

VENDOR SELECTION MATRIX™

IT AND ENTERPRISE SERVICE MANAGEMENT

THE TOP VENDORS FOR THE GERMAN UPPER MIDMARKET IN 2021

Research In Action

February 2021

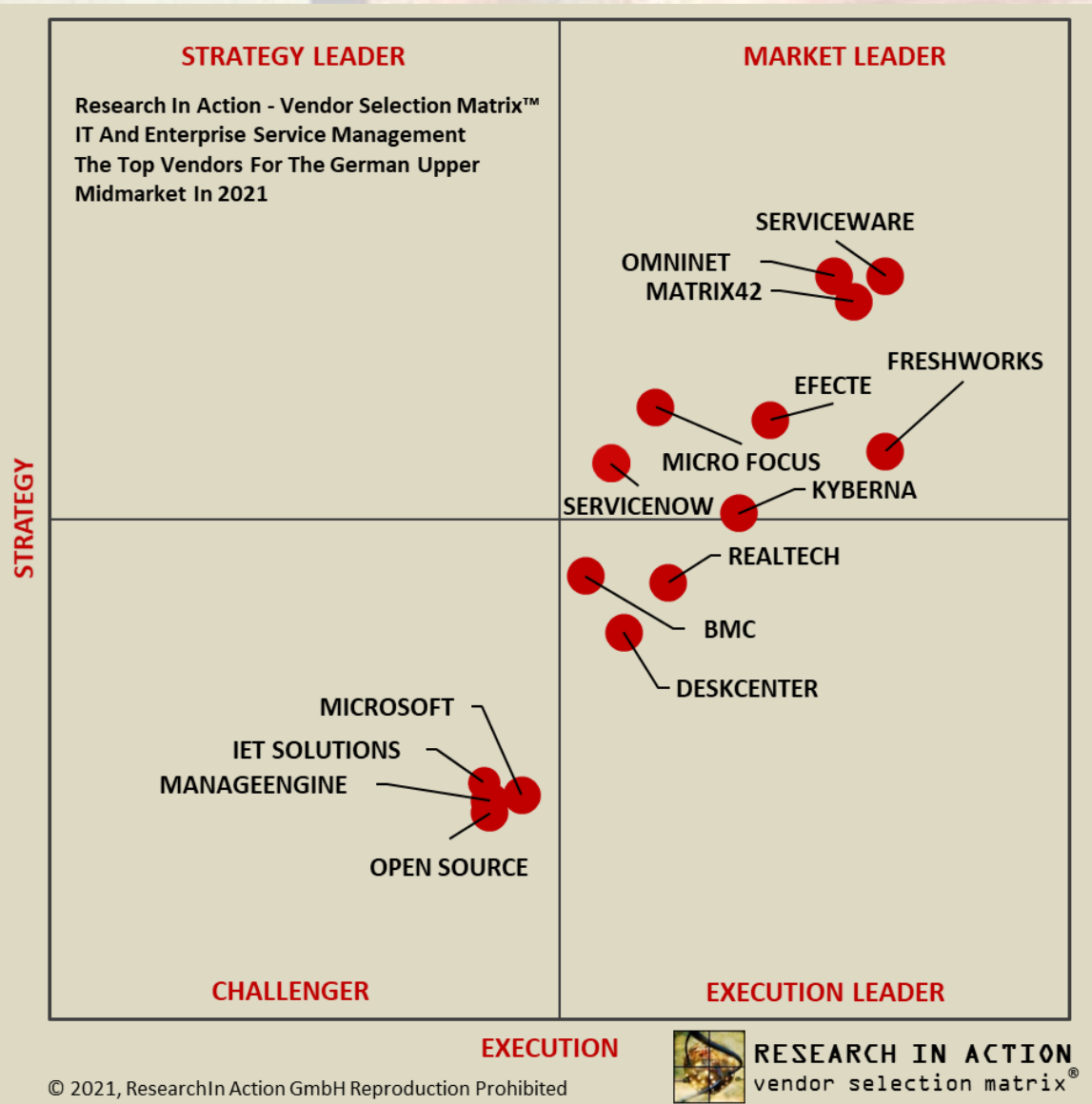
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RESEARCH IN ACTION
independent research & consulting

VENDOR SELECTION MATRIX™:

IT AND ENTERPRISE SERVICE MANAGEMENT



		STRATEGY	EXECUTION	TOTAL
1.	SERVICEWARE	4.49	4.64	9.13
2.	OMNINET	4.49	4.54	9.03
3.	MATRIX42	4.44	4.58	9.01
4.	FRESHWORKS	4.14	4.64	8.78
5.	EFECTE	4.20	4.41	8.61
6.	MICRO FOCUS	4.23	4.19	8.41
7.	KYBERNA	4.01	4.35	8.36
8.	SERVICENOW	4.11	4.10	8.21
9.	REALTECH	3.88	4.21	8.09
10.	BMC	3.89	4.05	7.94
11.	DESKCENTER	3.78	4.13	7.90
12.	MICROSOFT	3.45	3.93	7.38
13.	IET SOLUTIONS	3.48	3.85	7.33
14.	MANAGEENGINE	3.44	3.86	7.30
15.	OPEN SOURCE	3.41	3.86	7.28

Note: Potential numerical deviations due to rounding

FOREWORD

Every year, Research In Action surveys 10,000+ enterprise IT and business decision makers in order to gain insights on strategy, investments and ongoing challenges of technology innovation in the IT and Marketing Automation realm. These surveys give us access to a wealth of direct and unfiltered feedback from the buyers. It also helps us to understand how buying decisions are made in today's business environment. The Vendor Selection Matrix™ is a primarily survey-based methodology for vendor evaluation where 62.5 % of the evaluation is based on a survey of enterprise IT or business decision makers and 37.5 % on the analyst's judgement. The analyst's input is fed by a combination of intensive interviews with software or services vendors and their clients, plus their informed, independent point-of-view as an analyst. All of this combines to make Research in Action Vendor Selection Matrix™ reports so unique. This approach is one of the key differentiators of Research In Action in market research. For this report we interviewed 750 IT managers with budget responsibility in German upper midmarket* companies. We selected those vendors which achieved the best evaluations scores from the buyers but disregarded those with fewer than 15 evaluations.

For years we have seen a steady evolution from IT Service Management (ITSM) to Enterprise Service Management (ESM), which means that many companies want to apply their process modeling skills to other business processes. In Germany there are significant differences between large enterprises and upper midmarket companies when it comes to ESM versus ITSM. While in large enterprises the transformation from ITSM to ESM has already been completed for more than 70% of those surveyed, this is not yet the case with medium-sized companies. Only a little over 42% of the respondents stated that ITSM is already part of ESM today or will be in 12 months at the latest.

As well as the ratings, we also asked respondents whether they would recommend the vendor to their peers, the percent of affirmatives is documented as the Research In Action Recommendation Index; it ranges in this landscape from 84% to 99%.

This report provides you with a useful guide to important IT and Enterprise Service Management Trends and will help you make an informed decision regarding which vendors could best fit your requirements. This information can then be used in a amore detailed evaluation.

