planview®

Transitioning from Project to Product with the Flow Framework®

Flow Framework® v1.0
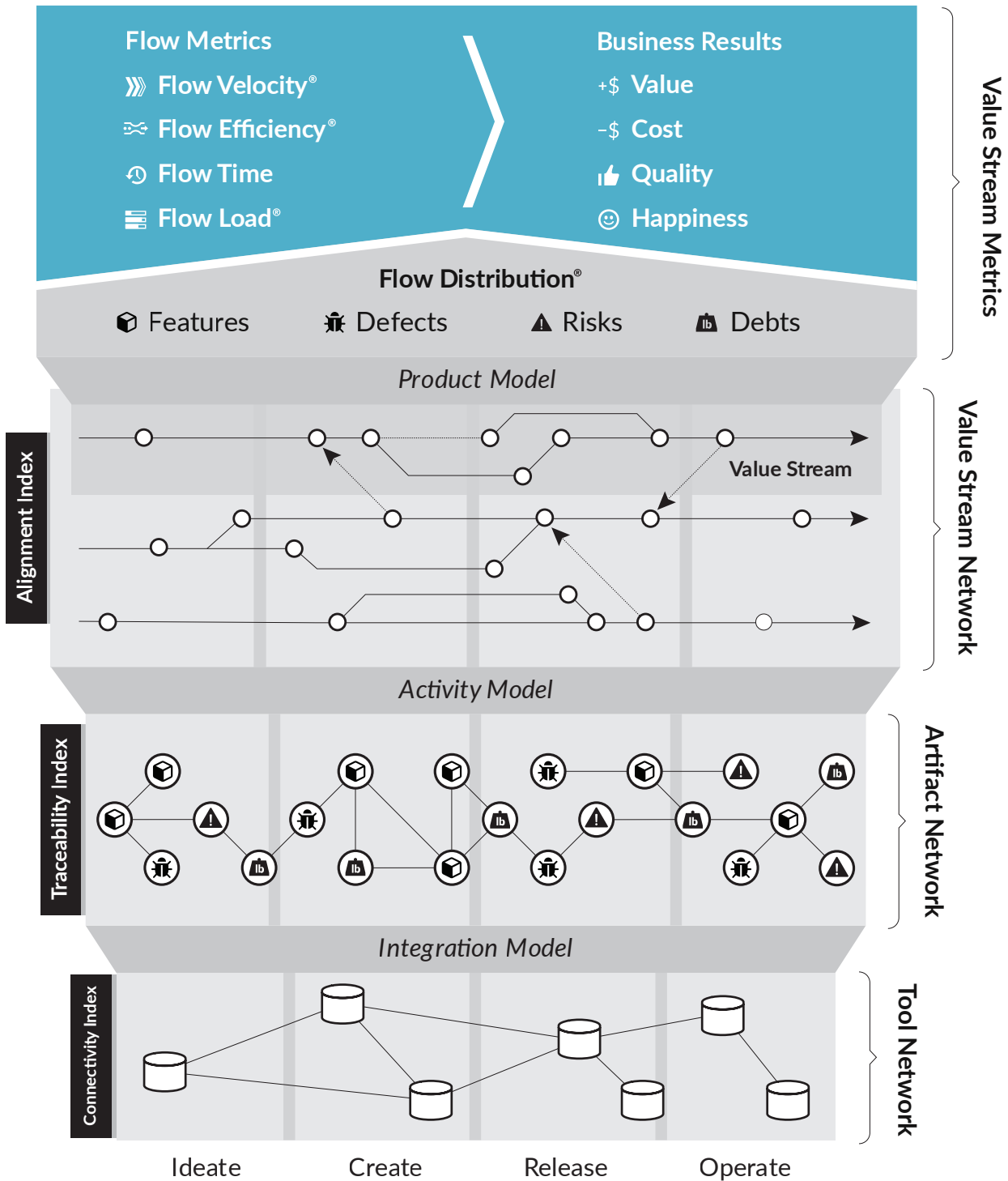
Flow Metrics
- 》》 Flow Velocity®
- ⤬ Flow Efficiency®
- ◷ Flow Time
- ▤ Flow Load®

Business Results
- +$ Value
- −$ Cost
- 👍 Quality
- ☺ Happiness

Flow Distribution®

◆ Features　　🐛 Defects　　⚠ Risks　　📦 Debts

Value Stream Metrics

Product Model

Alignment Index

Value Stream

Value Stream Network

Activity Model

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Artifact Network

Integration Model

Connectivity Index

Tool Network

Ideate　　　Create　　　Release　　　Operate

❚   Introduction

Traditional businesses have been implementing digital transformations for nearly two decades, in an effort to achieve parity with digital natives. But in 2020, for many, the shortcomings of their digital transformation efforts were revealed. Yet at the same, we also witnessed technology leadership and their business counterparts accomplish incredible feats. Years' worth of acceleration was achieved in a matter of months to support the customer and employee experience.

> Research by Dell of 4,300 business leaders found that 1 in 3 business leaders are worried that their organization may not survive the next couple of years.

There is no returning to the status quo. Leadership must build on this momentum and avoid reverting to pre-pandemic transformation roadmaps and old modes of thinking. Finally, we have alignment and the singularity of focus on end user needs to incrementally guide our digital journey.

Technology leadership must maintain the ongoing shift away from a project management approach to IT—despite all their legacy and complexity—to a product operating model to ensure their survival. And there's no time to waste; by 2027, it's estimated that 50 percent of the S&P 500 companies will be replaced if they continue on their pre-pandemic trajectory. While this estimation was made in 2016, we can assume this churn rate is now even higher.

The destination of the project to product journey is clear: mastery of large-scale software delivery, the 21st Century's means of mass production. But the road to get there has been murky; until recently, the office of the CIO had neither map nor compass to ensure it is moving in the right direction.

With the 2018 publication of his Amazon best-selling book *Project to Product*, Planview CTO Dr. Mik Kersten has charted that path. He introduced the Flow Framework®, a lean and prescriptive framework for technology leaders to guide and measure the journey to product and their organization's ability to achieve innovation velocity.

By the beginning of 2021, Dr. Kersten's book had sold over 36k copies and continues to top many technology and business related categories. Translation: the transition from project to product has never been more important to help your organization adapt to the intensified digital-first world.

In this paper, you'll learn about the Flow Framework—the only measurement paradigm for value stream management (VSM)—and how to implement it in your organization with Planview's market-leading VSM Platform.

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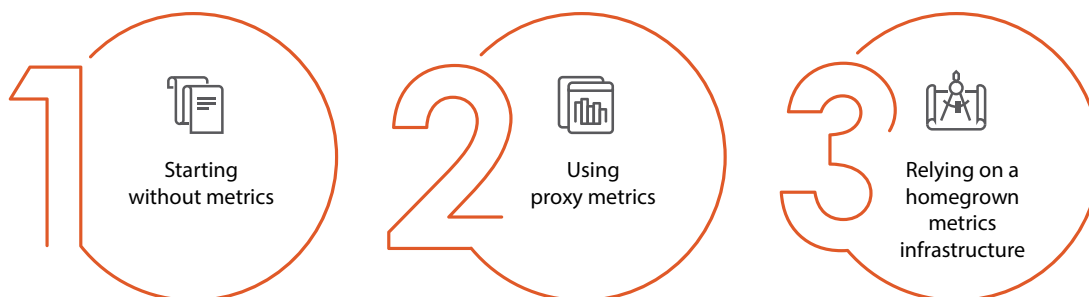
The Right Metrics for the Shift to Product

> **What does transitioning from project to product mean?** Project-oriented management emphasizes cost over profit and adherence to time frames over delivery of business value, causing a disconnect between the business and IT. Product-oriented management focuses on the continuous delivery of business value through products consumed by internal or external customers.

