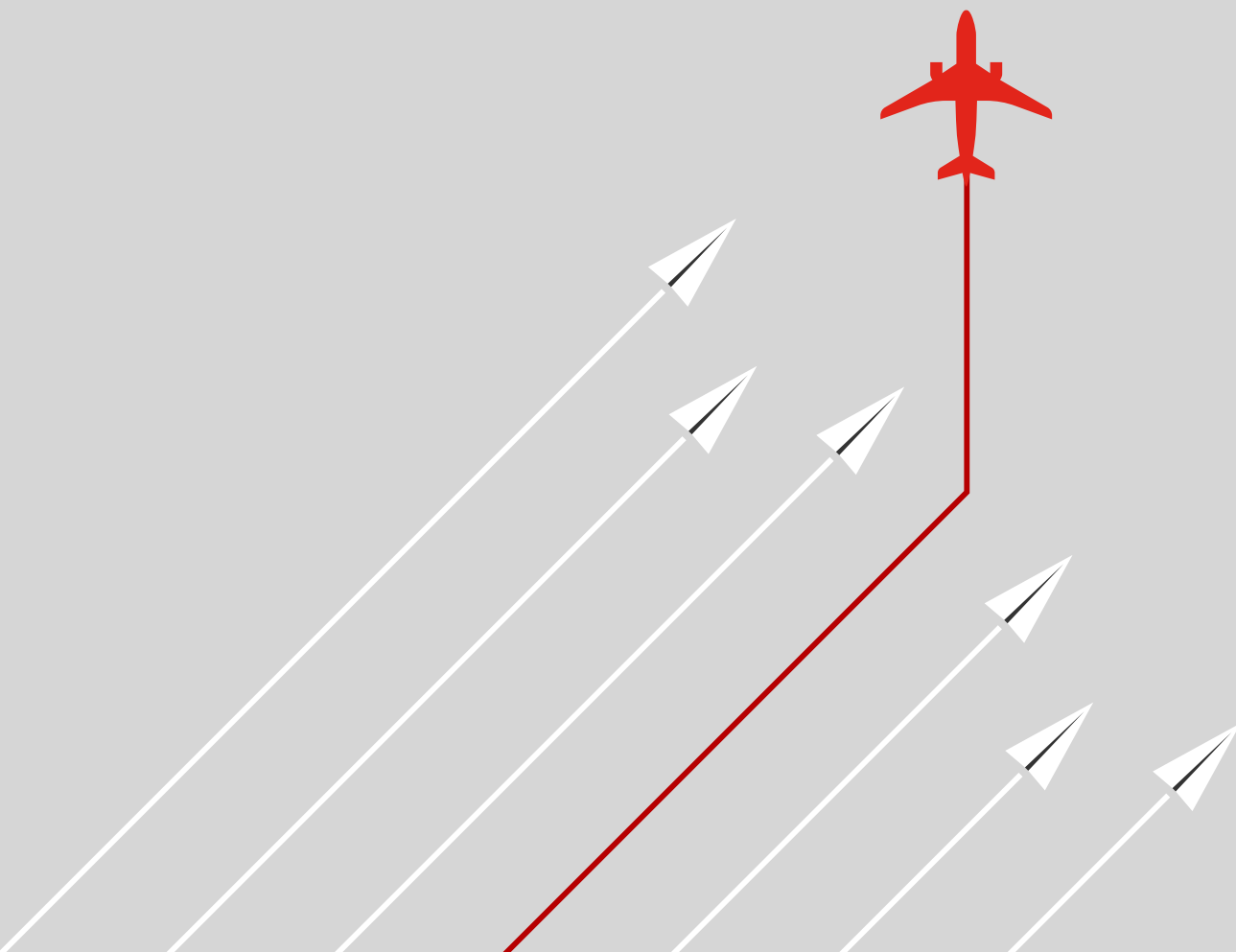




THE 2023 BUYER'S GUIDE FOR VALUE STREAM MANAGEMENT PLATFORMS AND FLOW METRICS

An Evaluation Guide for Technology Decision Makers



Enterprises need full visibility into the performance of their software delivery process to combat growing economic uncertainty and optimize value delivery to customers.

