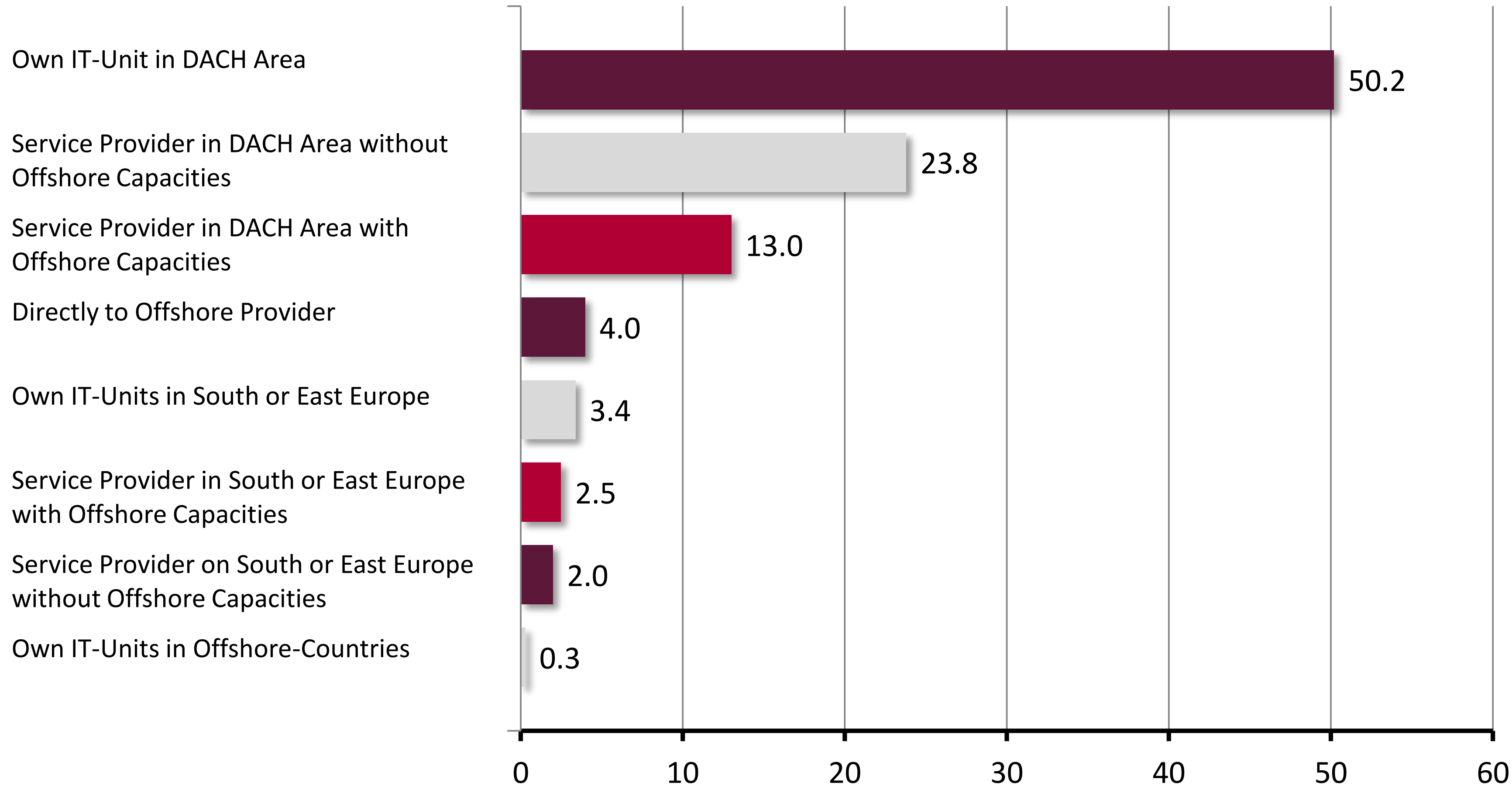
Key Market Trends (4/4)

- Selective sourcing decisions replace complete deals: companies seek to keep key capabilities and know-how for important process applications **inhouse**
- Marketing & sales: more than 50% of German companies find their outsourcing partners via **online research**
- Duration of outsourcing contracts decreases
- **Pricing: usage based models** replace long term contracts
- DIN SPEC 1041: standard for organizing and structuring outsourcing
- Trend towards using IT freelancers (e.g. IBM Germany); 16% to 20% of outsourcing service deals are based on freelance work