Shifting IT to a product operating model is critical to bridging the crippling divide between technology and the business. Now is the perfect time to remove the operational chasm, as both parties can build on their emergency collaboration during the pandemic-induced remote world. They can remain similarly aligned, structured, and rewarded for delivering outstanding customer experiences fueled by technology and innovation at the speed of the market and at the cost to be competitive.

Yet switching to a new operating model without the right metrics will prove a disaster for anyone who attempts it. For example, Nokia measured its success at scaling Agile by the number of developers following Scrum. They've since lost the mobile device market completely. One of the world's top 25 financial institutions spent $1 billion on its third digital transformation. This large bank's IT transformation was run as a two-year project and focused on cost reduction. It was completely divorced from the business's need to create new digital experiences for the mobile and web. For the third time, the transformation failed and all the responsible executives were fired.

Organizations need an agreed-upon set of outcome-based metrics for measuring and tracking work in IT, and Fortune 500 companies and other large-scale organizations across major industries such as manufacturing, healthcare and finance are turning to end-to-end value stream metrics known as Flow Metrics.

Three Metrics Mistakes to Avoid

1 Starting without metrics

2 Using proxy metrics

3 Relying on a homegrown metrics infrastructure

When it comes to the journey from project to product, there are three common metrics mistakes to avoid:

1. Starting without metrics

To measure the success of any endeavor, you need a set of consistent metrics for your current and future states. Too often, IT begins a shift to product—which involves pervasive changes to people, process and technology—without first measuring the baseline. How can they possibly gauge their progress objectively?

Before starting any transformation effort, leaders should:

  1. Agree on a core set of metrics for the journey.

  2. Gather accurate baseline metrics of the current state.

  3. Establish targets for improvement in the future state.

2. Using proxy metrics

With literally hundreds of available IT metrics, selecting the ones that truly measure the impact of the shift to product can be hard. Organizations commonly pin their transformations on proxy metrics, i.e. measuring process, activity, and operational efficiencies that are indicative of siloed, local optimizations.

Unfortunately, proxy metrics are misleading, as they do not tie directly to business outcomes and cannot be relied upon to present an accurate picture. An IT team can be deploying a hundred times per day, but if their work is not connected to the needs of the business, the results will not materialize for the business either.

## 3. Relying on a homegrown metrics infrastructure

Nearly every large-scale IT organization has a 'metrics initiative', where IT uses its own resources to develop custom metrics off a data lake or data warehouse. However, homegrown initiatives are expensive, drawn out, architecturally flawed, and brittle. When it comes to extracting and normalizing data from the software delivery toolchain itself, internal staff is overwhelmingly ill-equipped and under-resourced for the task.

An organization's technology resources should be devoted to its market-differentiating products, and not to the task of acquiring, reconciling, storing and visualizing data from a constantly evolving heterogenous software delivery pipeline. The dollar cost and opportunity cost of such endeavors is usually nothing short of devastating.

Identifying the Right Metrics: Measure Flow

In his 2018 book, Dr. Kersten advised established organizations to prepare for the coming Turning Point in the latest technology revolution driven by software. In 2020, Dr. Kersten and Prof. Carlota Perez, author of *Technological Revolutions and Financial Capital*, both agreed that the pandemic had triggered that Turning Point.

As we pass through the Turning Point of the Age of Software, competition increases dramatically. This period, historically marked by financial crashes and recoveries, is when businesses either master the new means of production or decline and become relics of the previous age.
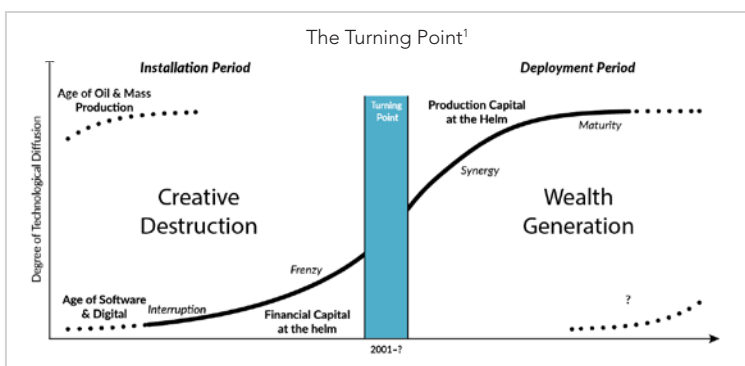
Adapted from Carlota Perez

After the Turning Point, companies that have not mastered software delivery at scale will decline in relevance and market share

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1. Mik Kersten. *Project to Product,* page 20.

The bottom line is that software delivery organizations in any traditional business or government agency must become as productive as software startups and digital natives to survive.

Look no further than Robinhood, the online investment and trading unicorn, whose zero-commission business model disrupted the online brokerage industry in the fall of 2019. To prevent a mass exodus of their customers, investment giants like Charles Schwab and TD Ameritrade had to implement equivalent terms in their trading platforms within days—not months or years.

That could happen to your business tomorrow.

So just like digital natives, you need fully connected value stream networks that are aligned to your product delivery, which are focused on flow over siloed specialization and which connect all your software delivery activities to measurable business results. Without a connected value stream, you will never obtain accurate end-to-end metrics to measure how fast you're capable of delivering critical capabilities.

The end-to-end value stream metrics you need are the Flow Metrics, as described in detail in Dr. Mik Kersten's revolutionary best-seller *Project to Product*.

Flow Metrics measure the rate of business value delivery for software products through the lens of your customers (whether internal or external).

If your Flow Metrics show continuous improvement in the flow of business value, your product transformation is *on track*.

If the sustained continuous improvement is significant enough to create differentiated customer experiences that grow the business, your product transformation has been a *success*.

To create a clear set of metrics that can be shared by both technology and business leaders, Flow Metrics abstract away details like team structure, technical architecture, and tool implementations. They hone in on business value, namely how much business value you are delivering today, and where you can invest your dollars and talent in delivering more value faster, tomorrow.

The Flow Framework defines Flow Distribution® and four Flow Metrics to measure individual product value streams and product portfolios:

Flow Distribution®
Are we investing in both business value generation and business value protection?

Flow Metrics

Flow Velocity®
Is value delivery accelerating?

Flow Efficiency®
Is waste decreasing in our processes?

Flow Time
Is time-to-market getting shorter?

Flow Load®
Are we balancing demand vs. capacity to ensure future productivity?

"Using VSM paradigms like the Flow Framework®, IT organizations can make intangible software work visible and measurable from a business context."

Brian Solis, Global Innovation Evangelist, Salesforce[2]

2. Brian Solis, Customer loyalty is up for grabs; retention is now mission-critical, CIO.com, April 2021 - accessed 05/04/2021

Flow Metrics and Discipline Metrics: You Need Both

Overall Health is Key

Have you ever noticed that when you go to the doctor—be it your primary care doctor, a dermatologist, or an orthopedist—they always start by measuring your vital signs? They'll measure your weight, blood pressure, and temperature. Once a year, your doctor will send you to the lab for blood work. And in recent years general practitioners have also added a questionnaire on your emotional state.

Why is that? Because those are the primary metrics to gauge your overall health. Those vital signs are the six most important medical signs that indicate the status of the body's life-sustaining functions.

These vital signs will always be taken into account when you describe your symptoms. If any of your vitals are trending negatively or outside the normal range, your doctors will advise to drill down into a specific area with deeper testing and analysis.

Vital Signs for the Technology Leader

As a technology leader, you also need vital signs and metrics to put above all other metrics. Before requesting and studying metrics similar to X-rays, MRIs, CTs, and EKGs for specific disciplines of your software delivery organization

(like quality, development, release, operations and service), you need to understand the overall health of your product value streams.

Flow Metrics are the vital signs for software delivery, as they provide a clear indication of whether your flow is healthy, trending positively, and can support the business results you've targeted.