To Infinity...and Beyond!

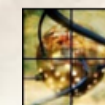
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* The German upper midmarket, der "deutsche gehobene Mittelstand" includes companies with a minimum of € 50 million annual revenue. Excluded are PLCs (AGs) as well as government, public sector and non-profit organizations.



OUR SURVEY DEMOGRAPHICS: IT AUTOMATION

COUNTRY BREAKDOWN



Deutschland	750
Total	750

INDUSTRY BREAKDOWN

Energy	57
Financial Services	126
Government & Non Profit	0
Life Sciences	119
Manufacturing	210
Technology, Media & Telecoms	65
Consumer Packaged Goods & Retail	53
Professional Services	72
Travel & Transportation	48
Total	750

90.000+
Data-Points

750
IT
Managers

Leading
Vendors

20+
Reports
In 2021

COMPANY SIZE BREAKDOWN

Midsize Companies
(Revenue more than € 50 million)



Headcount below 1.000:	104
Headcount 1.000 to 2.500	163
Headcount 2.500 to 5.000:	256
Headcount over 5.000:	227
Total	750

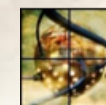
JOB TITLE BREAKDOWN



IT Leiter	138
Leiter IT Betrieb/Rechenzentrum	119
Leiter IT Service Management oder Help Desk	98
Projektleiter	69
Leiter Infrastruktur	68
Geschäftsführer	64
Leiter Shared Services Center	45
CTO	43
VP IT	19
Leiter Automatisierung	18
CIO	17
Leiter Change Management	15
Leiter Application Performance Management	13
Leiter IT Einkauf	11
Leiter Prozessmanagement	8
Andere	5
Total	750

37,5 %
Analyst's
Opinion

62,5 %
Survey
Results



OUR MARKET IMPACT OVER THE LAST 12 MONTHS

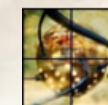
Customer base:
150,000 IT Automation
100,000 Marketing Automation

400 vendors evaluated
20+ research reports
15,000 clicks on average

10,000+ enterprise
survey participants

15 press releases
1,200 clicks on average

Vendor Selection Matrix™: The right mix makes all the difference
62.5% customer evaluations + 37.5% analyst's judgement = 100% success

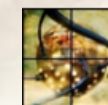


WHAT TOOLS DO YOU USE TO CREATE THE VENDOR SHORTLIST?



Decision Makers use a mix of traditional and online tools to create the vendor shortlists

N = 3,750 Enterprise, Marketing and Business Managers with budget responsibilities.



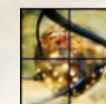
WHAT IS IT AND ENTERPRISE SERVICE MANAGEMENT?

- IT Service Management (ITSM)¹ refers to the entirety of activities – directed by policies, organized and structured in processes and supporting procedures – that are performed by an organization to plan, design, deliver, operate and control Information Technology (IT) services offered to customers. It is thus concerned with the implementation of IT services that meet customers' needs, and it is performed by the IT service provider through an appropriate mix of people, process and information technology.
- The IT Infrastructure Library (ITIL)² is the de facto standard for IT Service Management process definitions today.
- Enterprise Service Management (ESM)³ is a category of business management software - typically a suite of integrated applications that a service organization uses to capture, manage, save and analyze data critical to their service business performance. Enterprise Service Management has grown out of the use of IT Asset Management for traditionally non-IT assets. Today it is also increasingly used for:
(1) Human resources, (2) Vendor management, (3) Technical services, (4) Field services, (5) Financial management and (6) Shared services organizations.

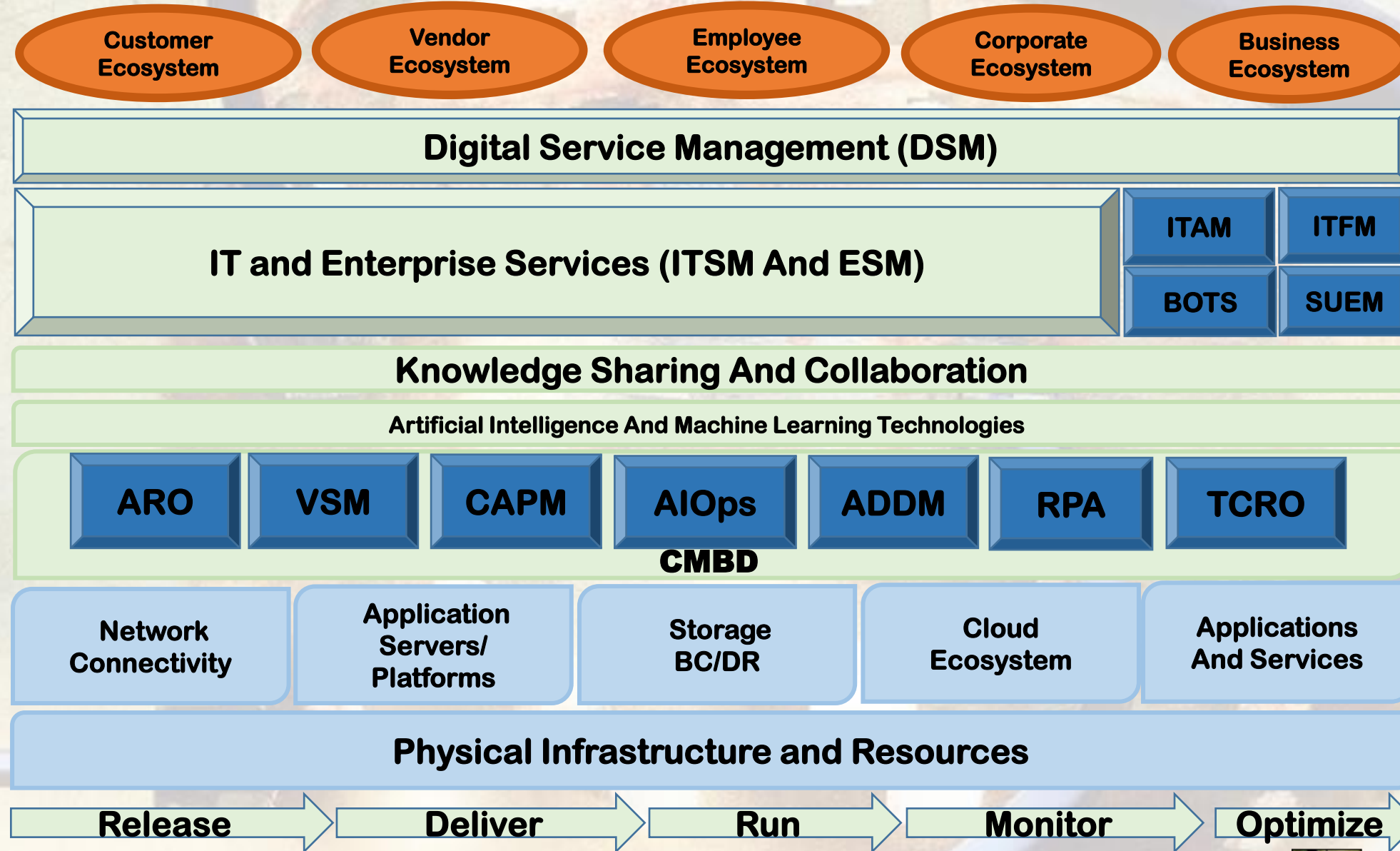
¹ IT Service Management, see https://en.wikipedia.org/wiki/IT_service_management.