What CIOs are saying:

59%
say digital
initiatives take too
long to complete

52%
say it takes too
long to realize
value

Unfortunately, more than half of digital initiatives lag compared to CEO/leadership expectations. In a survey conducted by Gartner®, 59% of CIOs said initiatives take too long to complete while 52% said it takes too long to realize value.¹

Combine that with the fact that an estimated **40% of effort is wasted within technology organizations** (based on Planview's analysis of data from over 3,000 value streams) and the picture becomes clearer on why they are unable to achieve targeted business growth and ROI.

So, what's the solution?

To enable product-led delivery, enterprises are increasingly turning to value stream management (VSM) platforms to assess and improve the health of product delivery and drive alignment of business priorities. Gartner estimates that in 2023, **70% of organizations will use value stream management to improve flow in the DevOps pipeline, leading to faster delivery of customer value.**²

In this guide, you'll learn how to determine which value stream management solution is the right choice for enabling your organization to improve velocity and time-to-market. It covers:

- Why VSM is needed now by technology organizations
- How VSM solutions drive better business outcomes
- The top 10 critical capabilities a VSM solution needs to have
- What to include in a vendor evaluation checklist
- Where to get additional help

1. Gartner, 2023 Gartner CIO and Technology Executive Agenda, October 18, 2022

2. Gartner, The Future of DevOps Toolchains will Involve Measuring Flow in IT Value Streams, 14 Jan 2020

WHY IS VALUE STREAM MANAGEMENT NEEDED?

Business and technology leaders are under constant pressure to deliver outstanding customer experiences fueled by digital innovation. And all at the speed of the market and at a competitive cost.

Unfortunately, Agile and DevOps alone have proven insufficient to provide the visibility and insights needed to operate most effectively and efficiently.

Furthermore, the post-pandemic economic headwinds are putting additional constraints on businesses to do more with less without sacrificing the employee experience. Leaders are seeking ways to accelerate value delivery, invest more wisely, and optimize their use of talent.

Value stream management (VSM) is a proven business methodology that's been adopted from Lean manufacturing and applied to modern software development for measuring, analyzing, and improving flow. It generates the visibility and insight leaders need to drive growth, reduce costs, and improve customer satisfaction by delivering more value at a faster rate.



**REDUCE
TIME-TO-MARKET**



**INCREASE
EFFICIENCY**



**IMPROVE
QUALITY**



**BOOST EMPLOYEE
ENGAGEMENT**

Value Streams Are Complex and Hard To Measure

It's a definite challenge to measure flow across enterprise value streams comprised of hundreds, or even thousands, of technology practitioners. One of the biggest contributing factors is that information is never in one place.

Measuring flow for product value streams involves tracing its constituent units of value creation as they traverse teams, tools and departments in the form of artifacts like Activities, Capabilities, Epics, Features, Stories, Bugs, and Incidents.

Did you know?

42%

of large-scale software delivery organizations use 4 to 10 core tools for Portfolio Management, Roadmapping, Agile Planning, Testing, Service Desk, and Incident Management, as well as dozens of additional tools to support the continuous integration and continuous deployment pipeline and operations.³

The reality of heterogeneous toolchains is evidence that even in cross-functional teams, practitioners need specialized tools and user experiences to maximize their focus, flow, and productivity.

Measuring flow, therefore, requires tracing the constituent units of value as they traverse the value stream from an idea to its outcome, as well as throughout the feedback loop.

3. Kersten (2018). *Project to Product*. IT Revolution, p. 174.

10 CRITICAL CAPABILITIES FOR VSM SOLUTIONS

Value stream management solutions enable enterprises to deliver on technology-based innovation by driving strategy and supporting execution more effectively.

It is essential that enterprise-level VSM solutions be able to support business-critical projects. Optimal VSM solutions for the large enterprise will have a strong focus on scalability, flexibility, performance, data services, and features to improve security and data protection.