A drill-down into Flow Metrics reveals where work is slowing down, where the system bottleneck lies—where corrective action can remove the constraint and unblock flow for the entire value stream.

As with the human body, diagnosing the ailment and healing a specific function that is underperforming will require
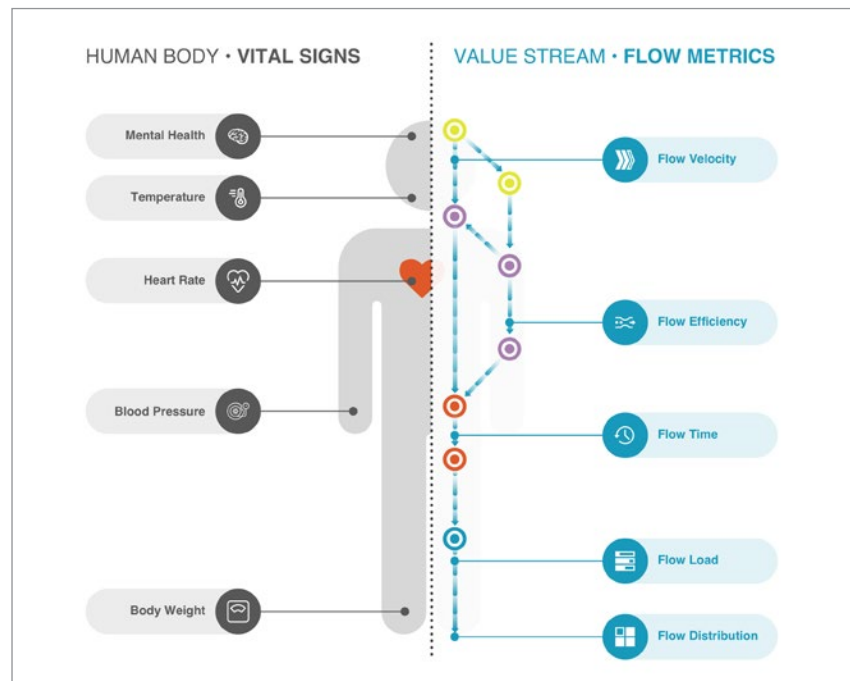
detailed metrics on that specific discipline. Discipline-specific metrics can often be provided by the tool used to perform that function. **However, Flow Metrics need to be generated from data residing in all the tools, supporting all the functions.**

Proxy metrics that measure a specific silo are only meaningful if the silo itself is the bottleneck. But you should not confuse proxy metrics with an indication of the value stream's overall health. Jeff Bezos urged his shareholders to resist proxies for decision making[3]. Instead, you must find the metrics that directly correspond to business outcomes.

Do DORA Metrics and Release Metrics Measure Flow?

With the widespread adoption of DevOps practices to streamline and automate the activities that take place from "code commit" to "code deploy", many IT organizations now use the DORA metrics. These four metrics, defined by DevOps Research and Assessment (DORA) and annually reported in the Accelerate State of DevOps Report, have set the gold standard for operational efficiency for releasing new code.

The four DORA metrics are Lead Time (from code commit to deploy), Deployment Frequency, Mean Time To Restore (MTTR) and Change Failure Rate. Some people believe this is all you need.

But while the DORA metrics are necessary, they are not sufficient on their own. They are the first-stage booster rocket that will get you off the ground, but they are not enough to get you to the moon.

Without a doubt, you must become proficient at releasing code rapidly, securely and confidently. But this has quickly become table stakes across the industry. In the circles where you compete, everyone will become a DORA high performer in short order. Your organization will remain competitive only if it can deliver business value—not code changes—at an ever-increasing clip.

While the DORA Lead Time metric measures code commit to code deploy, Flow Time measures ideation to production—starting from when work is accepted by the value stream and ending when the value is delivered to the customer.

For most organizations, half the time and half the money gets spent before a card ever gets to a development team's backlog. Flow Metrics help you identify bottlenecks across the entire value stream and address them in a systematic and sustainable way.

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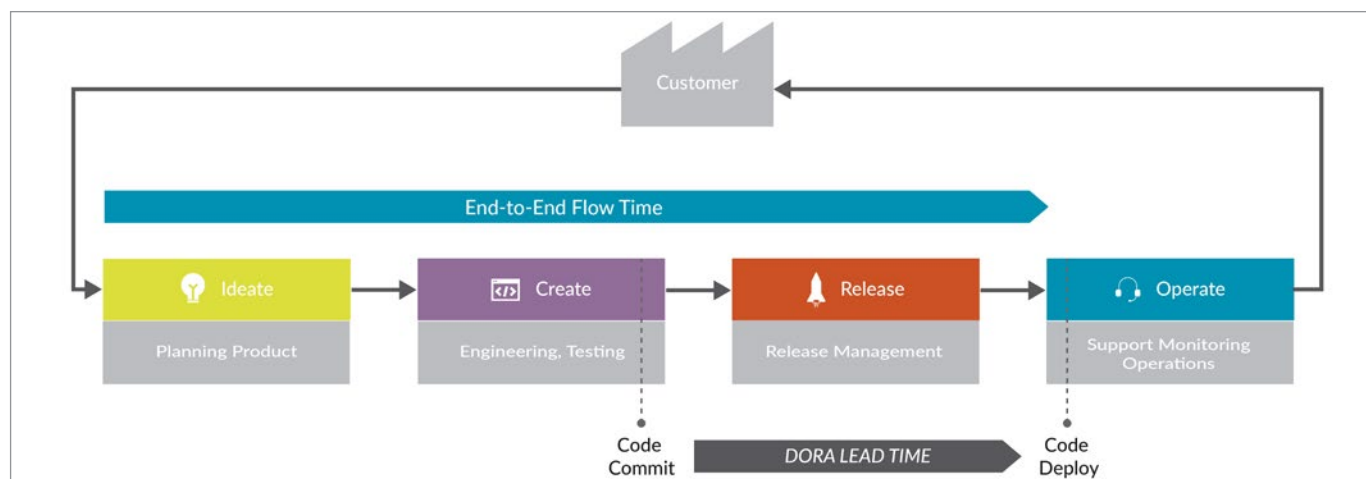
3. Mik Kersten. *Project to Product,* page 46.

Generating Flow Metrics from Value Stream Networks

Functional Specialization and Tool Proliferation

Software delivery is one of the most complex endeavors undertaken by humanity[4]. It requires functional specialization supported by user experiences and systems of engagement that are tailored to the modern software specialist's role[5].

For that very reason, the modern software delivery toolchain is comprised of best-of-breed and specialized tools born of the Agile and DevOps movements, mixed in with legacy tools from past movements. The specialization is positive, much like medical specialization (which has more than doubled life expectancy since the Industrial Revolution).

Yet for all the productivity benefits of tool choice and proliferation, it has often come at a cost to flow. Ergo, the benefits of specialization can only be fully realized if the silos that it creates can be connected effectively.

Measuring Flow Across Heterogenous Toolchains

If you're after end-to-end Flow Metrics, there is no choice but to mine the ground truth from the enterprise tool networks and knit the data together.

In practical terms, getting actionable real-time visibility into end-to-end flow requires three things:

1. The ability to capture data from any tool without interruption—isolated from third party changes and tool upgrades—and without destabilizing the tools' daily operation.

2. The ability to join and abstract the data from the individual tools into one integrated set of Flow Metrics.

3. The ability to view the data sliced-and-diced through the business lens, so that software delivery performance can be correlated to business results.

Once armed with visibility into the flow of your product value streams, you can get to problem-solving. You can identify where flow slows down—where a constraint is impeding business value delivery—and get to work on relieving that bottleneck. Then, you move on to the next bottleneck, and so on and so forth.