Source: Capgemini, Cio.de, IT Sourcing Europe

Germany – Offshoring

Geographic Distribution of Outsourcing Contracts 2011 (n = 77, in %)



Source: Capgemini

Germany - Offshoring

Potential Target Groups in the German Market

- IT service providers
- IT consultants & System Integrators
- Software vendors
- Offshoring IT consultants
- IT staffing specialists
- Non-IT end clients

Target Groups

Source: Capgemini

Germany - Offshoring

"Freelancers represent an important opportunity for us to flexibly use specialized external know-how. We often work together with external IT specialists in order to develop new software or to test new processes."[1]

Dr. Dirk Meyerhoff, CEO, Schüco Service GmbH

1 Capgemini: Studie IT Trends 2014

Germany – Offshoring

Top 10 providers of IT Staffing and Project Management Services 2011 (revenue in € million)

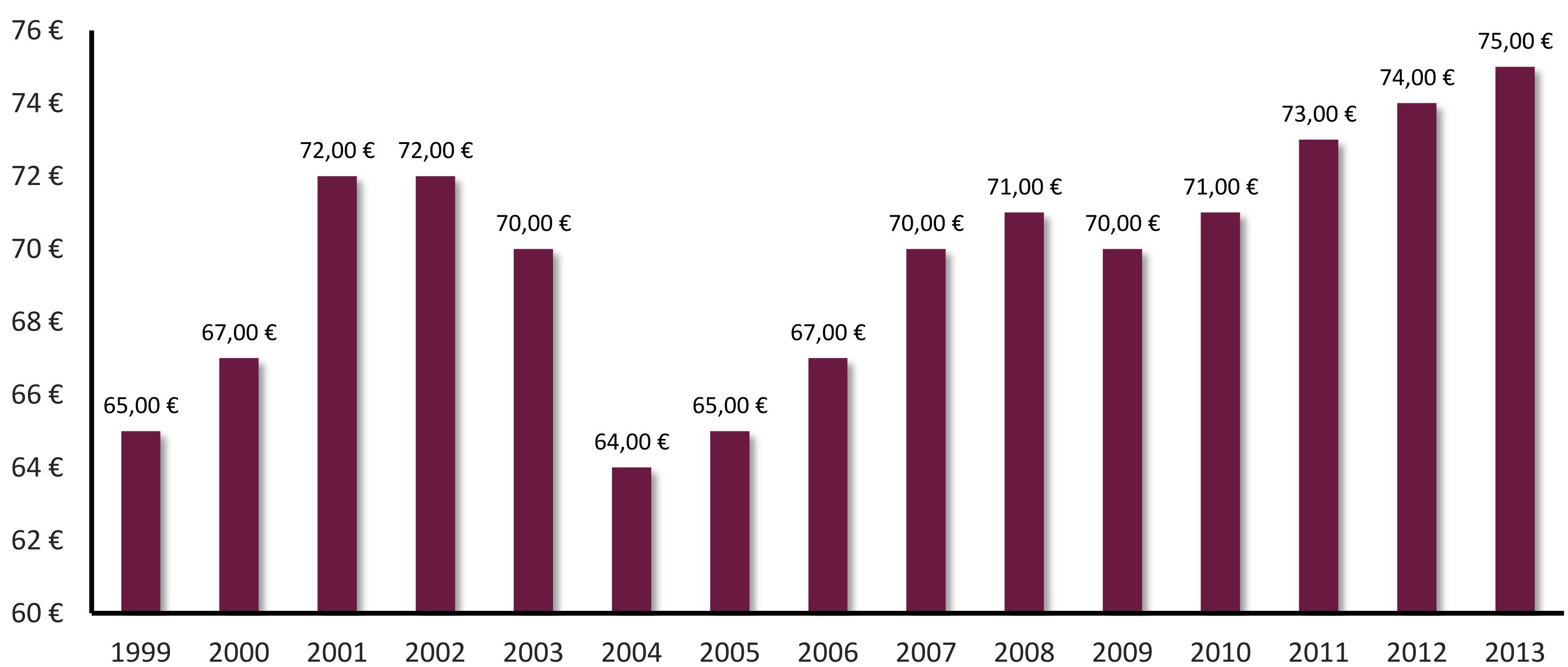
Rank	Company	Head Office	Revenue 2011	Staff 2011	Typology
1	Hays AG	Mannheim	490.0	725	IT Staffing
2	Allgeier Holding	Munich	250.0	2,392	Hybrid IT Services
3	GFT Technologies	Stuttgart	221.4	287	Hybrid IT Services
4	GULP	Munich	105.0	133	IT Staffing
5	Reutax	Heidelberg	110.0	142	IT Staffing
6	Harvey Nash	Duesseldorf	60.0	520	Hybrid IT Services
7	1st Solution Consulting	Duesseldorf	35.0	26	IT Staffing
8	Top itservices	Ottobrunn	33.2	350	Hybrid IT Services
9	Solcom	Reutlingen	28.5	361	IT Staffing
10	Quest	Frankfurt	27.0	26	IT Staffing