Below are the top 10 areas organizations need to consider when selecting the best VSM solution for their needs and desired business outcomes.



1. Business Orientation

Software delivery value streams exist to create value for the business so it's critical that any VSM solution helps leadership understand how delivery impacts business outcomes. Consider the following questions:

- **Are the value stream metrics presented in non-technical language, suitable for a conversation between technology, business, and finance stakeholders?** Using a common, non-technical language goes a long way to align everyone on measuring and delivering value. Dashboards that focus on issue counts, merge requests, story points, or deployment frequency are unlikely to support effective communication at the senior leadership level.
- **Does the solution help align product teams with strategic outcomes like top-line growth, operational efficiency, customer satisfaction, and employee engagement?** Technologists are more engaged when they can see how their work impacts customers and the business. This information provides crucial context they can then leverage for better day-to-day decisions.
- **Are Flow Metrics trended alongside the critical business outcomes of each value stream?** A side-by-side view clarifies the impact that changes or investments have on business outcomes. A VSM solution should provide a holistic view that communicates the tradeoffs between speed, risk, and quality.



2. End-To-End Flow Metrics

The goal of measuring value streams is to identify systemic bottlenecks and improve delivery. Often, the biggest constraints lie outside the delivery pipelines, so end-to-end visibility is a must. Consider the following questions:

- **Does the solution identify bottlenecks that impede faster delivery at any point from ideation to production?** It should be easy to discern which bottleneck is impacting end-to-end flow the most. Investing time and effort anywhere else would be a waste of time and resources.
- **Can users investigate and probe bottlenecks?** VSM solutions should help uncover the root causes or contributing factors of the finding. It's important the solution be able to drill down into the individual work items contributing to the problem or being impacted by it.
- **How well can the solution quantify and visualize the improvement to flow once bottlenecks are relieved?** Understanding how changes impact outcomes is critical to continuous learning and improvement.
- **Does the solution effectively present Flow Metrics for the entire IT portfolio?** A solution that represents the portfolio and business line structure can produce insights that highlight cross-value stream dependencies, which inform adjustments to organizational design.



3. Actionable Analytics

Data is only useful if you know how to interpret and act on it. VSM solutions offer insights to help businesses make data-driven decisions and invest wisely. Consider the following questions:

- **Does the solution identify how to take action to improve performance?** The VSM solution should help users identify areas for improvement related to prioritization, waste, capacity, dependencies, and outliers.
- **Does the solution provide predictive analytics?** Predictive analytics help leaders proactively address problems before it's too late. VSM solutions can alert teams to take corrective action and mitigate the risk.
- **How well does the solution capture meaningful events on metric timelines, e.g. hiring, reorgs, pivots, and new processes?** Capturing historical context on trended charts is vital for organizational learning and the preservation of knowledge.
- **Do leaders have a birds-eye view across portfolios or teams of teams to support rebalancing and prioritization?** A VSM solution should provide macro and micro views to identify risks and opportunities.



4. Visualization

Good visualizations help create a shared understanding of the value stream, its performance, and its challenges. Consider the following questions:

- **Do the metrics and insight visualizations facilitate an understanding of what flows through the value streams, how it flows (process), and how well it flows (speed and efficiency)?** To support tradeoffs and prioritization, the solution should distinguish between different units of value, like Features, Defects, Risks, and Technical Debt.
- **Does the solution provide organized and intuitive dashboards with drill-down capabilities?** The ability to zoom in on problem areas helps uncover wasteful practices .
- **Does the solution visualize value stream maps?** Value stream maps should illustrate how value flows from start to finish and convey details about what's going on in each step.
- **Are value stream maps constructed from live value stream data?** Manually drawn value stream maps create a static image that quickly becomes outdated when bottlenecks shift.