Track Technology's Impact on Business Results

As you begin to measure flow, you also track impact. When technology's impact on business results is made explicit, everyone starts paying closer attention to value. If done consistently and across the board, it optimizes your ability as a leader to:


4. Mik Kersten. *Project to Product, page* 170.
5. Mik Kersten. *Project to Product, page* 167.

- Determine whether business priorities are being met
- Make decisions that deliver quantifiable and tangible business value
- Rebalance portfolios and adjust investment levels to meet enterprise goals

You can harness Flow Metrics analytics to:

Revenue vs. Feature Delivery

1. Trend business results and flow side-by-side

This enables you to establish impact and make it possible for everyone to see the relationship between digital output and business performance.
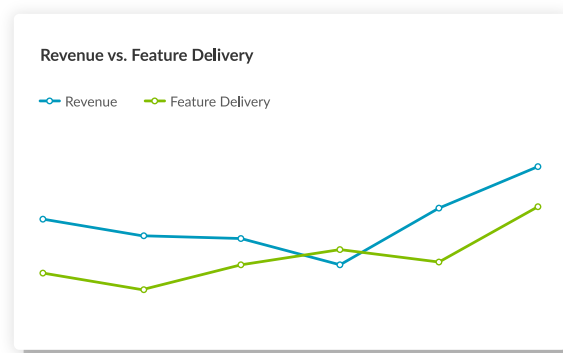
2. Use insights to inform decision making

The real-time insights you can glean from this accurate and actionable data helps you:

- **Clarify targets:** Make it easy to determine when current flow is insufficient to support targeted business outcomes (like profitability, adoption or customer satisfaction)
- **Always consider internal and platform products:** While not monetized directly, their value must be just as explicit. What benefit do they provide? For example, speed, accuracy, savings
- **Change the conversation:** Build consensus with stakeholders by tying roadmap, tradeoffs and prioritization to high-level business imperatives

Building Your Own Flow Metrics

True to the realities of modern software delivery, measuring flow requires tracking the work as it progresses and traverses a series of tools used by practitioners from ideation to production.

Product value streams comprise many types of specialists, across multiple disciplines (planning, design, architecture, development, testing, security, operations), each executing their work in a dedicated tool optimized for their role. And as the industry evolves, new tools emerge to replace old ones, the toolchain itself evolving with the times like any other product.

The trick is to get to Flow Metrics fast and in real time, because you don't have two years to wait. One leading U.S. insurance company spent a year and $1million to build their own Flow Time metric, only to find the investment rendered obsolete the moment they even slightly modified their toolchain.

Given your large investment in development resources, you may feel you have the expertise and capacity to build your own Flow Metrics solution in house. It may seem like a fun and simple project to undertake, one that utilizes the people and knowledge you already have, as well leveraging your existing data lake strategy.

But be warned; homegrown Flow Metrics can take years to produce, for the sheer effort of culling, normalizing, selecting, and visualizing the right data. Add to that the cost of data replication and storage, the need for a ten-person strong full-time product team, the expertise one must develop on each tool's APIs and data schemas, the care you must take to prevent bad queries from impacting tool performance, and the break/fix work following every tool upgrade…

Just as you would not build your own Enterprise Agile Planning tool—your own Jira from scratch—you should not be building your own Flow Metrics tool. You simply do not have time; your digital-savvy competitors already have this data to continuously improve and pull further away from the pack. The cost of delay increases by the day.

While on the topic, nor can your Agile Planning tool provide you with end-to-end Flow Metrics. Agile Planning tools are designed for work management and optimization of scrum teams and not of the whole value stream. They cannot visualize current and historical flow for a product in terms of business value creation and protection and aligned with business outcomes.

Providing, that is, that the solution is embedded with powerful modeling and visualization capabilities with turnkey connectors to any tool in the software delivery toolchain. We'll return to this point later in this paper.

Improving Flow Across Value Stream Networks

What is the low-hanging fruit to flow optimization? Improvements that automate workflows and traceability across the value stream network. The removal of non-value adding work significantly improves Flow Efficiency significantly, and as a result—shortens time-to-market and boosts velocity.

Just 1–2 points improvement in Flow Efficiency can shorten Time to Market by 10%.

Continuous improvement to Flow Efficiency dramatically increases your ability to grow and protect the business.

ACTIVE TIME	10 days	9.5 days	9 days
WAIT TIME	90 days	80 days	70 days
FLOW TIME	100 days	89.5 days	79 days
FLOW EFFICIENCY	10%	10.6%	11.4%

Flow Efficiency Increase: **0.6**   Flow Efficiency Increase: **0.8**

Time-to-Market Improvement: 10.5%   **Time-to-Market Improvement: 11.7%**

Based on an analysis of 308 value stream networks of the Global 2000, as well as hundreds of conversations with their technology leaders, Planview has identified three inhibitors to flow that can be easily alleviated by automating workflows and traceability across tool boundaries.

The three inhibitors to flow are:

1. **Lost productivity:** Precious time is spent on non-value adding work, like duplicate data entry between tools, manual handovers, status meetings, and endless emails back and forth with zero traceability. According to estimates, practitioners waste anywhere between 20 minutes to 2 hours a day on these inefficient processes.

Case Study

One of the largest providers of specialized hospitals and rehabilitation facilities for outpatient care in the U.S. estimated spending one full FTE per day over a group of 50 developers on non-value-adding duplicate data entry.

2. **Burdensome traceability:** Many of the world's leading companies operate in highly regulated markets like financial services, automotive, healthcare, pharmaceuticals, and government. To remain in compliance, they must produce reports that trace every original requirement to its implementation (code, test, build). More often than not, they do so manually (usually using spreadsheets) in a process both expensive and error-prone.

3. **Frequent disruption by M&A, reorgs, and the introduction of new tools, processes or technologies:** Upheavals like mergers, acquisitions, divestitures, and reorganizations can be very damaging to flow. Enterprises often find themselves incapable of rapidly absorbing additions to their technology ecosystem. Many a transformation has been thrown off track by such changes, which disrupt any positive momentum in flow the organization had going, making it challenging to meet business results.

According to the Flow Framework, value stream networks require an information backbone that connects the tools and orchestrates near real-time data synchronization between them. This backbone, referred to as the Integration Model, defines the routes that business value can flow through the value stream network.

The Integration Model connects the tools and routes the work as it progresses from team to team, discipline to discipline, specialized tool to specialized tool. All the while, it normalizes, relates and synchronizes the individual work items ('artifacts') across tool boundaries, eliminating silos and information bottlenecks and all the non-value adding manual work.

Furthermore, the Integration Model also provides the tool network with the elasticity to expand and contract, to evolve and change, to absorb newly acquired networks, experiment with the latest tools, and gradually wean off old ones.
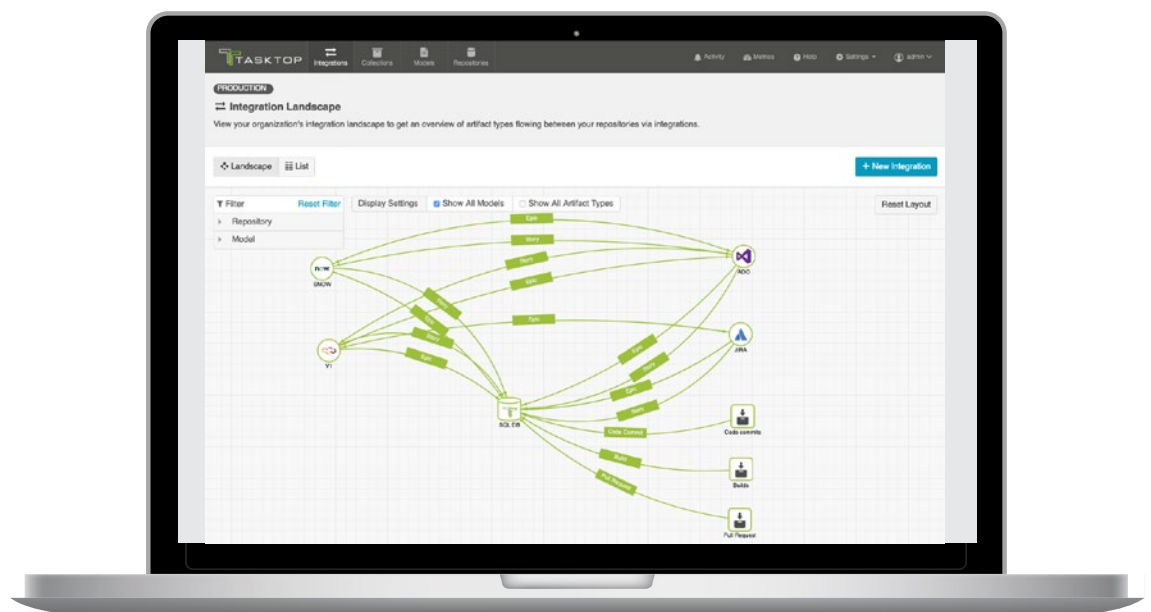
Visualizing the Integration Model for a value stream network

