

VENDOR SELECTION MATRIX™ VALUE STREAM MANAGEMENT SOFTWARE SOLUTIONS

THE TOP GLOBAL VENDORS 2021

Research In Action

November 2021

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RESEARCH IN ACTION
independent research & consulting

VENDOR SELECTION MATRIX™

VALUE STREAM MANAGEMENT



	STRATEGY	EXECUTION	TOTAL	
1.	DIGITAL.AI	4.71	4.64	9.35
2.	PLUTORA	4.49	4.58	9.06
3.	CONNECTALL	4.41	4.49	8.90
4.	TASKTOP	4.49	4.34	8.83
5.	IBM	4.29	4.50	8.79
6.	GITLAB	4.28	4.43	8.70
7.	SERVICENOW	4.40	4.08	8.48
8.	CLOUDBEES	4.15	4.15	8.30
9.	APPTIO	4.05	4.20	8.25
10.	OPSHUB	3.80	3.80	7.60

Notes:

- Scale Explanation: 1 (Low) To 5 (High).
- Potential numerical deviations due to rounding.



RESEARCH IN ACTION
vendor selection matrix®

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 63% of the evaluation is based on a survey of enterprise IT or business decision makers and 37% 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 1,500 enterprise IT and business managers with budget responsibility in enterprises globally. We selected those vendors which achieved the best evaluations scores from the buyers but disregarded those with fewer than 15 evaluations.

The adoption of DevOps tools and methods have accelerated across the globe, but many teams still struggle with showing the investments and their work into measures which are meaningful. Product owners and business leaders are looking for key metrics around cycle times, quality, and innovation improvements to support and accelerate improved customer experience and customer value. Actionable insights which allow different team members to collaborate, improve, resolve or repair bottlenecks are needed. Value Stream Management (VSM) is a methodology which aims to improve flow across the software value stream. But the VSM journey is a tough one as executive buy-in and existing team silos hamper its adoption. While VSM is a philosophy or approach it also must be supported with automation tools.

In this new report, we provide you with a useful guide to important VSM automation tools market trends, names the Top 10 vendors as selected by 1,500 users based upon product, company and service quality. This research will help you make an informed decision regarding which vendors might fit your requirements. This study can be used as a starting point before a more detailed evaluation of vendors for requirements and market evolution.

You only live once (YOLO)!

Eveline Oehrlich

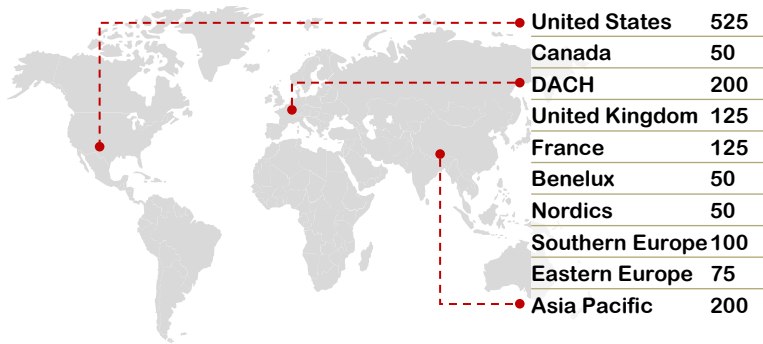
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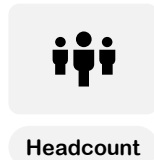
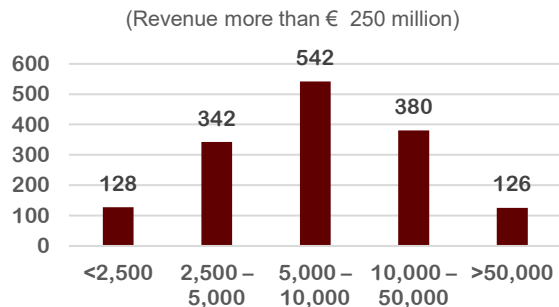


OUR SURVEY DEMOGRAPHICS: IT AUTOMATION

Country Breakdown



Company Size Breakdown



Industry Breakdown

Energy	95
Financial Services	255
Government & Non Profit	90
Life Sciences	200
Manufacturing	350
Technology, Media & Telecoms	200
Consumer Packaged Goods & Retail	110
Professional Services	100
Travel & Transportation	100
Total	1,500

Job Title Breakdown

VP IT Infrastructure	155	Chief Operations Officer	55
IT Manager	150	VP Technology	50
VP IT	135	Business Executive	40
Chief Information Officer	125	Sourcing and Vendor Management	37
IT Operations Manager	121	VP IT Financial Management	35
VP Service Desk	107	VP Enterprise Architecture	34
Chief Digital Officer	85	Project Manager	32
Chief Technology Officer	66	VP Application Development	27
Project Management Office	64	VP DevOps	25
VP IT Shared Services	62	Chief Financial Officer	20
VP Operations	60	Chief Sales Officer	15
		Total	1,500

All Research in Action surveys are gender neutral and 100% confidential.