² IT Infrastructure Library, see http://en.wikipedia.org/wiki/IT_Infrastructure_Library. ITIL is a trademark of AXELOS Limited.

³ Enterprise Service Management, see https://en.wikipedia.org/wiki/Enterprise_service_management.



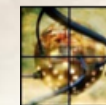
THE IT AUTOMATION MARKET TEXTURE



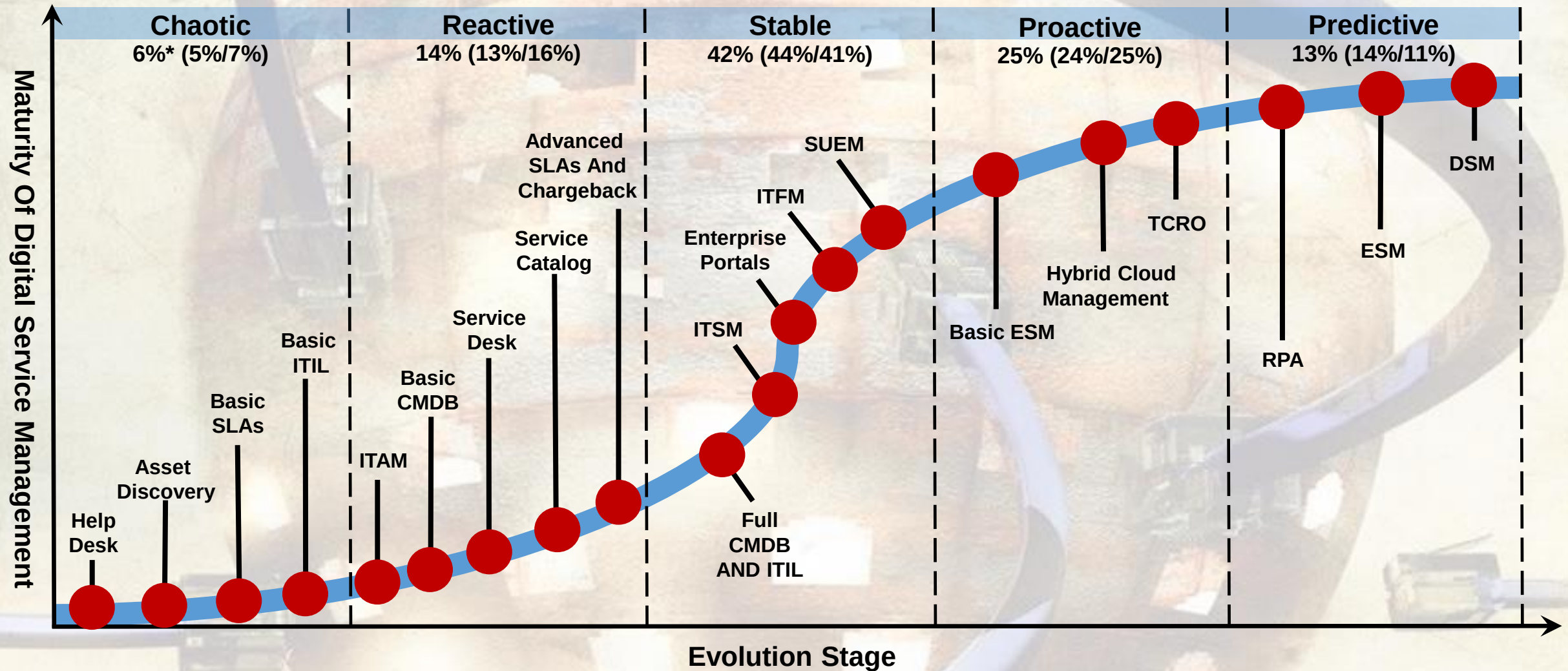
IT Automation solutions are necessary for a modern digital operating model.

IT Automation solutions are foundational for any transformation to reduce toil and decrease manual errors.

IT Automation solutions can enforce good practices to optimize digital service quality and speed of service delivery.



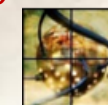
DIGITAL SERVICE MANAGEMENT MATURITY S-CURVE 2021



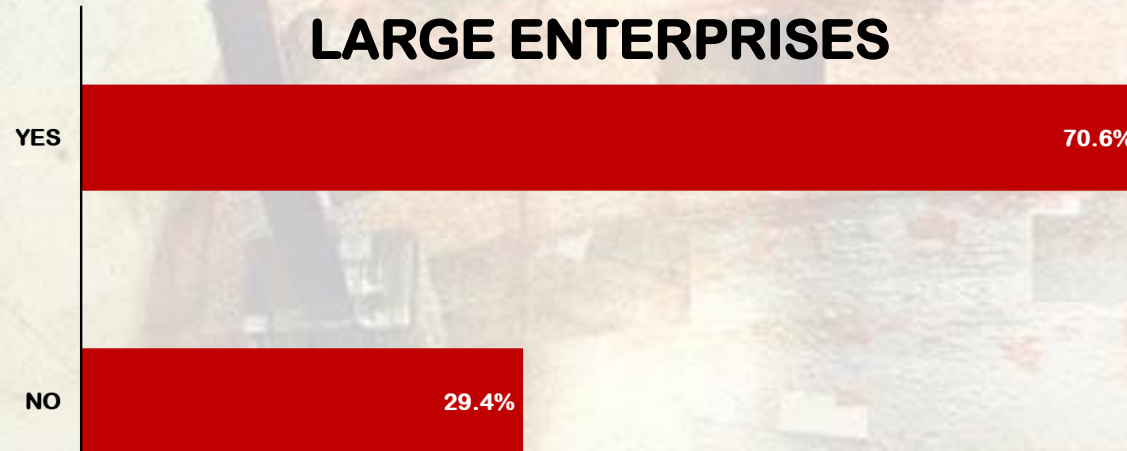
N = 2,250 Enterprise Managers with budget responsibility.

* Categories show adoption rates in 2021, (I) show changes from 2020/2019.

All acronyms are defined in the report Appendix



RESEARCH: HAS ITSM ALREADY MERGED OR WILL IT MERGE INTO ESM WITHIN THE NEXT 12 MONTHS?

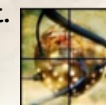


N = 2,050 Enterprise Managers with budget responsibilities and 750 Managers with budget responsibilities in the midmarket.