Implementing the Flow Framework® with Planview Solutions

From the minds of the people who created the Flow Framework comes the only turnkey and purpose-built solution for implementing it: the Planview VSM Platform, which offers two independent but complementary VSM experiences through Planview Tasktop Hub and Planview Tasktop Viz. Business and technology leaders can begin their journey where their pain is most acute.
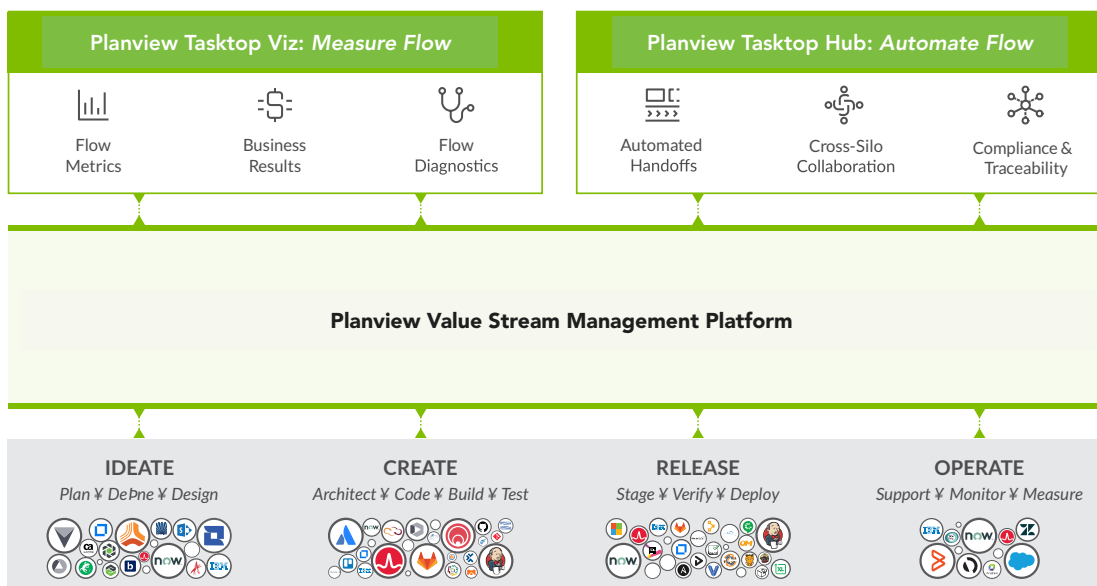
Drawing on Planview's 60+ high-performance connectors to the most widely-used software development and delivery tools, these solutions connect, visualize, and measure flow across product value streams.

Through groundbreaking no-code, do-it-yourself modeling, you can rapidly visualize flow and start to improve it:

Planview Tasktop Viz measures and analyzes flow in software delivery streams. Viz is where you go to see each product value stream's software delivery metrics side-by-side with the key business results they need to achieve in terms of cost, value, quality and happiness. Its Flow Metrics dashboards combine value stream metrics and business results to truly bring technology and the business together in setting priorities and identifying areas for investment.

Planview Tasktop Hub automates and accelerates flow through product value streams. Hub is a purpose-built integration solution for the software delivery toolchain. It flows the work to the practitioners effortlessly and plants traceable links between related artifacts to track work as it traverses complex collaboration networks.

Both products are powered by the Planview VSM Platform; draw on data captured from the software delivery toolchain by Planview's Flow Fabric™; and utilize Flow Modeling to shape the raw data into meaningful and actionable information for the enterprise.

Planview Tasktop Viz: *Measure Flow*			Planview Tasktop Hub: *Automate Flow*		
Flow Metrics	Business Results	Flow Diagnostics	Automated Handoffs	Cross-Silo Collaboration	Compliance & Traceability

Planview Value Stream Management Platform

IDEATE	CREATE	RELEASE	OPERATE
Plan ¥ Deþne ¥ Design	*Architect ¥ Code ¥ Build ¥ Test*	*Stage ¥ Verify ¥ Deploy*	*Support ¥ Monitor ¥ Measure*

Planview Tasktop Viz

Planview Tasktop Viz generates a live value stream visualization of your software products. Unlike any other metrics solution on the market, Viz is a turnkey solution designed for rapid time-to-value and the shift from project to product. Business users can instrument their value streams in Viz in just a few clicks and get end-to-end Flow Metrics dashboards within minutes. A Total Economic Impact report by Forrester recently found that <u>Viz can deliver a customer ROI of 640% over three years with a payback period of less than three months</u>.

- **Viz records how work is progressing** from the objective data captured from tools across all contributing departments and teams.

- **Viz models the business view** of products and portfolios onto the data and highlights value delivery.

- **Viz replays history** to uncover the factors that impact business outcomes to inform future decisions.
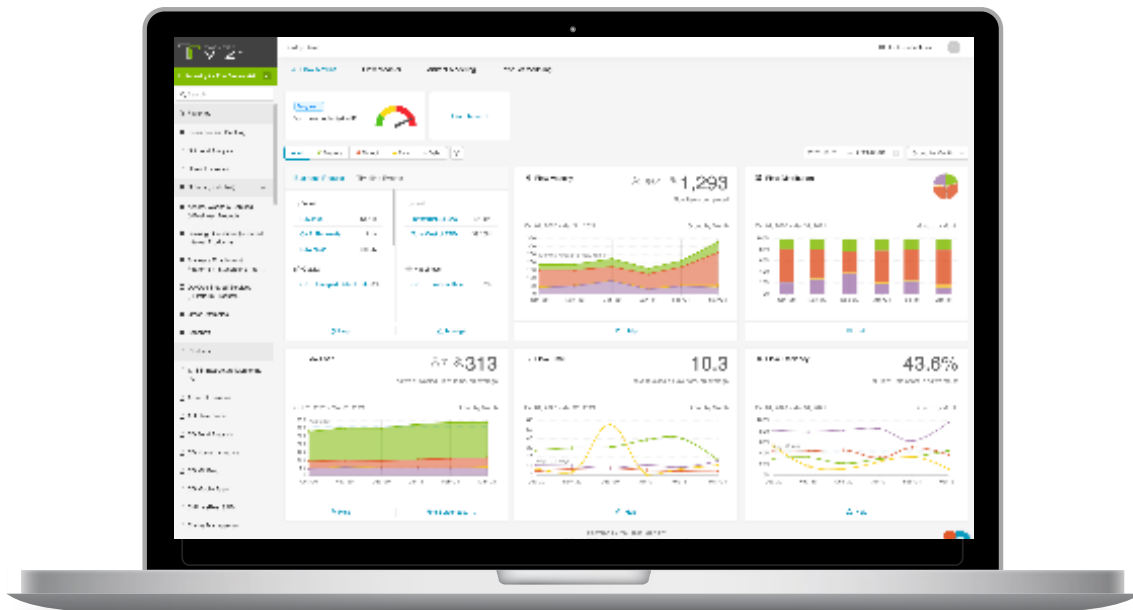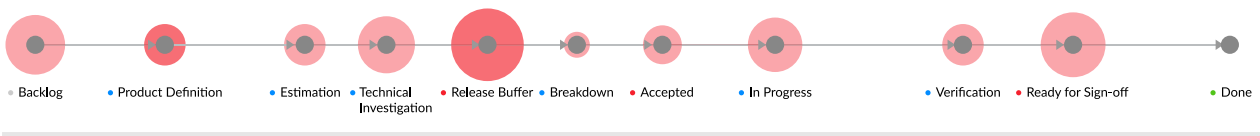
Carry out dynamic bottleneck analysis to focus on the biggest constraint impacting the flow of customer value.