Source: PAC

Offshoring

Average Hourly Rates for German IT Freelancers 2006 - 2012

The average rate/hour rose by about 7% between August 2009 and August 2013 (n > 80,000)



Source: GULP

Most attractive Industries for IT Freelancers in Germany

The Financial Sector is traditionally a very interesting industry for IT-Freelancers (August 2012)

Rank 2005	Rank 2012	Branch	Ranked by number of company entries	Ranked by number of freelancers	Ranked by number of projects	Ranked by project duration
1	1	Financial Institutes	1	1	1	10
2	2	Electronics	9	3	3	1
5	3	Telecommunication	5	2	2	8
3	4	Insurance	2	6	6	7
4	5	IT	3	4	4	13
8	6	Automotive	6	5	5	9
12	7	Trade & Consumer goods	4	8	9	16
6	8	Industry	7	10	10	11
7	9	Chemistry & Pharma	8	7	7	17
13	10	Software	16	13	11	2
11	11	Aviation and Aerospace	13	12	12	6
9	12	Traffic, Transport, Logistics	15	9	8	14
16	13	Consulting	14	15	15	3
15	14	Public Sector	12	11	13	12
14	15	Tourism	17	17	17	5
10	16	Energy supplier	11	14	14	18
17	16	Media	10	16	16	15
18	18	Other	18	18	18	4

Source: GULP

Germany – Offshoring

Demand Structure (1/6): Most sought-after skills (January 2014)

System Software		
Rank	**System**	**Av. rate/hour**
1	**Windows**	75 €
2	**Linux**	70 €
3	**Unix**	73 €
4	**Aix**	74 €
5	**Solaris**	75 €

ERP/CRM Systems		
Rank	**Skill**	**av. rate/hour**
1	**SAP**	89€
2	**PeopleSoft**	89€
3	**Navision**	76€
4	**Siebel**	84€
5	**Baan**	87€

Source: GULP

Germany – Offshoring

Demand Structure (2/6): Most sought-after skills (January 2014)

SAP Modules		
Rank	**Skill**	**Av. rate/hour**
1	**R/3 Controlling (CO)**	86€
2	**R/3 Finance (FI)**	89€
3	**R/3 Sales (SD)**	88€
4	**R/3 Basis**	85€
5	**R/3 Business Information Warehouse**	93€
6	**R/3 Project System (PS)**	91€
7	**R/3 Quality Management (QM)**	88€
8	**R/3 Advanced Planner and Optimizer (APO)**	95€
9	**R/3 Product Data Management (PDM)**	98€
10	**R/3 Maintenance (PM)**	90€

Source: GULP

Internet/Java		
Rank	**Skill**	**Av. rate/hour**
1	**HTML**	65€
2	**Websphere**	75€
3	**XML**	71€
4	**J2EE**	73€
5	**JSP**	68€

Demand Structure (3/6): Most sought-after skills (January 2014)

Database Technologies		
Rank	**Skill**	**Av. Rate/hour**
1	**ORACLE**	74€
2	**DB2**	74€
3	**SQL-Server**	70€
4	**MS-Access**	68€
5	**mySQL**	64€

Programming Languages		
Rank	**Skill**	**Av. rate/hour**
1	**Java**	72€
2	**SQL**	69€
3	**C/C++**	69€
4	**ABAP4**	86€
5	**C#**	68€
6	**JavaScript**	65€
7	**Basic**	67€
8	**PL/SQL**	74€
9	**PHP**	63€
10	**Perl**	70€