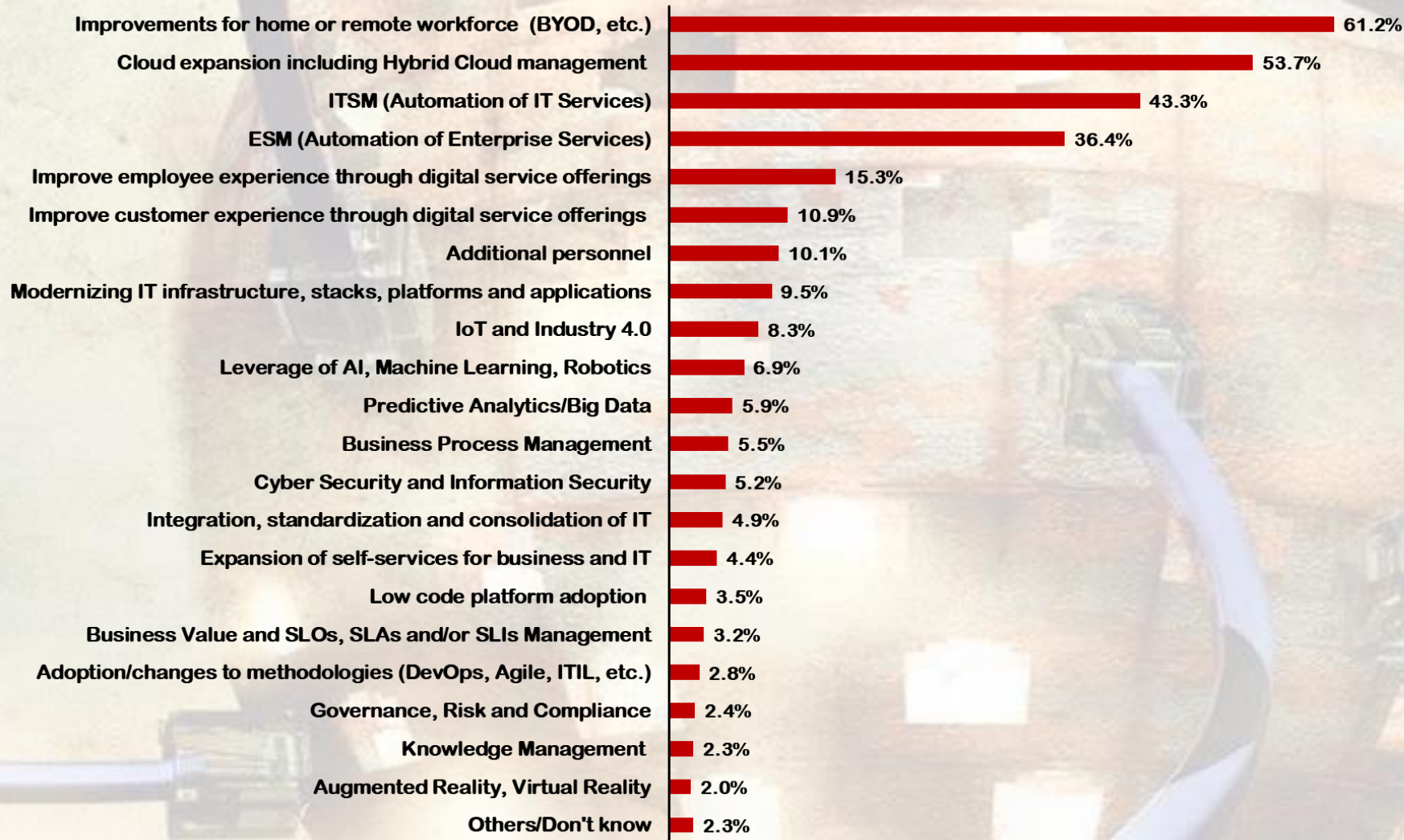
In Germany there are significant differences between large enterprises and the upper midmarket companies when it comes to ESM versus ITSM.

While in large enterprises the transformation from ITSM to ESM has already been completed for more than 70% of those surveyed, this is not yet the case with medium-sized companies. Only a little over 42% of the respondents stated that ITSM is already part of ESM today or will be in 12 months at the latest.

But: Of the 57.5% of respondents from the upper midmarket who do not yet see ITSM as an integrated part of ESM, 76.3% said that they believe this will change in the next three to five years..



RESEARCH: WHAT ARE YOUR TOP THREE INVESTMENT AREAS RELATED TO IT AND ENTERPRISE SERVICE MANAGEMENT IN 2021?



N = 750 IT Managers with budget responsibilities in the German upper midmarket.

The focus is on four investment topics for 2021.

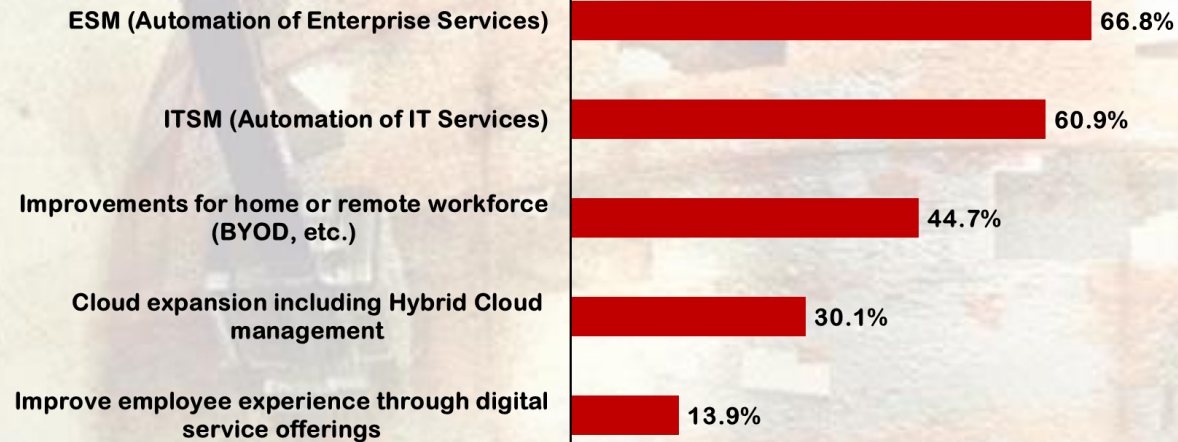
For 2021, German upper midmarket companies are essentially focusing on four topics in the field of IT and Enterprise Service Management:

1. Home office support
2. Cloud extensions
3. ITSM
4. ESM

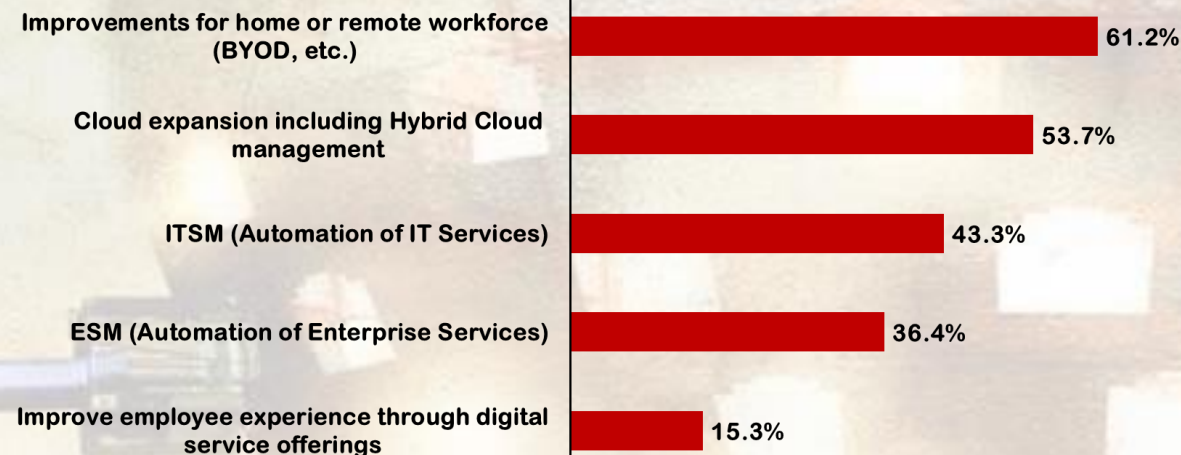
All four topics were mentioned by more than a third of the respondents. All other topics are considered far less important, with fewer than 10% starting with the eighth most important investment area.

RESEARCH: WHAT ARE YOUR TOP THREE INVESTMENT AREAS RELATED TO (IT AND) ENTERPRISE SERVICE MANAGEMENT IN 2021?

LARGE ENTERPRISES



MIDMARKET

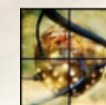


N = 750 IT Managers with budget responsibilities in DACH enterprises and
750 IT Managers with budget responsibilities in the German upper midmarket.

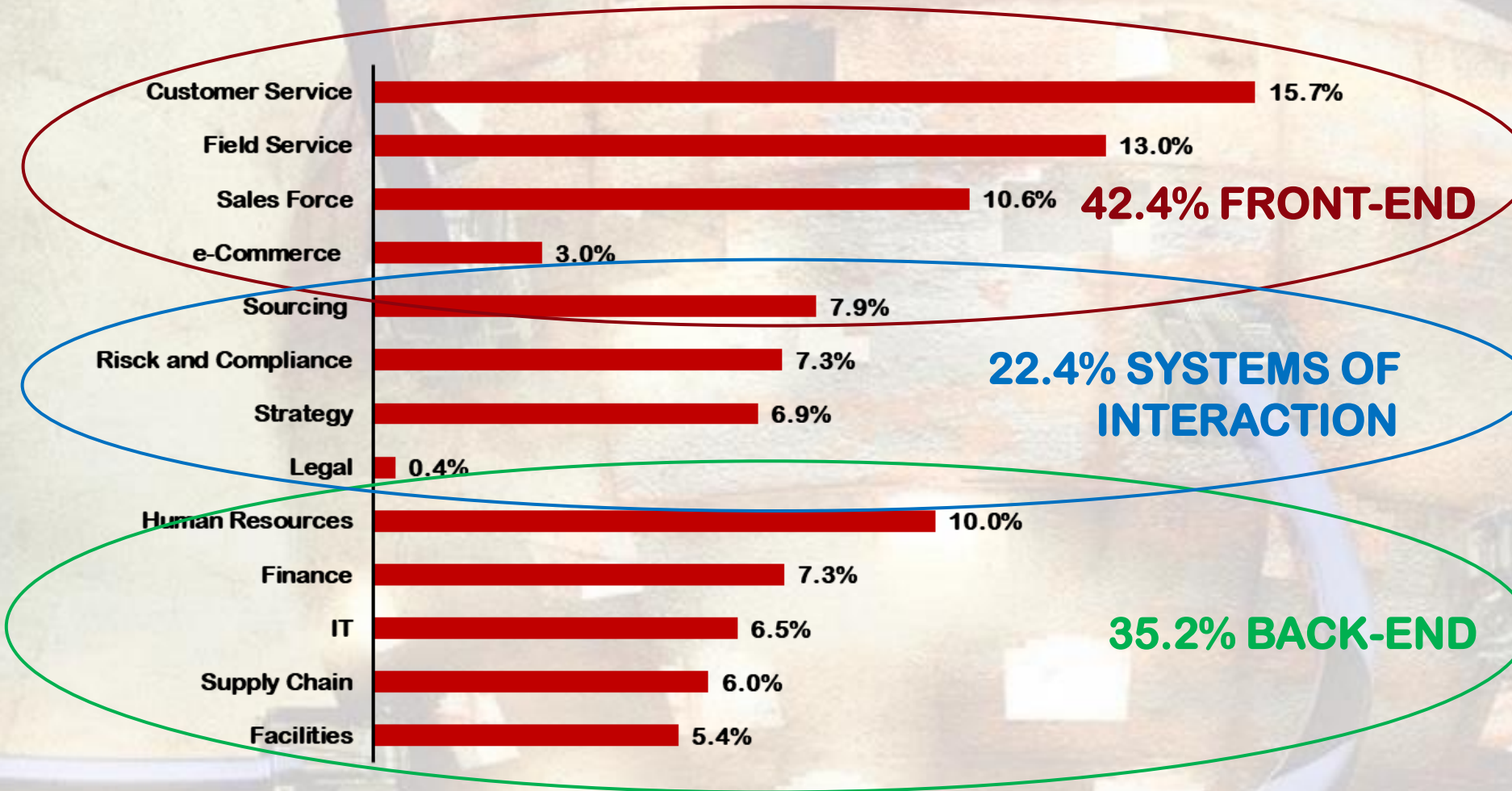
Large enterprises in DACH and the German upper midmarket companies have different priorities.

The top five investment areas for 2021 are identical, but the weighting is different.

While large enterprises are increasingly investing in the automation of ESM and ITSM processes, the upper midmarket companies are initially concentrating on better support for employees in the home office and the further transformation of IT services into the Cloud, previously provided internally by the internal IT department.



RESEARCH: WITHIN WHICH TOP THREE AREAS WILL YOU APPLY ENTERPRISE SERVICE MANAGEMENT WITHIN THE NEXT 12 MONTHS?

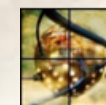


The Front-End as the primary focus of the ESM transformation.

For more than 40% of the decision-makers surveyed, Front-End issues such as customer service and field service are on the list of top three areas for the use of ESM in 2021.

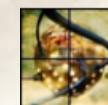
ESM optimizations in the Back-End area are “top-of-mind” for a little more than a third of those surveyed.

N = 750 IT Managers with budget responsibilities in DACH enterprises and
750 IT Managers with budget responsibilities in the German upper midmarket.