5. Abstraction

VSM solutions project the business lens over carefully selected data subsets from within the software development toolchain to measure by product. Consider the following questions:

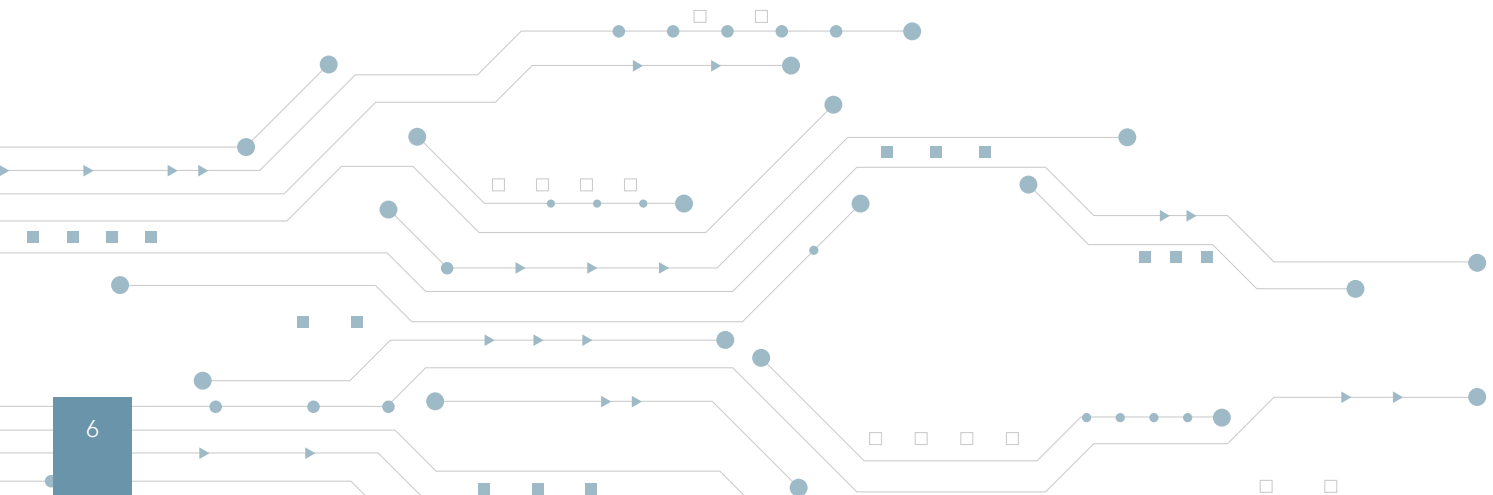
- **How easy is it to carve out data subsets that constitute a single product?** Modeling capabilities should be sophisticated enough to accurately define a product's scope.
- **Does the solution support endpoints, artifacts, and workflows without limitations or constraints?** The solution should be able to abstract multi-tool work item data into clear units of business value.
- **Does the solution support quick updates to value stream configuration as products and portfolios evolve?** Users should be able to easily keep value stream configurations up to date, reflecting changes to teams, projects, and workflows.



6. Integration and Automation

VSM solutions don't just measure flow—they automate it. Automated cross-tool data exchange increases flow efficiency and unlocks capacity. Consider the following questions:

- **Does the VSM solution include out-of-the-box integration capabilities for all the tools that participate in a value stream?** Consider portfolio management, requirements management, agile planning, development, testing, defect management, IT service management, and CRM. Setting up integrations can take time, so look for a solution with reusable models and avoid custom coding.
- **Can the integration cover business needs, flowing work items, folders, relationships, and attachments?** Look for a configurable solution to accommodate your business use cases.
- **Does the VSM solution support external integrations while protecting your privacy?** When flow crosses company borders, automating data exchange with suppliers, partners, and clients will significantly improve speed, efficiency, and quality.
- **Does the VSM solution enable you to control the flow of work by automatically advancing it to the next step/tool when ready?** Automating handovers reduces waste and eliminates manual, error-prone duplicate data entry.
- **Can the solution create and propagate digital relationships between artifacts to automate traceability?** Audits can be tedious and negatively impact flow, so look for a tool that will take this work off your team's plate with built-in traceability features.