VSM Portfolio Insights: Track Your Product Journey

The VSM Portfolio Insights dashboard in Planview Tasktop Viz arms technology and product leaders and C-level executives with end-to-end visibility into digital transformation successes and areas for optimization.

This portfolio view rolls up metrics and analytics generated at the individual product value stream level to the executive plane. The interactive dashboard presents consolidated insights into the performance, quality, value and impact of delivery including:

• The progress of the shift from project to product-based IT

• The ability to respond rapidly to the market

• The business processes capable of acceleration, namely: feature to cash, defect to resolution, risk to mitigation or debt to pay-off

• The value creation and value protection areas currently lacking appropriate investment

Watch a short demo of what VSM Portfolio Insights

Planview Tasktop Hub

Planview Tasktop Hub improves Flow Efficiency and shortens Flow Time by automating powerful workflows across tool boundaries. The only model-based integration platform for connecting the value stream network, Hub is 4x faster to set up and 10x easier to maintain than any other solution.

• **Hub automates the necessary data flow** from one tool to the other—bringing the work to the people, when they need it, and in their tool of choice.

• **Hub eliminates waste in everyday operations** that are draining productivity, like duplicate data entry, manual handovers and manual traceability.

• **Hub creates a single source of truth** to improve collaboration between disciplines including Product, Development, Testing, Release and Operations.
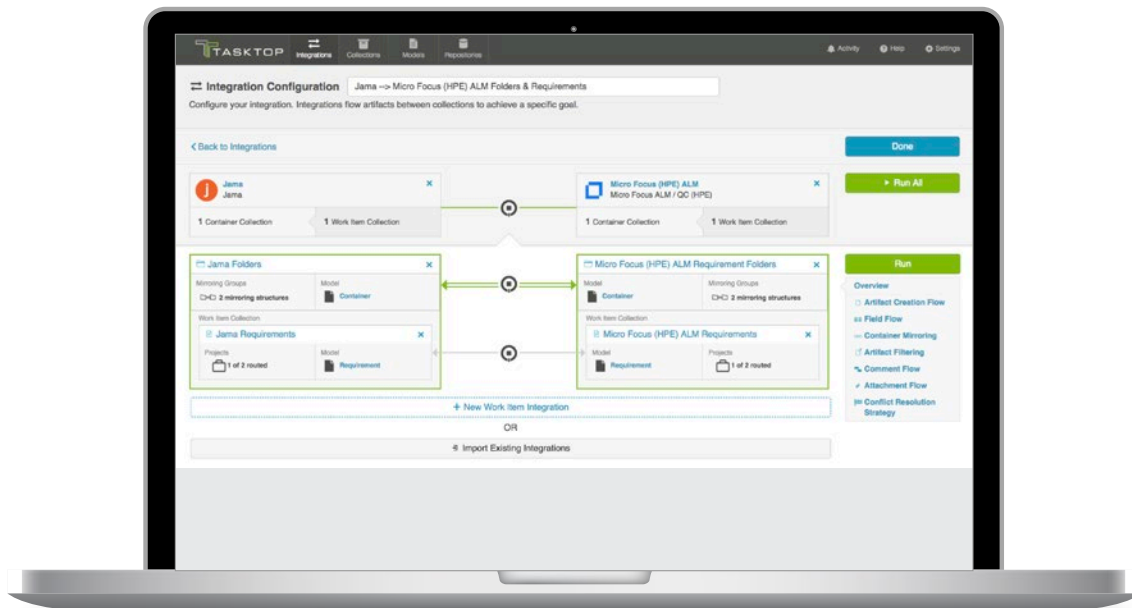
No Code, No Customization. Thanks to Modeling.

Many firms can offer beautifully rendered metrics dashboards, eye candy for any executive. But behind those pretty pictures are poorly-productized custom solutions. There's a services contract, prerequisites and preconditions, custom data extraction and manipulation, and long lead times. It's exceedingly difficult to account for different practices and behaviors across departments and geographic locations, mature and less mature teams. It's impossible to incorporate work that deviates from the standard.

Not so with Planview solutions.

Planview Tasktop Viz and Planview Tasktop Hub are predicated on the concept of modeling, so the solutions can be configured by business users and easily scaled to the entire organization.

Four layers of **point-and-click modeling** exist in Planview's solution:

- **Product modeling:** Easily carve out the subset data pertaining to a specific product value stream from within the tools used by all contributing teams and departments.

- **Flow Item modeling:** Map the work in your product model to four types of value creation: features (new business value), defects (resolutions to quality issues), risk (business value protection), and debt (investments in technology and ways of working).

- **Flow State modeling:** Map the states that work goes through into four easy-to-understand states: New, Active, Waiting and Done.

- **Integration modeling:** Identify the meta-data that truly matters for synchronization and reporting at the organizational level, and leave the rest to live in its source repository for users of that tool.

Modeling your value streams provides the data to visualize your value stream, see your flow, and embark on a data-driven continuous improvement journey.
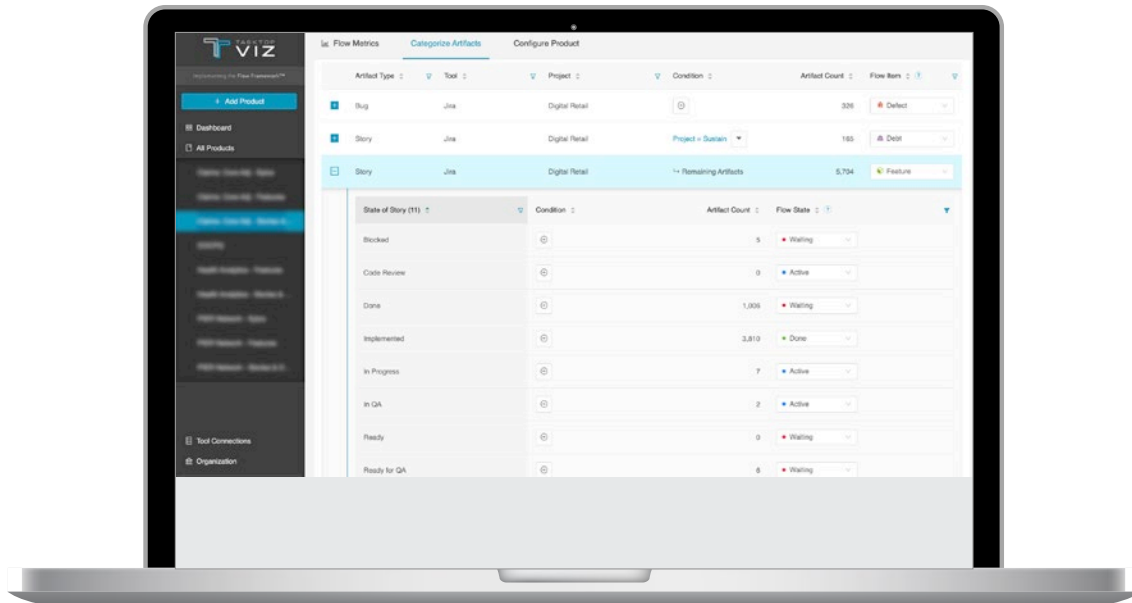
Modeling in Planview Tasktop Viz

Rapid Time-to-Value with Planview Connectors

Planview Tasktop Viz and Planview Tasktop Hub are both powered by Planview Connectors, robust out-of-the-box integrations to nearly 60 software delivery tools.