INSIGHTS: TOP MARKET TRENDS 2021

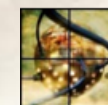
- **ITSM is part of a holistic ESM (for large enterprises) or will become one in the next few years (for the upper midmarket companies).** Enterprise Services Management means managing processes in a large number of business areas from a central point. Existing ITSM solutions and processes are excellent foundations for business processes such as human resources, facilities, case management, project management, fleet management and beyond, as ITSM teams have already figured out how important processes can be streamlined and automated. The expansion of ITSM tools to include business services is a natural evolution and increases the value of IT to the business. As many services within an organization are interconnected and teams work together to transform themselves, Enterprise Service Management becomes a valuable investment. While in large enterprises the transformation from ITSM to ESM has already been completed for more than 70% of those surveyed, this is not yet the case with the upper midmarket companies. Only a little over 42% of those surveyed stated that ITSM is already part of ESM today or will be in 12 months at the latest. But: Of the 57.5% of respondents from the upper midmarket who do not yet see ITSM as an integrated part of ESM, 76.3% stated that they believe this will change in the next three to five years.
- **Joint decision-making between IT and the business.** The provision and delivery of services is no longer the sole responsibility of IT. As employees and departments within organizations continue the trend towards self-service, business decision-makers and IT jointly decide on the best strategies and tools for IT and enterprise service management to have a positive impact on the service experience across their organization and ultimately on the overall business results.



INSIGHTS: TOP MARKET TRENDS 2021

- **Few investment areas dominate the market.** The top five of the investment areas for 2021 are identical for large DACH enterprises and the German upper midmarket companies, but the ranking of the five is different. While large enterprises are increasingly investing in the automation of ESM and ITSM processes, the upper midmarket companies are initially concentrating on better support for employees in the home office and the further transformation of IT services into the Cloud, previously provided internally by the internal IT department. In both studies, the top five investment areas total over 70% of all mentions. If the results of both studies are combined, the following picture emerges for the overall market:

- #1: Improvements for home or remote workforce (BYOD, etc.) – 52.9%.
- #2: ITSM (Automation of IT Services) – 52.1%.
- #3: ESM (Automation of Enterprise Services) – 51.6%.
- #4: Cloud expansion including Hybrid Cloud management – 41.9%.
- #5: Improve employee experience through digital service offerings – 14.6%



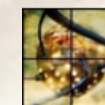
VENDOR SELECTION MATRIX™: IT AND ENTERPRISE SERVICE MANAGEMENT: THE TOP VENDORS FOR THE GERMAN UPPER MIDMARKET IN 2021

VENDOR NAME	PRODUCT(S)
BMC	BMC Helix, Remedy Service Management Suite, Remedyforce, FootPrints, Track-It
DESKCENTER	Deskcenter Management Suite
EFFECTE	efecte Service Management
FRESHWORKS	freshservice, freshdesk
IET SOLUTIONS	iET ITSM
KYBERNA	ky2help Service Management
MANAGEENGINE	ServiceDesk Plus
MATRIX42	Enterprise Service Management, Digital Workspace Platform, Secure Unified Endpoint Management
MICRO FOCUS	IT Operations Management, Service Management Automation X (SMAX)
MICROSOFT	System Center Service Manager, Microsoft Operations Manager
OMNINET	OMNITRACKER
OPEN SOURCE	(1) OTRS, RT und openITCOCKPIT für Incident und Problem Management (2) I-Doit, OCS Inventory NG, OpenQRM, RANCID, Facter, Opsi und Puppet für Change, Configuration und Asset Management (3) R-Project, SE Toolit, XE Toolkit, Orca und]Project-Open[für Capacity Management
REALTECH	dot4, The Guard
SERVICENOW	ServiceNow Workflows
SERVICEWARE	Serviceware Financial, Performance, Processes, Knowledge, Resources

This listing is alphabetical and includes the top 15 vendors which achieved the best evaluation scores from the buyers, having disregarded those with fewer than 15 evaluations.

Other Vendors mentioned outside of the top 15 or with too few evaluations:

- DCON
- SAP
- SOFTEXPERT
- SOLAR WINDS
- TOPDESK
- USU
- VISION HELPDESK
- WENDIA
- ZENDESK



VENDOR SELECTION MATRIX™: IT AND ENTERPRISE SERVICE MANAGEMENT: THE TOP VENDORS FOR THE GERMAN UPPER MIDMARKET IN 2021- VENDOR QUICK FACTS

VENDOR NAME	STAFF	REVENUE	GROWTH	RI*	GOOD TO KNOW
BMC	> 4.000	> € 1 Mrd	< 5% p.a.	92%	A top five player for large companies, only in the top 10 for German medium-sized companies.
DESKCENTER	< 100	< € 10 M	> 10% p.a.	96%	Strong IT asset management as the basis for service, security and endpoint management.
EFFECTE	> 110	> € 15 M	> 20% p.a.	98%	Today the leading European Cloud alternative for the German upper midmarket.
FRESHWORKS	> 3.500	> € 100 M	> 40% p.a.	97%	Very strong growth rates, now also successful in the German midmarket.
IET SOLUTIONS	> 40	< € 10 M	< 0% p.a.	96%	Rooted in IT service management, iET is also used in non-IT areas.
KYBERNA	> 50	> € 10 M	> 40% p.a.	98%	Strong growth, the insider tip for IT and enterprise service management.
MANAGEENGINE	> 10.000	< € 50 M	> 25% p.a.	93%	Both internationally and in Germany with strong growth. The top tip for the future.
MATRIX42	> 470	> € 50 M	> 25% p.a.	97%	Market leader in the administration of the digital workplace in the German upper midmarket.
MICRO FOCUS	> 12.000	> € 500 M	< 5% p.a.	93%	In the German upper midmarket with an upwards trajectory again.
MICROSOFT	> 115.000	> € 500 M	> 10% p.a.	84%	Almost all companies use a certain set of basic monitoring tools.
OMNINET	> 180	< € 50 M	> 10% p.a.	99%	The most flexible complete solution for the digitization and automation of workflows.
OPEN SOURCE	0	€ 0	< 0% p.a.	95%	The steadily declining trend for several years now has accelerated.
REALTECH	< 100	> € 10 M	< 0% p.a.	97%	The best solution for SAP-integrated service management.
SERVICENOW	> 6.000	> € 3 Mrd	> 25% p.a.	94%	The global market leader has not yet fully reached the German upper midmarket.
SERVICEWARE	> 500	< € 100 M	> 20% p.a.	99%	The best vendor for the German upper midmarket, now and in the future.

* The Research In Action Recommendation Index (RI) is collected and calculated by asking the survey participants (see page four) "Would you recommend this vendor in this market to your peers - Yes or No?".

NOTE: Revenue numbers (and growth) are estimated specifically for this market by Research in Action and do not reflect overall company revenue numbers (and growth). Staff numbers are company totals.

VENDOR SELECTION MATRIX™: EVALUATION CRITERIA

STRATEGY

Vision And Go-To-Market	30%	Does the company have a coherent vision in line with the most probable future market scenarios? Does the go-to-market and sales strategy fit the target market and customers?
Innovation And Differentiation	30%	How innovative is the company in this market? Does the solution have a unique selling proposition and clear market differentiators?
Viability And Execution Capabilities	15%	How likely is the long-term survival of the company in this market? Does the company have the necessary resources to execute the strategy?
Recommendation Index	25%	Would customers recommend this vendor in this market to their peers?