7. Governance

Value stream management creates a control plane for delivering software at scale. Consider the following questions:

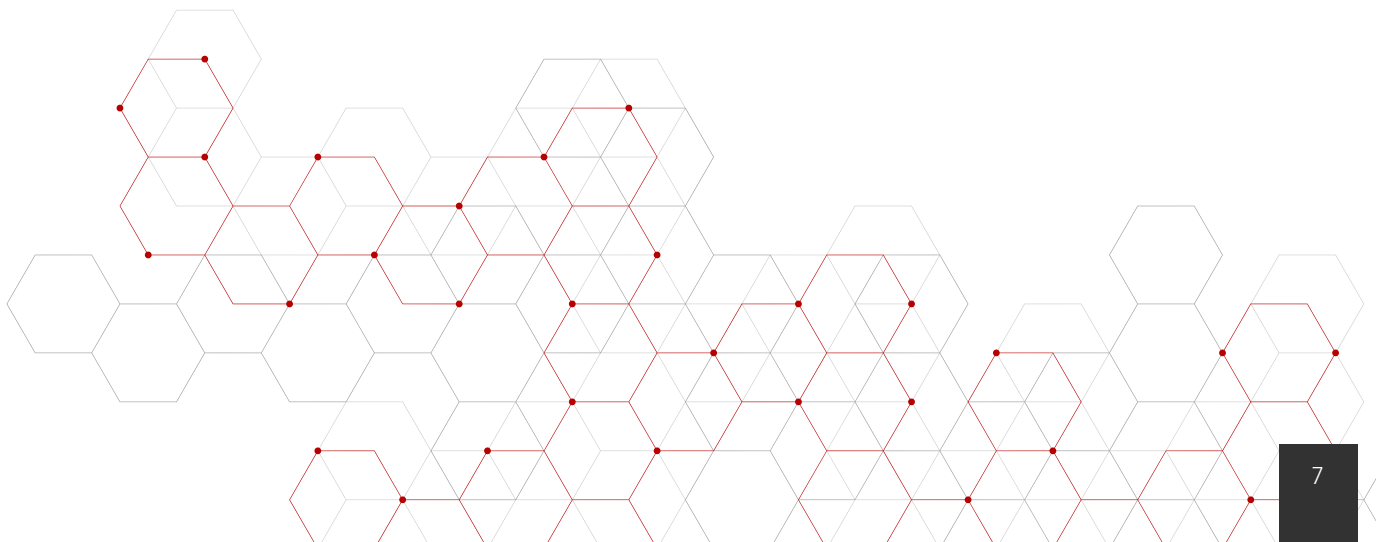
- **How well does the solution establish governance over what value streams are and how to measure them?** Without a guiding framework for measuring value delivery, it's easy to misrepresent value streams, aggregate data incorrectly, or slip into old habits of measuring proxies.
- **Does the solution ensure good practices in compliance and security work?** A VSM solution can help govern speed vs. risk.
- **Can the solution help govern IT's transformation from a project operating model to a product orientation?** Many organizations are undergoing the shift from project to product and will benefit from a framework that helps sustain the momentum and see the transition through.
- **Does the solution promote lean practices?** A VSM solution should expose deviations from good practice regarding WIP, aging, distribution, and waste.



8. Time-To-Value

To seize market opportunities, increase differentiation, and reduce operational efficiencies, leaders need quick and timely access to data and insights. Consider the following questions:

- **Can the solution provide visibility into value streams within hours of provisioning?** A turnkey, plug-and-play solution provides rapid time-to-value and eliminates lengthy cycles of custom development and vendor customizations.
- **Can the solution work instantly in the organization's current tool landscape without imposing prerequisites and pre-conditions to switch existing tools, implement new work management tools, change workflows, modify schemas, or undertake extensive data hygiene efforts?** Look for VSM solutions that fit your environment as-is and have out-of-the-box connectors for a wide variety of tools. Seek a vendor whose roadmap anticipates incorporating new tools and tool categories.
- **Does the solution help measure the shift from project to product and support a stepwise approach to maturity?** Few organizations are exclusively product-oriented or agile. Initiatives, projects, programs, as well as hybrid work methodologies, will continue to exist. An ideal VSM solution lets you start from where you are today and doesn't force the adoption of a specific work methodology.