Planview has created the industry's most comprehensive encyclopedia of tool API capabilities per tool, per version. Our high-performance and low-impact connectors are built to a meticulous spec, to maintain operational stability of your tools as well as the integrity of your data.

Every single day, the Connectors are tested vigorously through our Integration Factory, which proactively runs 500,000 tests on more than 300 tool versions to ensure their seamless operation in any environment.

Integration Factory ensures you can upgrade your tools without fear and have confidence that whatever tool version you run, Planview will work.

Tools we support	Requirements Management	Agile Planning	ALM	Test Management	Project & Portfolio Management	Change/Workflow Management	PLM
	Blueprint	Aha!*	Codebeamer*	IBM Engineering Test Management	Broadcom Clarity*	CA Harvest*	Aras Innovator*
	IBM Engineering Requirements Management DOORS Family	Asana*	IBM Engineering Workflow Management*	Micro Focus ALM/Quality Center*	Jira Align*	IBM Rational ClearQuest*	PTC Windchill*
	IBM Engineering Requirements Management DOORS Next*	Atlassian Jira*	Micro Focus ALM Octane*	Microsoft Test Manager	Micro Focus PPM*	Micro Focus Solutions Business Manager*	
	Jama Connect*	Broadcom Rally*	Microsoft Azure DevOps Services*	SmartBear QAComplete*	Microsoft Project Server		
	Micro Focus Dimensions RM*	DigitalAi Agility VersionOne*	Microsoft Azure DevOps Server*	TestRail	Planview AdaptiveWork		
	Modern Requirements4DevOps	Pivotal Tracker*	Mozilla Bugzilla	Tricentis qTest*	Planview Portfolios*		
		Planview AgilePlace*	Polarion ALM*	Tricentis Tosca*	Planview PPM Pro		
		ServiceNow Agile Development*	PTC Windchill RV&S*	UIPath Test Manager	ServiceNow PPM*		
		Apptio Targetprocess*		Xray Test Management			
		Trello*		Zephyr for Jira			

	Version Control Systems	ITSM	Release Orchestration & Automation	Enterprise Architecture	Content Management	Security	
	Bitbucket	Atlassian Jira Service Management*	Digital.ai Release XebiaLabs*	Sparx Systems Pro Cloud Server*	Microsoft SharePoint*	WhiteHat Sentinel	*Tools supported by Tasktop Viz*
	Gerrit	BMC Remedy*					
	Git	ServiceNow*					
	GitHub*	Salesforce Service Cloud*					
	GitLab*	Zendesk*					

Four Phases of Data-Driven Continuous Improvement

"Take your business and break it down into smaller chunks and start building things. And don't solve problems that don't exist yet, that you haven't yet faced".

Pieter Jordaan, CTO of Technology, TUI Group

Getting Started with Planview

Adopting the Flow Framework is a commitment to the ethos of data-driven continuous improvement. It's applying systems-thinking relentlessly to the complex, creative network of software delivery activity.

So where does one begin?

Dr. Mik Kersten says, "Start small, measure, iterate, and refactor".

Planview's Flow Institute helps organizations learn and scale the practices of flow optimization through a combination of technology and services, through three phases:

1. **Learning to See:** For the first time, your end-to-end value stream for software products will be explicit, visual and measurable. Learn to read your metrics and understand productivity through the eyes of your customers and the concepts of business value flow. Start to see where flow is slowing down and develop hypotheses on how to remove those constraints.

2. **Learning to Improve:** In light of targeted business results for the product, identify which bottlenecks to focus improvement initiatives on. Use the Flow Metrics in retros to form experiments designed to achieve your goals. Observe the impact of the experiments on your Flow Metrics and evaluate their success. To drive the cultural shift, when experiments result in improvements, celebrate, tell and retell those stories across the organization.

3. **Learning to Scale:** An Enterprise Flow Team, comprised of value stream architects, business agility coaches, and continuous improvement strategists, begins to apply learnings at the enterprise scale to multiply the wins. They help teams establish a cadence of data-driven continuous improvement and ensure executive leadership publicly supports successes as well as failures. At this stage, you continue to set improvement targets, so eventually you're able to conceive, develop and deliver business value within days, if not hours.

There is a Flow Framework Package designed to progress an initial cohort of product value streams through the first phase of the program.

Coaching by Inspirational Thought Leaders, Grounded in Reality

At Planview, we believe in an enterprise's inherent ability to improve from within. Yet, a commitment to focusing on flow with a product orientation is a journey. At many levels it is also a cultural shift.
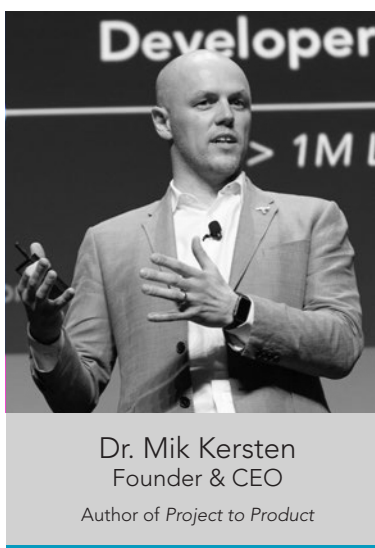
Planview's Flow Framework Starter Package helps you start the journey and prove it can be successful. Starting small, it teaches everyone—from leaders to practitioners—how to adopt and implement a continuous improvement strategy in service to business outcomes.

As you're implementing the Flow Framework, Planview's flow advisors provide coaching to every level of your organization to keep you on course and provide insight from our work with the Fortune 500.

Dr. Mik Kersten coaches the executive leadership, based on his insights and experience from working with the world's leading IT organizations and his intimate ties to thought leaders in the digital transformation, Agile, and DevOps domain.

Experienced Flow Advisors, including celebrated authors and speakers Carmen DeArdo and Dominica DeGrandis, work at the product value stream level. Drawing on their personal experience at Bell Labs, Nationwide Insurance, Boeing, Oracle, AT&T and Invesco, as well as hundreds of hours working with the Fortune 100, these down-to-earth thought leaders are devoted to coaching value stream leads, architects, and change agents on implementing the Flow Framework and data-driven continuous improvement.

Planview's Flow Advisors include celebrated authors and thought leaders

Dr. Mik Kersten
Founder & CEO

Author of *Project to Product*

Dominica DeGrandis
Principal Flow Advisor

Author of *Making Work Visible*

Carmen DeArdo
VSM Practice Lead

Author of *A Leader's Guide to Digital Transformation*

▌ Appendix

Doing SAFe® Right with the Flow Framework

When Dean Leffingwell, Cofounder and Chief Methodologist at Scaled Agile Inc., introduced SAFe 5.0 at the 2019 SAFe Summit, he made it clear that Business Agility requires technical agility and a business-level commitment to product and value stream thinking.

He also reminded his audience that the word project doesn't exist in SAFe, and joked that had Mik Kersten not already done so, he would've written a book titled *Project to Product*.

> **"Mik's book really hit the nail on the head. This is a futuristic book."**
> Dean Leffingwell, Cofounder and Chief Methodologist, Scaled Agile, Inc.

Enterprises that have made strong strides down the SAFe path have trained and certified their teams, hired internal coaches, adopted new tools, and implemented new processes. They've worked tirelessly over several years to expand initial experiments to a larger enterprise footprint—a process that for most is still in progress.