100,000+
Data Points



1,500
Enterprise Managers



37%
Analyst's Opinion



63%
Survey Results

The Vendor Selection Matrix™ Evaluation Methodology:

The basis of our competitive vendor evaluation reports is always an extensive buyer survey.

We then select those vendors which achieved the best evaluations scores from the buyers but disregard those with fewer than 15 evaluations.

The final matrix scores are a combination of the survey results, vendor input and analyst's opinion.



OUR MARKET IMPACT OVER 12 MONTHS

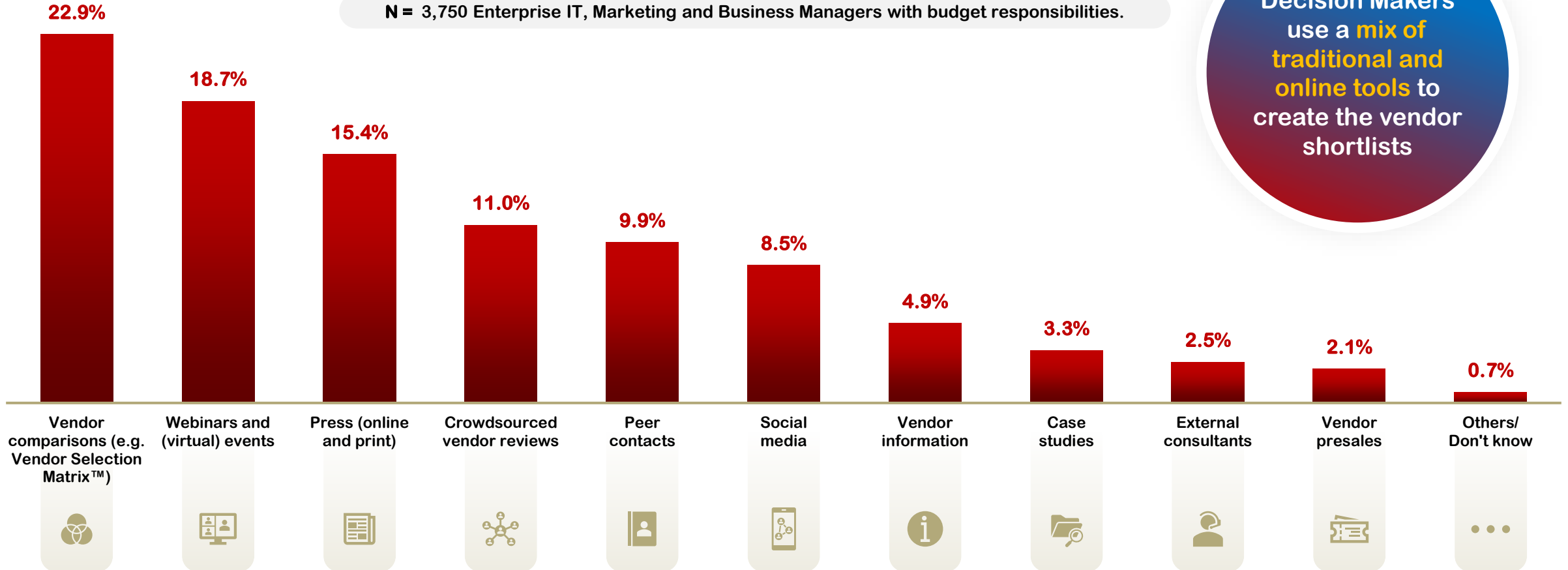


Vendor Selection Matrix™: The right mix makes all the difference
63% customer evaluations + 37% analyst's judgement = 100% success



WHAT TOOLS DO YOU USE TO CREATE THE VENDOR SHORTLIST?