9. Scalability

For VSM to be adopted at scale, the solution must establish the foundations for sustainable and scalable VSM metrics. Consider the following questions:

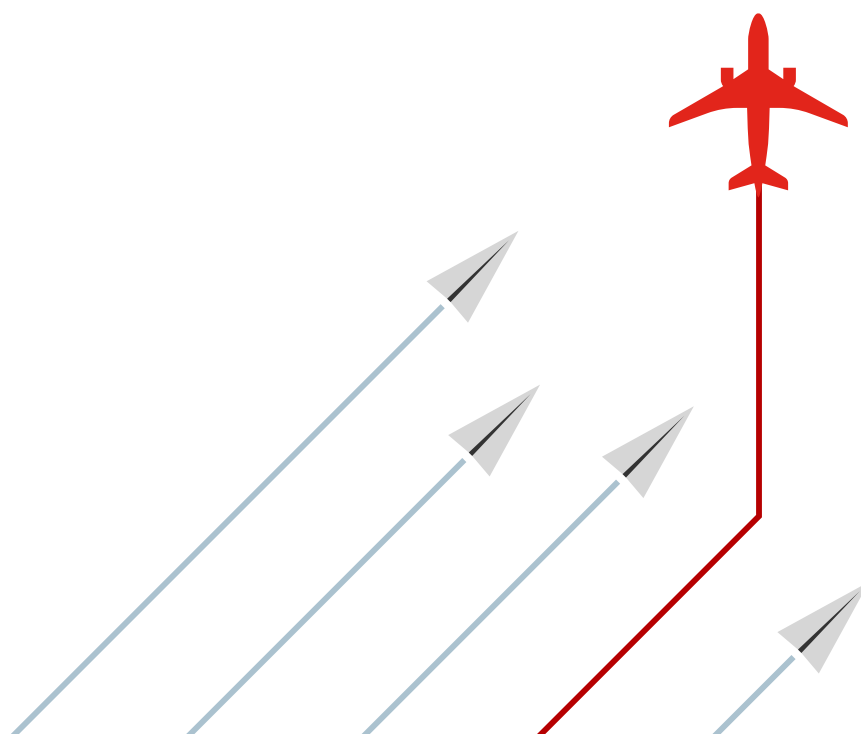
- **Does the solution prioritize the operational stability of your tools while extracting data for the metrics?** The VSM solution should operate with a light touch, intelligently avoiding strain on the tools practitioners rely on for daily work (like Atlassian Jira or ServiceNow) and gathering only the necessary data.
- **How well does the solution insulate metrics from toolchain changes, like version upgrades, cloud migrations, or new security requirements?** A VSM solution should be designed to seamlessly address these factors on your behalf, ensuring high data fidelity for your metrics.
- **Can the setup of value streams be easily entrusted to product owners?** VSM adoption and expansion should not be constrained by the capacity of one or two DBAs or admins. Product and value stream owners should be able to generate their metrics easily and feel a sense of ownership and trust in the data.



10. Customer Support

A good VSM solution is more than just a product. Many organizations need help defining their value streams, identifying strategies to improve flow, and driving new behaviors. Consider the following questions:

- **Does the VSM solution include coaching from experts on strategies to improve flow and drive change?** Rather than resorting to trial and error, look for guidance from VSM experts who can help you with a field-proven methodology. Seek a vendor that has been involved in other successful VSM implementations and can help you decide where to start, what to pay attention to, how to approach improvements, and how to scale.
- **Does the vendor provide cultural and technical help?** Reorganizing work around product value streams is an adjustment. Your VSM vendor should help you create the conditions to drive cultural change, including psychological safety, an environment that encourages experimentation, and leadership by example.