EXECUTION

Breadth And Depth Of Solution Offering	30%	Does the solution cover all necessary capabilities expected by customers?
Market Share And Growth	15%	How big is the company's market share and is it growing above the market rate?
Customer Satisfaction	25%	How satisfied are customers with the solution and the vendor today?
Price Versus Value Ratio	30%	How do customers rate the relationship between the price and perceived value of the solution?

NOTES:

62.5% of the evaluation is based on the survey results, 37.5% is based on the analysts' assessment.

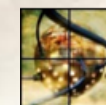
• 40% of the evaluation is based on the survey results: (1) Recommendation Index, (2) Customer Satisfaction, (3) Price Versus Value.

• 15% of the evaluation is based on the analysts' assessment: (1) Viability And Execution Capabilities, (2) Market Share And Growth.

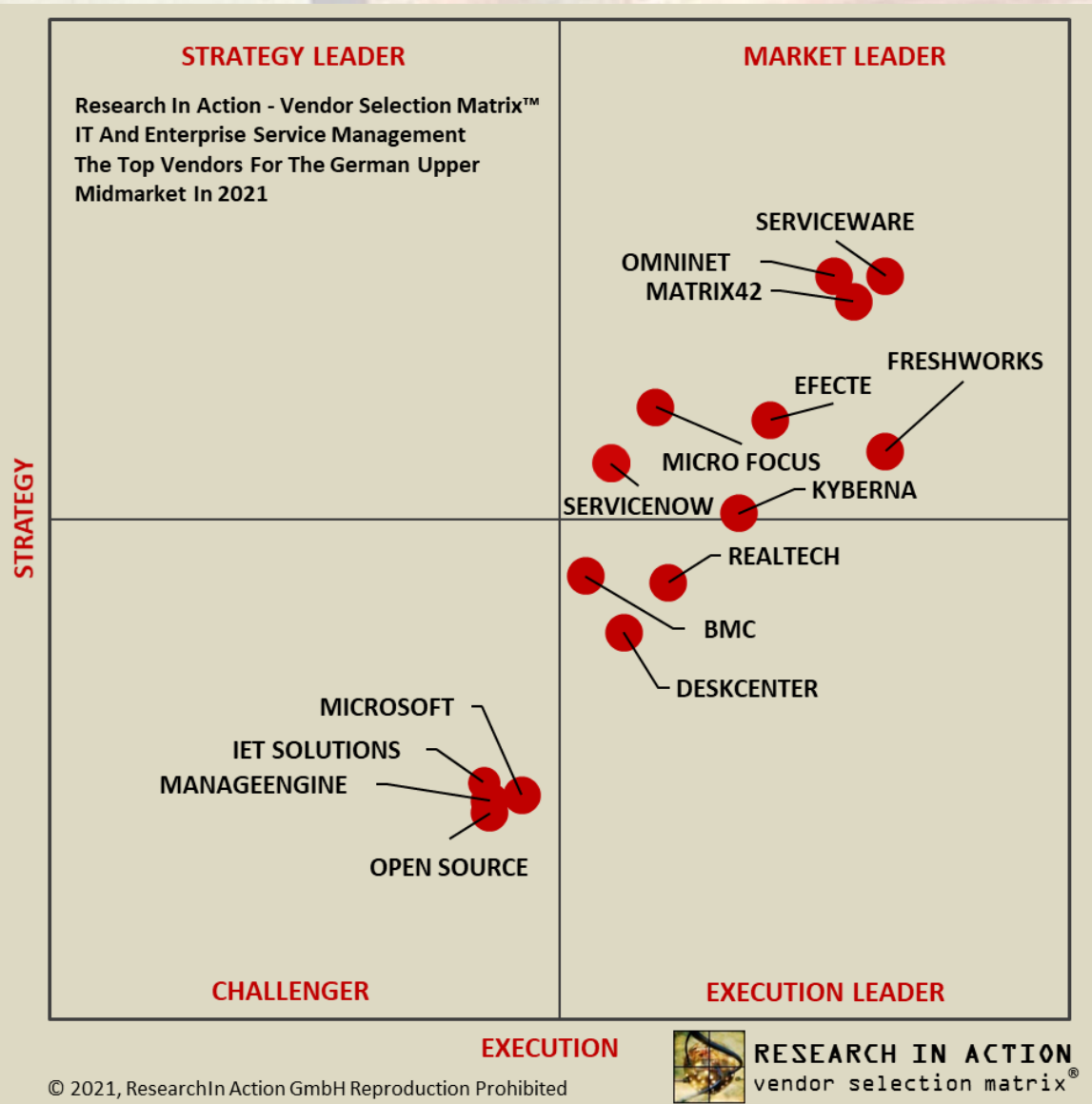
• 45% of the evaluation is based on a combination of survey results and analysts' assessment: (1) Vision And Go-To-Market (2) Innovation And Differentiation (3) Breadth And Depth Of Solution Offering.

The Research In Action Recommendation Index (RI) is collected and calculated by asking the survey participants (see page four)

"Would you recommend this vendor in this market to your peers - Yes or No?"



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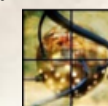
VENDOR SELECTION MATRIX™: IT AND ENTERPRISE SERVICE MANAGEMENT

Efecte has already achieved the ambitious goal of becoming the leading European Cloud alternative to ServiceNow

- **General:** Efecte is represented in the Research In Action Vendor Selection Matrix™ for the fourth time in a row. As the market leader in the Nordic region, Efecte, founded in 1998 and headquartered in Espoo-Helsinki, is the expert for innovative SaaS solutions in the field of IT and Enterprise Service Management. The publicly listed Finnish company has over 110 employees and more than 300 customers, the current annual growth rate is 24%. Efecte is active in Scandinavia, Poland, the Czech Republic and Germany. In Germany in particular, Efecte is on a strong growth path.
- **Strategy:** Efecte's credo is to simplify IT and Enterprise Service Management to support the digitization and automation of business processes. High quality of the solutions and the best user experience are the most important pillars, Cloud and SaaS the delivery model. This strategy is rated very positively by the customers surveyed. In the Research In Action Recommendation Index, which was collected for the second time this year, Efecte even scored the second highest rating of all vendors with 98% (up from 96% last year).
- **Execution:** Efecte is very well positioned in Enterprise Service Management, but its outstanding strengths lie in "state-of-the-art" IT Service Management. Particularly noteworthy here are: (1) Agile Service Management with "Agile Swarming" and a holistic Kanban board for all processes and (2) The unified user interface (across all end devices), which allows parallel work on faults. Customers are particularly satisfied with the simple and transparent pricing model (users per month) from Efecte, with no additional costs for add-ons. Consequently, Efecte achieved the highest rating of all vendors in the evaluation of customer satisfaction.
- **Bottom Line:** The 750 surveyed IT executives with budget responsibility in German upper medium-sized companies have included Efecte in the ranks of the top providers of the Research In Action Vendor Selection Matrix™ for IT and Enterprise Service Management for the fourth time in a row. Efecte has now established itself as one of the market leaders in the top five.