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



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

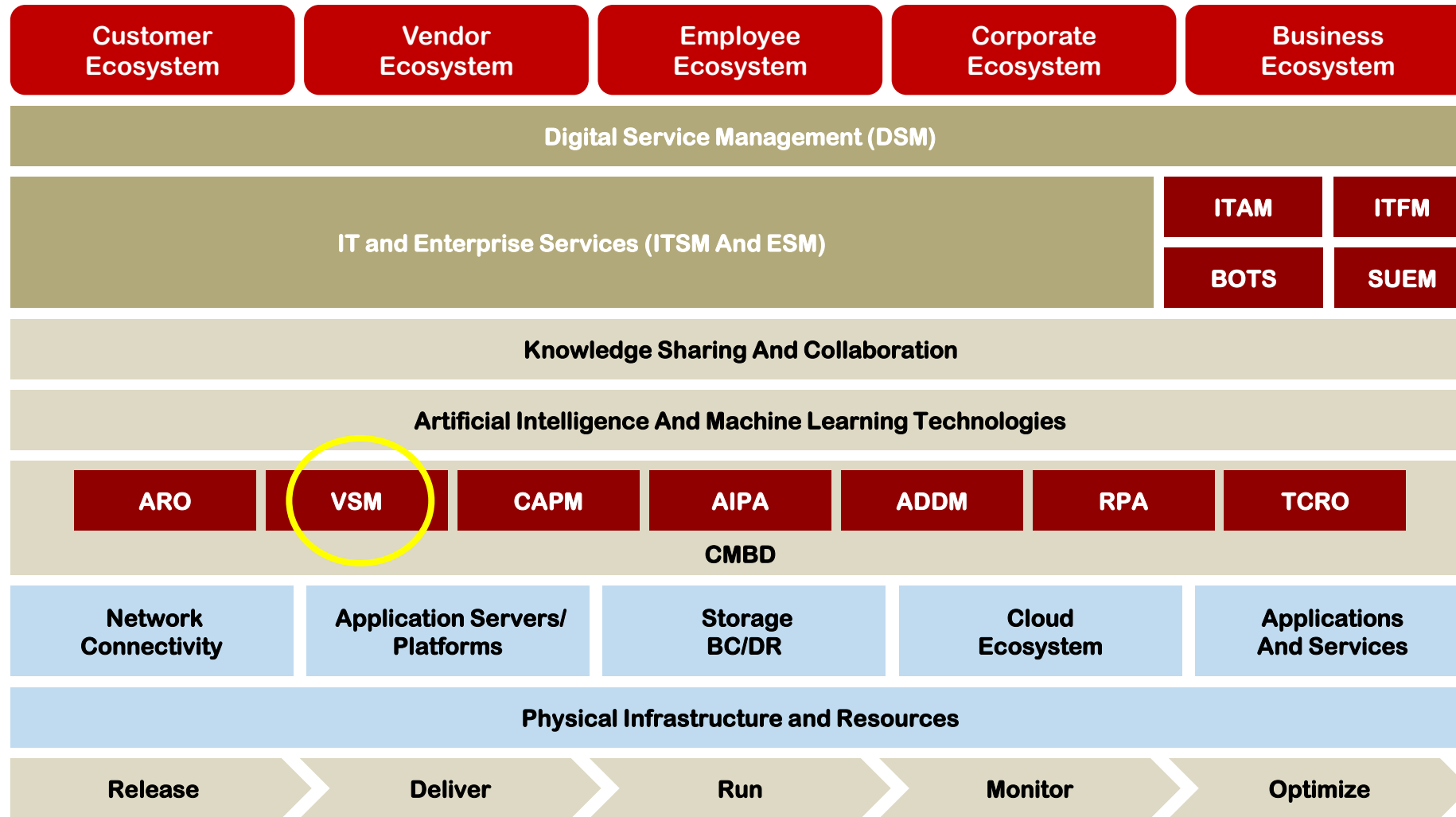


WHAT IS VALUE STREAM MANAGEMENT?

- 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 product, 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.
- The focus of the vendors offering VSM solutions is the value chain of software delivery including the macro steps of ideate, create, release, and operate.
- The subprocesses within the macro steps are also essential and necessary to provide a complete picture of the value stream. The solution should cover the following key aspects:
 - Normalization of data across related topics and other pipeline processes
 - Analytics to measure pipeline efficiency, effectiveness of results and overall business value
 - Integration with key other topic areas such as requirement management and portfolio management
 - Ability to support compliance and governance requirements
 - Visualization capability of e.g., resources, project status and quality details.