SOLUTION EVALUATION CHECKLIST

Criteria	Questions to Ask VSM Vendors	Yes/No
Business Orientation	Are the value stream metrics presented in non-technical language, suitable for a conversation between technology, business, and finance stakeholders?	
	Are Flow Metrics trended alongside the critical business outcomes of each value stream?	
End-To-End Flow Metrics	Does your VSM solution identify bottlenecks impacting end-to-end flow?	
	Can users drill down into the individual work items contributing to bottlenecks or being impacted by them?	
	Does your VSM solution quantify and visualize the improvement to flow once bottlenecks are relieved?	
	Does your VSM solution effectively present Flow Metrics for the entire IT portfolio?	
Actionable Analytics	Does your VSM solution help users identify areas for improvement related to prioritization, waste, capacity, dependencies, and outliers?	
	Does your VSM solution provide predictive analytics?	
	Can your VSM solution sufficiently capture meaningful events on metric timelines, e.g. hiring, reorgs, pivots, and new processes?	
	Does your VSM solution provide macro and micro views to identify risks and opportunities?	
Visualization	Can your VSM solution visualize metrics and insights of what flows through the value streams, how it flows, and how well it flows?	
	Does your VSM solution provide organized and intuitive dashboards with drill-down capabilities?	
	Can your VSM solution visualize value stream maps?	
	Are value stream maps constructed from live value stream data?	
Abstraction	Do your VSM solution's modeling capabilities allow you to accurately define a product's scope?	
	Does your VSM solution support endpoints, artifacts, and workflows without limitations or constraints?	
	Does your VSM solution support quick updates to value stream configuration as products and portfolios evolve?	

Criteria	Questions to Ask VSM Vendors	Yes/No
Integration and Automation	Does your VSM solution include out-of-the-box, integration capabilities with reusable models and no custom coding required?	
	Is your VSM solution configurable to cover business needs, flowing work items, folders, relationships, and attachments?	
	Does your VSM solution support external integrations while protecting our privacy?	
	Are we able to control the flow of work and automate handovers?	
	Can your VSM solution create and propagate digital relationships between artifacts to automate traceability?	
Governance	Does your VSM solution provide a governance framework for measuring value streams?	
	Does your VSM solution ensure good practices in compliance and security work?	
	Can your VSM solution help govern IT's transformation from a project operating model to a product orientation?	
	Does your VSM solution promote lean practices regarding WIP, aging, distribution, and waste?	
Time-To-Value	Can your VSM solution provide visibility into value streams in real-time?	
	Does your VSM solution integrate seamlessly into your organization's current tool landscape without needing to switch existing tools, implement new work management tools, change workflows, modify schemas, or undertake extensive data hygiene efforts?	
	Can your VSM solution measure the shift from project to product and support a stepwise approach to maturity?	
Scalability	Does your VSM solution allow for the continued use of internal tools, like Atlassian Jira or ServiceNow, without interference or slowing down usability?	
	How well does your VSM solution insulate metrics from toolchain changes like version upgrades, cloud migrations, or new security requirements?	
	Are product owners able to easily to setup value streams?	
Customer Support	Do you have experts who can coach us on developing and implementing strategies for optimizing flow? Is this service included in your VSM solution?	
	Do you provide technical help? Do you provide guidance on how to approach organizational change and adoption of your VSM solution?	

Where to get more help:

Below are additional resources to help organizations decide if a VSM solution is the right option for them, and how to choose the right solution based on organizational needs.



How to Use Flow Metrics in the
SAFe® Cadence



The Total Economic Impact™ of
Planview Tasktop Viz®, conducted by
Forrester Consulting



Take the Project to Product Maturity
Assessment



The CIO's Value Stream Management
Playbook

Planview has one mission: to build the future of connected work. Our solutions enable organizations to connect the business from ideas to impact, empowering companies to accelerate the achievement of what matters most. Planview's full spectrum of Portfolio Management and Work Management solutions create an organizational focus on the strategic outcomes that matter and empower teams to deliver their best work, no matter how they work. The comprehensive Planview platform and enterprise success model enables customers to deliver innovative, competitive products, services, and customer experiences. Headquartered in Austin, Texas, with locations around the world, Planview has more than 1,300 employees supporting 4,500 customers and 2.6 million users worldwide. For more information, visit www.planview.com.

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