STRATEGY	RESULT
Vision And Go-To-Market	4.25
Innovation And Differentiation	4.00
Viability And Execution Capabilities	4.00
Recommendation Index	4.50
	4.20
EXECUTION	RESULT
Breadth And Depth Of Solution Offering	4.50
Market Share And Growth	3.50
Customer Satisfaction	4.75
Price Versus Value Ratio	4.50
	4.41
Scores from 1 to 5 (maximum)	



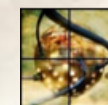
THE RESEARCH IN ACTION GMBH VENDOR SELECTION MATRIX™ METHODOLOGY

Vendor Selection Matrix™ Disclaimer:

The Vendor Selection Matrix™ is a primarily survey-based methodology for comparative vendor evaluation. Research In Action GmbH does not endorse any vendor, product or service depicted in our research publications, and does not advise technology users to select only those vendors with the highest ratings. The information contained in this research has been obtained from both enterprise as well as vendor sources believed to be reliable. Research In Action GmbH's research publications consist of the analysts' opinions and should not be considered as statements of fact. The opinions expressed are subject to change without further notice. Research In Action GmbH disclaims all warranties, expressed or implied, with respect to this research, including any warranties of merchantability or fitness for a particular purpose. All trademarks are recognized as the property of the respective companies.

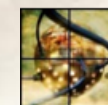
About:

Research In Action GmbH is a leading independent information and communications technology research and consulting company. The company provides both forward-looking as well as practical advice to enterprise as well as vendor clients.



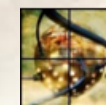
APPENDIX: IT AUTOMATION MARKET TEXTURE DEFINITIONS

- **Application Discovery and Dependency Mapping (ADDM)** solutions automatically discover various applications running on server and network devices within the business hybrid infrastructure, and maps the dependencies between them providing a holistic view of all the resources running and the relationships between them.
- **AI Powered Chatbot Platforms** which are used to build applications that answer questions, provide advice and/or recommendations using natural language processing and other dialog related technologies.
- **Artificial Intelligence and Machine Learning (AI/ML)** are both technologies and are leveraged in automation solutions. Artificial intelligence (AI) is the ability of a computer program or machine to think and learn (AI can mimic human cognition). Within IT Automation AI is used to correctly interpret a variety of data, to learn from such data, and to use those learnings to achieve specific goals and tasks through flexible adaptation. Machine learning enables computers with the ability to learn without being programmed (explicit algorithms). It explores the study and construction of algorithms which can learn and make predictions on data. The algorithms follow programmed instructions or can make predictions or decisions based on the data. Machine learning is used when explicit algorithms cannot be done (e.g. computer vision, search engines, optical character recognition).
- **Artificial Intelligence for Operations (AIOps)** solutions equip IT enterprise teams with analysis of volumes and categories of data to improve key processes, tasks and decision making. The adoption of these tools automates the ingestion of fast volumes of data; leverage machine learning to analyze the data, present findings to either predict or alert on issues, and leverage the knowledge for automation or decision making.
- **Application Release Orchestration (ARO)** solutions equip IT enterprise organizations and their teams with the automation of the software deployment cycle across hybrid technology environments.
- **Configuration Management Database (CMDB)** is a database which captures IT components referred to as configuration items (CIs), which can be software, hardware, a document, article, or any such item that is part of the information system of the organization.
- **Continuous Application Performance Management (CAPM)** software solutions continuously identify issues around performance and availability of software applications, IT and enterprise services. The solutions strive to proactively detect and diagnose application performance problems and health and enable a situational awareness of application related issues.
- **Enterprise Service Management (ESM)** is a category of business management software - typically a suite of integrated applications that a service organization uses to capture, manage, save and analyze data critical to their service business performance. It automates service offerings across internal functional areas such as (1) Human resources, (2) Vendor management, (3) Technical services, (4) Field services, (5) Financial management and (6) Shared services organizations.
- **Digital Service Management (DSM)** solutions enable the management of resources and services which support multiple digital services leveraged by external customers. The purpose is to break down operating silos, ensure compliance and governance while enabling the business to continuously innovate new and existing digital services.
- **End User Experience Management (EUEM)** solutions monitor and manage the impact of application and device performance from the end user's point of view and ensure quality of service as seen and experienced by the end user.



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- **IT Asset Management (ITAM)** software manages the full lifecycle of IT assets which typically includes all software, hardware, networking, cloud services, and client devices. In some cases, it may also include non-IT assets such as buildings or information where these have a financial value and are required to deliver an IT service. IT asset management can include operational technology (OT), including devices that are part of the Internet of Things. These are typically devices that were not traditionally thought of as IT assets, but that now include embedded computing capability and network connectivity.
- **IT Financial Management (ITFM)** software enables the accurate and cost-effective management of IT assets and resources with the aim to plan, control, recover (or overall manage) costs which are occurring while providing IT and Enterprise Services to the organization.
- **The IT Infrastructure Library (ITIL)** is the de facto standard for IT Service Management process definitions today.
- **Internet of Things Management (IoT)** solutions vary depending on the use case but typically manage a system of interrelated computing devices, mechanical and digital machines, objects, animals or people that are equipped with unique identifiers which transfer data over a network without requiring human-to-human or human-to-computer interaction.
- **IT Operations Management (ITOM)** solutions monitor and control IT services and infrastructure and enable IT to execute routine tasks necessary to support the operation of applications, services and hardware components within an organization; typically included are the provisioning of IT infrastructure, capacity management, cost-control activities, performance and security management and availability management for all IT infrastructure and assets.
- **IT Service Management (ITSM)** refers to the entirety of activities – directed by policies, organized and structured in processes and supporting procedures – that are performed by an organization to plan, design, deliver, operate and control Information Technology (IT) services offered to internal customers. It is thus concerned with the implementation of IT services that meet customers' needs, and it is performed by the IT service provider through an appropriate mix of people, process and information technology.
- **Robotic Process Automation (RPA)** solutions enable the automation of tasks, processes and procedures which are normally conducted by a human. RPA solutions create software robots that mimic human actions. Typically, these are tasks that a human would do. (Ro)Bots and Virtual Agents are part of RPA solutions.
- **Secure Unified Endpoint Management (SUEM)** software enables the management and securing of mobile applications, content, collaboration and provides for the management of all endpoints like smartphones, tablets, laptops, printers, ruggedized devices, Internet of Things (IoT) and wearables.
- **Technology Cost and Resource Optimization (TCRO)** software enables the planning, management and visibility of the supporting and required business and IT technology resources from a cost and capacity perspective by visualizing, planning, prioritizing and optimizing the usage and demands of technology resources (people, processes and technologies) for the enterprise.
- **Value Stream Management (VSM)** software solutions capture, visualize, and analyze the flow of work across the entire Agile software delivery project. The capabilities include end-to-end visibility, traceability and governance over the entire process and help to plan, track, and steer work at the team, program, portfolio, and enterprise levels. It includes the people working on a project, the systems which are operated and leveraged, and the flow of information and materials between teams. It enables the measurement of speed and quality for digital transformations.



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