THE IT AUTOMATION MARKET TEXTURE



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

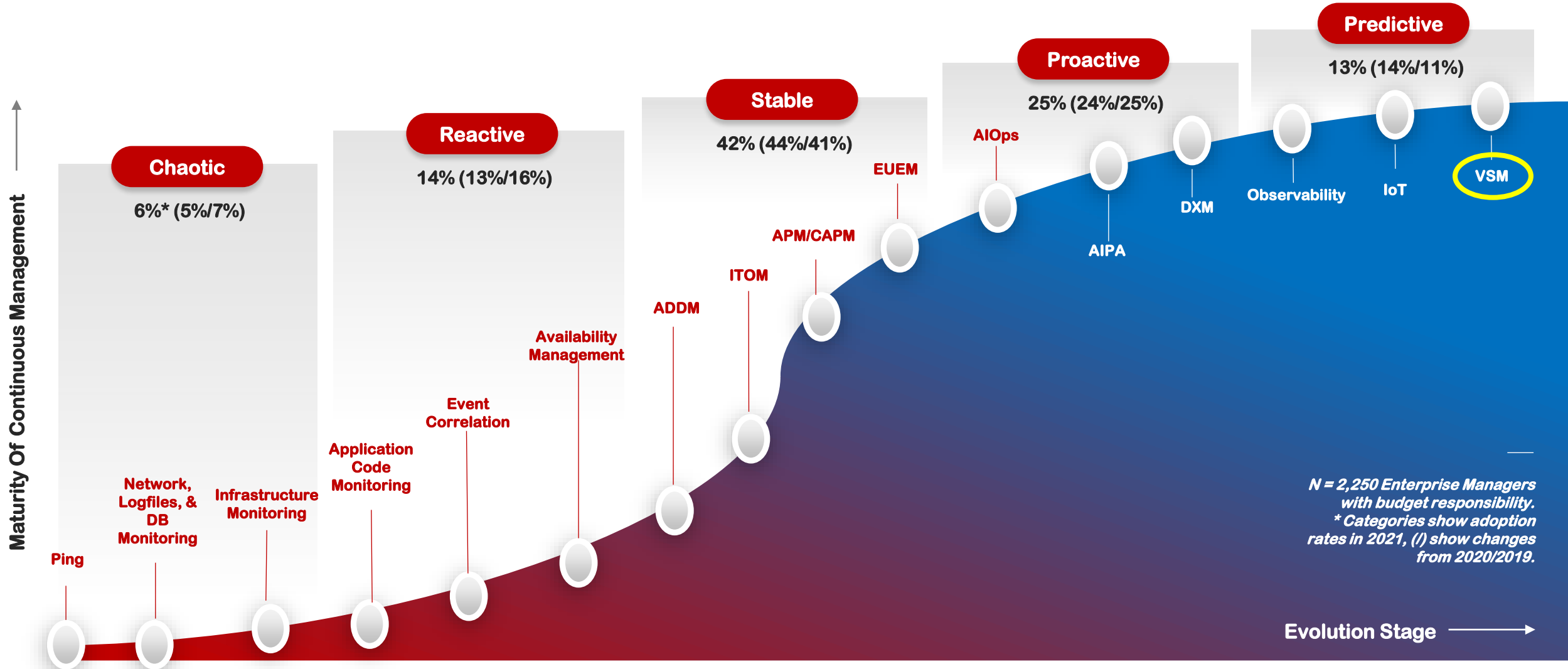
IT Automation solutions are foundational for any transformation to reduce toil and decrease manual errors.

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



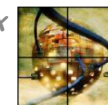
CONTINUOUS MANAGEMENT (CM)

MATURITY S-CURVE 2021



N = 2,250 Enterprise Managers with budget responsibility.
* Categories show adoption rates in 2021, (/) show changes from 2020/2019.

All acronyms are defined in the report Appendix

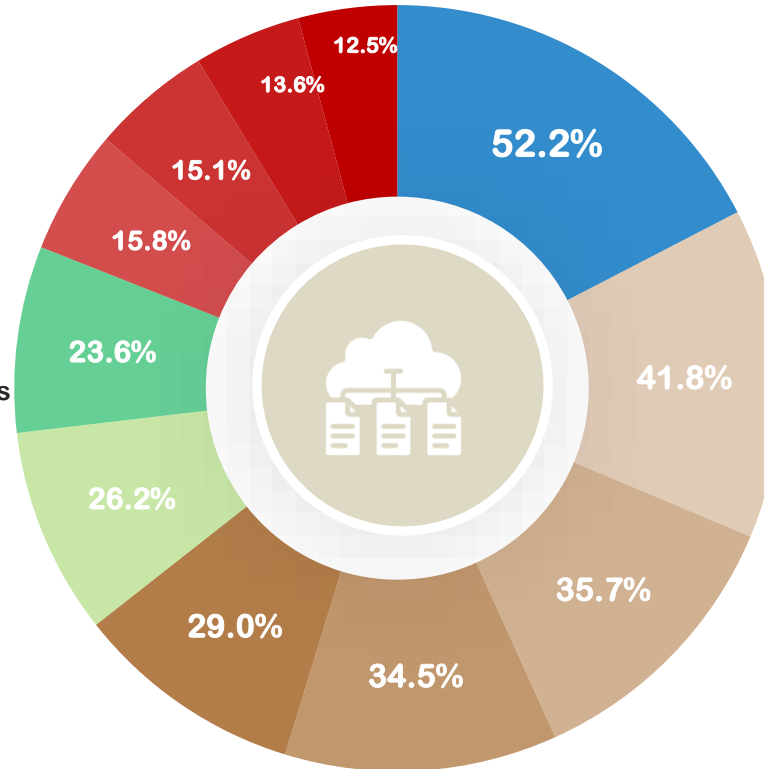


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RESEARCH:

OUTCOMES EXPECTED FROM VALUE STREAM MANAGEMENT AUTOMATION TOOLS

- Improved quality of releases
- Shorter process cycle times
- Increased productivity across the value streams
- Reduced overall process costs
- Higher customer satisfaction
- Increased collaboration across the value streams
- Reduced lead time
- Decrease waste across the value stream
- Reduced mean time to repair (operating time)
- Reduced change failure rate
- Increased value add ratio



N = 1,500 Enterprise IT and Business Managers with budget responsibilities.

There are many important outcomes of Value Stream Management tools, but which ones are more important than others?

Top five expected outcomes:

- 1 Improved quality of releases
- 2 Shorter process cycle times
- 3 Increased productivity across the value streams
- 4 Reduced overall process costs
- 5 Higher customer satisfaction



RESEARCH:

TOP FIVE INVESTMENT AREAS

Provide metrics which show business value

1

Understanding of costs across value chain

2

Management of risks across value stream

3

Understanding of time required

4

Improve flow across value chain

5

N = 1,500 Enterprise IT and Business Managers with budget responsibilities.

Showing value to the business tops the investment priorities in VSM today.

36% of enterprises globally are investing into VSM to provide metrics to show value to the business.

34% indicated that their key priorities are to understand the costs across the value chain.

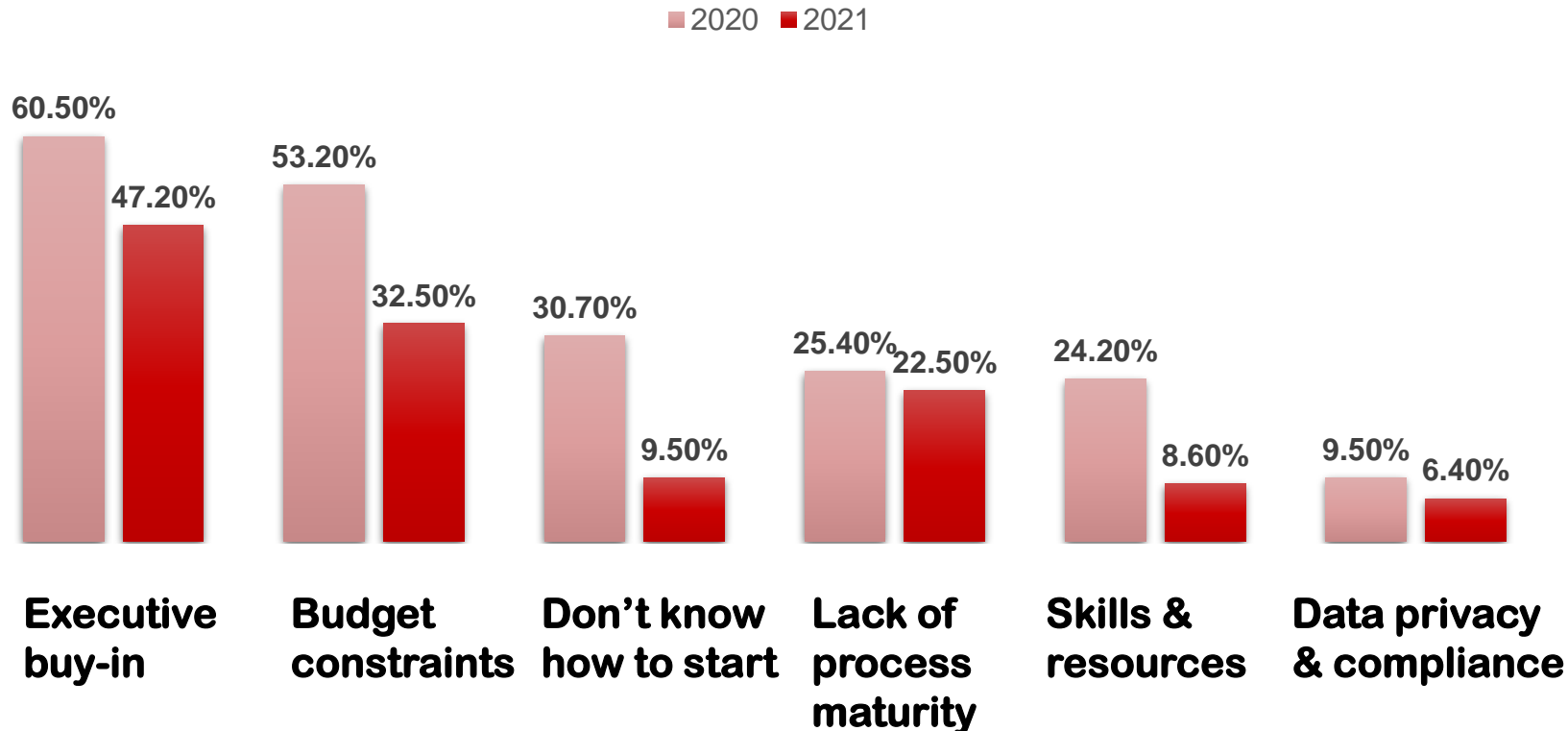
31% are wanting to manage the risks associated with the different elements across the value chain.