Source: GULP

Germany – Offshoring

Demand Structure (4/6): Most sought-after services

- **Demand structure for offshoring**:
  - Application development (!)
  - Maintenance
  - BPO
  - Desktop management
- BPO: German outsourcing customers are increasingly interested in BPO from Eastern Europe; especially logistics and financial services industry
- **Managed testing services**: German outsourcing customers are increasingly interested in testing services from Eastern Europe, especially energy & utilities and financial services industry
- **Infrastructure outsourcing**: Increasing interest among German outsourcing customers in infrastructure outsourcing to Eastern Europe; especially financial services industry, manufacturing, and logistics

Source: Gartner, BITKOM, Capgemini, Steria Mummert

Germany – Offshoring

Demand Structure (5/6): Most sought-after skills

- In general: greater emphasis on **formal IT education** (university degree) and **certification**
- Growing demand for **big data management, analytics, BI**: competences in data-mining, statistical methods and data structures
- **Mobile applications**: iOS: Objective-C, Android: Java, HTML5
- **Open source programming** (LAMP-technologies): Linux, Apache, MySQL and PHP
- Business Intelligence / analytics
- IT security
- **Programming languages**: Java, C/C++, C#, .Net, PHP, ABAP4; demand for Java will further increase due to Android

Source: BITKOM, Cio.de, Capgemini

Germany – Offshoring

Demand Structure (6/6): Most sought-after skills

- **Agile development** proficiency required (e.g. Scrum)
- Further increasing demand for Typo3 particularly from SMEs
- **SAP skills** (modules: FI, BW, CO, SD)
- Oracle know-how
- **Business know-how**: processes and functions (accounting, marketing, etc.)
- Project management skills
- **Soft skills**: social and communication skills, cross-cultural skills, language skills
- **Overall**: software development will become a commodity and demand for offshoring / nearshoring will further increase due to digital transformation of the German economy and skills shortage

Source: Source: Cio.de, Gartner, PWC, Silicon.de

Agenda

Germany – Key Success Factors for Exporting

Marketing & Positioning

- Creating a “national brand” (cluster of excellence) → trust
- Having a clear strategy
- International references
- Competitive and transparent pricing (benchmark: Indian offshoring providers at ca. 50% of German prices, but higher overheads for project management and coordination required)
- Ability to communicate customer value and ROI
- Key account and customer relationship management
- Market segmentation and specialization by: company size (SMEs), technology, verticals, functional areas, business processes
- Reflecting market and technology trends (e.g. digital transformation) effectively in the service portfolio
- Focus on specific offshoring services (e.g. software testing)
- Strategic partnerships, networks and alliances in Germany (indirect market penetration)
- Communicating the nearshoring advantage effectively (combination of low-risk destination with cost advantages)

Germany – Key Success Factors for Exporting

Quality & Processes

- Project management skills: continuous work tracking and reporting
- Knowledge of evaluation, selection and purchasing procedures
- Compliance with quality, deadlines and budget requirements
- Professional HR management (motivation, skills management) → minimizing fluctuation
- University alliances and cooperation with academia: skill alignment and sustainable recruitment
- German companies have comparatively high expectations concerning quality
- Quality management standards, methodologies and process models: CMMI, ISO, RUP, Agile Methods, SCRUM, Six Sigma, ITIL
- Agile methods (Scrum) for nearshoring (particularly relevant for smaller projects and for SME clients)
- Certification: QM, project management, process management, technologies
- Customer education (SMEs): how to use offshoring effectively by applying suitable models and processes; expectation handling concerning onsite delivery
- Compliance with international IT security management systems and standards (e.g. ISO/IEC 27001, ISO/IEC 15408)

Germany – Key Success Factors for Exporting

Technology & Capabilities

- Ensuring continuing education and training
- Ability to support client with evaluation, project preparation and requirement specification (e.g. with UML); technical documentation
- Building relevant technical capabilities (e.g. Java, SAP (ABAP4), TYPO3)
- Measures to ensure security and data protection
- Combination of technology and business know-how (**"hybrid capabilities"**); vertical expertise
- Technical responsiveness and adaptability (e.g. OSS, SAP, mobile applications)
- Language skills and cross-cultural trainings: German language capabilities as an USP
- Onsite delivery capabilities
- Integrated outsourcing services for SMEs: combination of IT consulting and outsourcing services with trainings and success-based fees and a local key account
- Ability to cover the whole software development cycle and to provide "turnkey solutions"

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