The Flow Framework does not instruct you how to handle the complex coordination and orchestration of software development across multiple Agile teams; that is entirely the domain of SAFe. It is, however, complementary to SAFe, in that it gives you a simplified, high-level view of the impact your Agile and DevOps transformations are having on business results. With each PI (Planning Increment), are you increasing how much you deliver for the business? Are you able to adopt emerging tech faster?

The Flow Framework's goal is to measure what your SAFe implementation is producing in coarser business value terms, to communicate better with the people in finance or lines of business who don't "speak Agile" and whose eyes glaze over when they hear about "story points".

Thus, in the Flow Framework®, all the work items generated by your SAFe® implementation are mapped to just four flow items: features (new business value), defects (quality), risk (security, governance, compliance), and debt (removal of impediments to future delivery).

Once abstracted in this manner, you can have productive conversations with the business about prioritizing work and avoid the quality death spiral:

- Trade-offs between new features and mounting debt become evident.
- Compliance and risk work receive the timely attention they deserve.
- Unplanned defect work can be measured, and adequate capacity gets reserved to handle it in future releases.
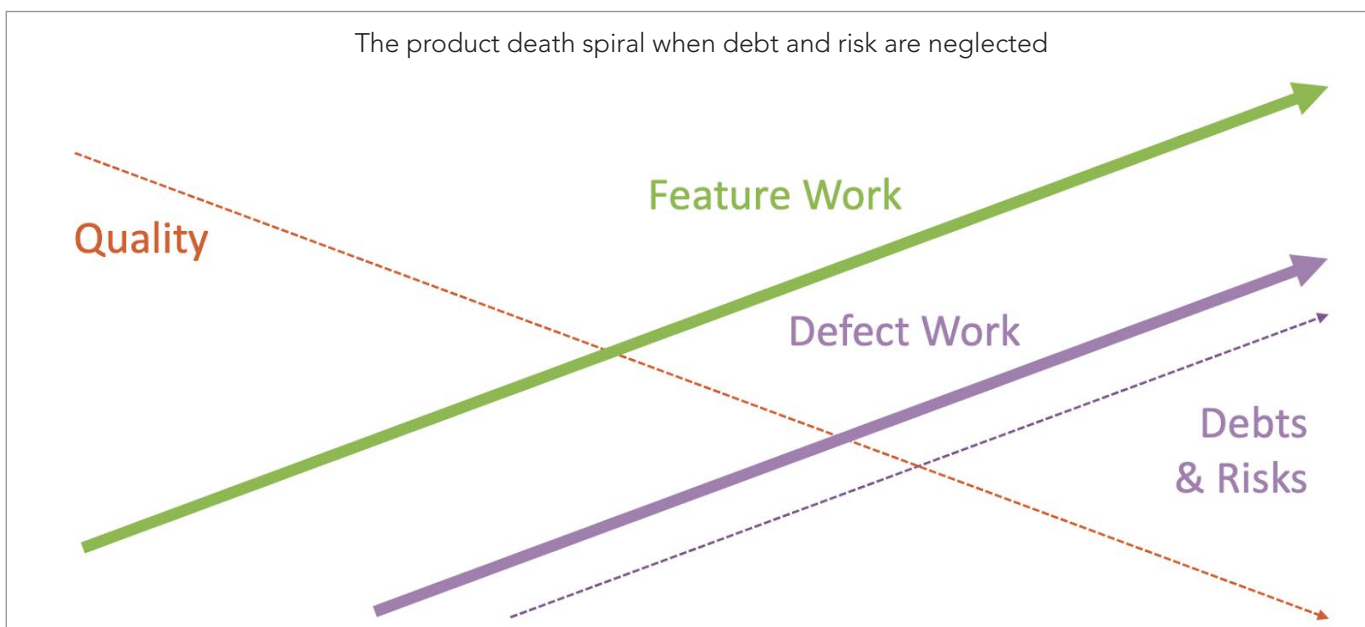

The product death spiral when debt and risk are neglected

Quality

Feature Work

Defect Work

Debts & Risks

Diagram Adapted from Gene Kim

Impacts of the Shift to Product on Roles and Organization

As maturing IT organizations start managing work by product, some long-standing roles are changing. PMO roles—such as program and project managers—are expanding and evolving, as IT organizations reorient around value-based outcomes.

We've seen three new roles emerge to date: **Value Stream Architect**, **Product Journey Champion** and **Product Value Stream Lead.** They are focused on creating and protecting the value that matters most to your business; whether that's profit, revenue, risk reduction, or the number of lives saved in the case of healthcare.

These roles spell opportunity and career growth for traditional project management roles, who can harness their experience—the strong business relationships, their knowledge of vendor management, risk management, revenue management and more—to reinvent themselves. They can be instrumental in ensuring the product model truly creates value for end-users. The PMO can become the VMO - the Value Management Office.

1. Value Stream Architect

The Value Stream Architect focuses on architecting the software delivery value stream for flow. They are:

- Optimizers - study bottlenecks, knowledgeable in Theory of Constraints
- Influencers - add work to product backlogs to drive change at each key stage
- Consultants - work with product, engineering and delivery managers to drive high-level decisions about workflow tooling

The Value Stream Architect role is less about structuring the software components, and more about the optimizing the delivery pipeline itself, treating it as a product. Architecting not just for speed, but for visibility too, helping business owners know exactly where their request is and when it's likely to be delivered (a dream for any PMO). They also ensure built-in feedback occurs across the value stream to catch problems earlier and identify data-driven CI improvement experiments.

2. Product Journey Champion

The Product Journey Champion is the business-level owner of the transition from project to product who helps keep the transformation on course. They work with key executives and managers across IT and lines of business to adopt a product mindset to optimize technology and staffing investments. They apply systems thinking and scale learned lessons and patterns, helping to celebrate the victories of the transition and continuously learn from the challenges. The champion is a cross-cutting consultant who sits above the value streams, skilled at political savviness to weave consensus across departments and keep the momentum and engagement up.

3. Product Value Stream Lead

A Product Value Stream Lead has intimate knowledge of the product and is responsible for all aspects of the product value streams in terms of:

- Business: Vision, design, customer happiness, costs, pricing, market changes.
- Operational: Processes (both engineering and product), licensing, etc.
- Technical: Agile teams, estimation, architecture.

In the top-level default structure, the Product Value Stream Lead would typically sit above the engineering manager and product manager in their respective product value stream. Within this structure, they draw from the expertise of disciplines and make informed decisions that strike a balance to best serve the desired business outcomes.

Not to be confused with a Product Manager, there are some key differences between the two roles:

Product Value Stream Lead	Product Manager
Operational cultivation of culture of innovation and technical integrity	Prioritization, Prioritization, Prioritization
Significant people management duties	Generally no people management duties
Generally no feature design	Feature design
Primary Flow Metrics: Flow Distribution® & Flow Efficiency®	Primary Flow Metrics: Flow Time, Flow Load®, Flow Velocity®
Staff team, set objectives & measure outcomes	Why build this product & what outcome will it produce?

▌ Next Steps

You should now have a clear understanding of how the Flow Framework can guide and measure your organization's journey to product to achieve innovation velocity, as well as how to implement it with Planview's pioneering solutions.

We've kickstarted the product journeys of a host of software delivery organizations with the Flow Framework and can help you, too.

If you want to know more, <u>speak to us</u> to determine the best way Planview can bring the right Flow Framework Package into your organization, so you can get your baseline Flow Metrics and begin making data-driven continuous improvements.

Discover More

- <u>Guide: The CIO's Value Stream Management Playbook</u>
- <u>Podcast: MIK + ONE: Pieter Jordaan, Group CTO, TUI Group</u>
- <u>eBook: Flow Metrics: A Business Leader's Guide to Measuring What Matters in Software Delivery</u>
- <u>White paper: The Planview VSM Platform: Transforming Businesses into High-Performing Tech Companies</u>

About Planview

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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