Understanding the time required from the initial step to the final step is a priority for **24%**.

Improving flow was with **20%** the fifth investment priority for global enterprises.



RESEARCH: MULTIPLE BARRIERS STIFLE THE ADOPTION OF VSM TODAY



N = 1,500 Enterprise IT and Business Managers with budget responsibilities.

The biggest hurdle - to receive executive buy – continues to be a challenge for VSM adoption.

Executive management should be responsible for enabling environments in which people can work effectively within their own and the larger context of value streams.



INSIGHTS: TOP MARKET TRENDS 2021

Pressure to show business value of technology ... more than ever. Digital transformation which was kick started during the worldwide pandemic has fueled not only the tech spend of enterprises (more investments into cloud, remote work and security for example) but has forced to accelerate the digitization of customer and supply-chain interactions and internal operations by three to four years. Such work required key collaborations, communication, and alignment across different teams and those who had adopted modern operating models such as Agile and DevOps already had an advantage compared to traditional IT organizations.

What this means: Alignment among a common goal across multiple disperse teams has always been a challenge. But the COVID-19 crisis has forced teams to work tighter at improved flow and quality to deliver the needed value to patients, clients, and employees. The topic of Value Stream Management gained significant adoption as it provides the means to align everyone around a common goal enabling proactive improvements and adjustments to understand where bottlenecks are and where adjustments need to be made to deliver on the promises made.



INSIGHTS: TOP MARKET TRENDS 2021

Software and application development and design must be connected to delivery and operation. As technology and software plays a vital role across all industries and within every organization to serve customers and enable employees, it is essential to connect the software and application development and design to how software and apps are delivered and operated. Only through the alignment across the different phases and teams is it possible to achieve an organization's agility and transformation objectives.

What this means: Without creating a strong connection between the different teams across the software value delivery chain, an organization runs risk of wasting time, effort and money on projects that will never lead to the needed and expected outcomes. This is where VSM as an approach is essential to accelerate continuous adaptation and resiliency of value that is quickly evolving and delivered to customers and employees.



INSIGHTS: TOP MARKET TRENDS 2021

Value stream management is still confused with value stream mapping. These two key terms are closely related but are not the same. Unfortunately, some organizations are confusing these two. While value stream mapping provides a collaborative cross-functional environment to visualize how work is done and identify bottlenecks it is simply a narrative created for a common understanding and alignment. Most of the time this is done through a value stream mapping exercise where different team members participate and describe the current state of how work is done. Value stream management is the big brother of mapping where teams can visualize the flow and rapidly identify constraints in their existing systems.

What this means: When value stream mapping is combined with value stream management, it gives teams the foundation for a conversation which helps organizations overcome barriers to achieve value. Starting with value stream maps, gives organizations a way to collaboratively and in a safe way to understand how things get done. The next step should be the management and monitoring of the entire software delivery process from idea, to build, test, delivery, and feedback collecting data to fully understand how each phase or team participates towards progress of the common goal.



INSIGHTS: TOP MARKET TRENDS 2021

Metrics do exist but need to be SMART. Accountability to internal and external stakeholders, leveraging existing data and published through reporting tools makes IT more reliable and leadership can see if development goals are aligned with business goals. While the focus of the metrics for a successful VSM journey should be on key DevOps and engineering measures around software delivery throughput such as velocity and stability, key focus must be put to gather metrics which are specific, measurable, actionable, relevant and timely (or traceable).

What this means: While there are specific recommendations for key metrics to be populated within a VSM journey, each organization (or team) might have different challenges. The first steps within a VSM journey should be to determine which metrics should be populated by following the SMART rule. This means to discover what specific, measurable, actionable, relevant and timely (or traceable) metrics should be populated to provide insights about the value stream(s) managed. Metrics must provide actionable input, should be numeric, unbiased, and timely so that the responsible team can make adjustments.



INSIGHTS: TOP VENDOR TRENDS 2021

- **VSM becomes an attractive topic for atypical vendors.** A variety of vendors which provide solutions in the IT monitoring, automation or operation space are adding VSM onto their messaging. This makes it challenging for enterprise customers to make tool selections.
- **Pure plays and mega vendors are competing.** The larger mega vendors have been announcing VSM strategies within the last twelve month while pure plays have been trailblazing the market setting the vision and evangelizing the topic for a while.
- **Advisory and services are essential for all vendors.** VSM can not be accomplished by purchasing an automation tool and many IT enterprise teams first need to learn how to adopt VSM. Almost all vendors are offering services and advisories around data consolidation and value stream management principles and the vendor landscape is richly venture-funded.
- **Roadmaps promise more than enterprises can digest at this point.** Unfortunately, the topic of VSM is still relative immature as challenges of executive buy-in and budget constraints have hampered its adoption. The vendors roadmaps are somewhat differentiated but mostly by integrations into their already existing DevOps, PPM or other automation solutions.
- **A VSM Consortium ready to share best practices.** Reflecting their history, a consortium of vendors are focused on providing research, best practices and VSM thinking. The VSM Consortium* is an essential body of knowledge to accelerate the VSM journey for enterprises across the globe.

* See <https://www.vsmconsortium.org>.



VENDOR SELECTION MATRIX™

VALUE STREAM MANAGEMENT



These are the Top 10 vendors as selected by 1,500 users based upon product, company and service quality.

VENDOR NAME	SOLUTION
APPTIO	Apptio Targetprocess
CLOUDBEES	CloudBees Software Delivery Platform
CONNECTALL	Value Stream Management Platform
DIGITAL.AI	Digital.ai Platform
GITLAB	GitLab
IBM	IBM UrbanCode Velocity
OPSHUB	Opshub Integration Manager, Opshub Migration Manager, Opshub Data Bridge
PLUTORA	Plutora Platform
SERVICENOW	ServiceNow DevOps
TASKTOP	Tasktop Hub and Tasktop Viz

This list is alphabetical and includes all relevant Value Stream Management Tool vendors and solutions named by the survey respondents.

Additional vendors that were cited but did not list in the Top 10, or had less than 15 ratings:

- ATLISSIAN
- BLUEPRINT
- KOVAI
- MICROSOFT
- PANAYA

NOTE: If a vendor does not respond, Research in Action will complete its scoring assessment based on analyst experience and desk research. The vendor's products and quick facts will be documented in the report, though a vendor scorecard will not be written.



VENDOR SELECTION MATRIX™

VALUE STREAM MANAGEMENT



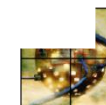
Vendor Quick Facts

VENDOR NAME	MARKET PRESENCE	GROWTH RATE	CUSTOMER TRACTION	GOOD TO KNOW
APPTIO	Small	Low	Good	Apptio Targetprocess Solves the Challenges of Agile Management.
CLOUDBEES	Medium	Medium	Good	CloudBees Helps Organizations to Turn Software Delivery Into a Core Business Process.
CONNECTALL	Medium	High	Strong	ConnectALL Creates Meaningful Connections Between Humans and Technology.
DIGITAL.AI	Medium	High	Strong	Digital.ai Goes Beyond Visibility with AI-driven Intelligence to Automate Governance and Drive Outcomes.
GITLAB	Medium	Medium	Strong	GitLab Makes Value Stream Management Actionable.
IBM	Medium	Medium	Good	IBM's UrbanCode Velocity Attracts Developers and Other Members of the Software Delivery Chain.
OPSHUB	Small	High	Good	OpsHub Evangelizes a Federated Approach to Value Stream Management.
PLUTORA	Medium	High	Strong	Plutora Accelerates the Efficiency Across Software Delivery Value Streams.
SERVICENOW	Medium	High	Good	ServiceNow Connects Disparate Systems Through its Data Platform and Automated Workflows.
TASKTOP	Medium	High	Strong	Tasktop Receives Additional Funding to Accelerate its Continuous Growth of VSM.

MARKET PRESENCE	GROWTH RATE	CUSTOMER TRACTION
Very Big	Very High	Strong
Big	High	Good
Medium	Medium	Medium
Small	Low	Low






NOTES:






- Market Presence combines the market share and perceived Mindshare (or Share of Mind).
- Growth Rate is the anticipated growth rate for this year where Medium is the average growth for this market.
- Customer Traction combines the vendor's customer retention rate and the Research In Action Recommendation Index (RI). The RI is collected and calculated by asking the survey participants: "Would you recommend this vendor in this market to your peers - Yes or No?".



VENDOR SELECTION MATRIX™:

EVALUATION CRITERIA

STRATEGY 		
 Vision And Go-To-Market	30%	<ul style="list-style-type: none"> › 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%	<ul style="list-style-type: none"> › 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%	<ul style="list-style-type: none"> › 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%	<ul style="list-style-type: none"> › Would customers recommend this vendor in this market to their peers?

EXECUTION 		
 Breadth And Depth Of Solution Offering	30%	<ul style="list-style-type: none"> › Does the solution cover all necessary capabilities expected by customers?
 Market Share And Growth	15%	<ul style="list-style-type: none"> › How big is the company's market share and is it growing above the market rate?
 Customer Satisfaction	25%	<ul style="list-style-type: none"> › How satisfied are customers with the solution and the vendor today?
 Price Versus Value Ratio	30%	<ul style="list-style-type: none"> › How do customers rate the relationship between the price and perceived value of the solution?

NOTES:

- 63% of the evaluation is based on the survey results, 37% 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: "Would you recommend this vendor in this market to your peers - Yes or No?".



VENDOR SELECTION MATRIX™

VALUE STREAM MANAGEMENT



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VENDOR SELECTION MATRIX™

VALUE STREAM MANAGEMENT

Digital.ai Goes Beyond Visibility with AI-driven Intelligence to Automate Governance and Drive Outcomes

STRATEGY	RESULT	EXECUTION	RESULT
Vision And Go-To-Market	5.00	Breadth And Depth Of Solution Offering	5.00
Innovation And Differentiation	4.75	Market Share And Growth	4.00
Viability And Execution Capabilities	4.00	Customer Satisfaction	4.75
Recommendation Index	4.75	Price Versus Value Ratio	4.50
	4.71		4.64

GENERAL:

Digital.ai was formed in January 2020 in partnership with TPG, a private equity company, and is a combination of Arxan Technologies, CollabNet VersionOne, Experitest, Numerify, and Xebialabs. The company is headquartered in Plano, Texas. It's Digital.ai solution portfolio encapsulates all capabilities necessary to create and deliver software including AI powered analytics and security. The Digital.ai Value Stream Platform enables enterprise organizations to plan, track, and orchestrate work across teams, locations, programs, and portfolios. This allows Digital.ai customers to develop better software faster to meet business goals more effectively. Recently, the company has brought on a new CEO and CMO to continue its growth journey.

STRATEGY:

Its strategy is to address all aspects of modern software enabling its customers with the delivery of digital products and services. The combination of technologies in agile planning, application protection, software delivery, continuous testing, and artificial intelligence are all unified into the Digital.ai Value Stream Platform. The goal is to bring together key constituencies from business, software delivery, and application security to support and manage an integrated, intelligent value stream. Digital.ai is on a mission to revolutionize how enterprises create, measure, deliver, secure, and continuously improve digital products.

EXECUTION:

The combined workforce of almost 1,000 global employees are focused on its Intelligent Value Stream Management Platform. Digital.ai is targeting Fortune 500 and Global 2000 companies with its mission to help these enterprises revolutionize the way they create, deliver and manage digital products and services to fuel revenue growth, and enable innovation while securing critical business assets. This mission is supported by direct global sales teams, global and regional SI's such as Capgemini, resellers and implementation and technology partners such as AWS and BMC.

BOTTOM LINE:

Digital.ai VSM Platform enables visibility across different aspects of value streams to improve planning and execution of software delivery. With an extensive set of prebuild workflows into existing enterprise tools, the solution provides deep and broad insights and intelligence into value streams.



Notes:

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- Potential numerical deviations due to rounding.



RESEARCH IN ACTION
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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.
- **Application Performance Management (APM)** solutions manage the performance and health of applications within a IT enterprise.
- **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.
- **Artificial Intelligence Predictive Analytics (AIPA)** solutions apply Artificial Intelligence across development, IT operations, service management and other functional areas to gain intelligent insights for proactive work, elimination of issues and ongoing improvements in context of the owner and function.
- **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.
- **Continuous Management (CM)** solutions that empower, automate and continuously manage the ongoing demands of all digital functions within an enterprise no matter if they are within IT or business teams.
- **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.
- **Digital Experience Management (DEM)** solutions manage the digital interaction of customers (end-users) with that of an enterprise.
- **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.



APPENDIX: IT AUTOMATION MARKET TEXTURE DEFINITIONS

- **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.
- **Observability** solutions enable the aggregating, correlating and analyzing of steady streams of performance data from distributed applications and the hybrid infrastructure which support the applications.
- **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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