BROADCOM®
SOFTWARE

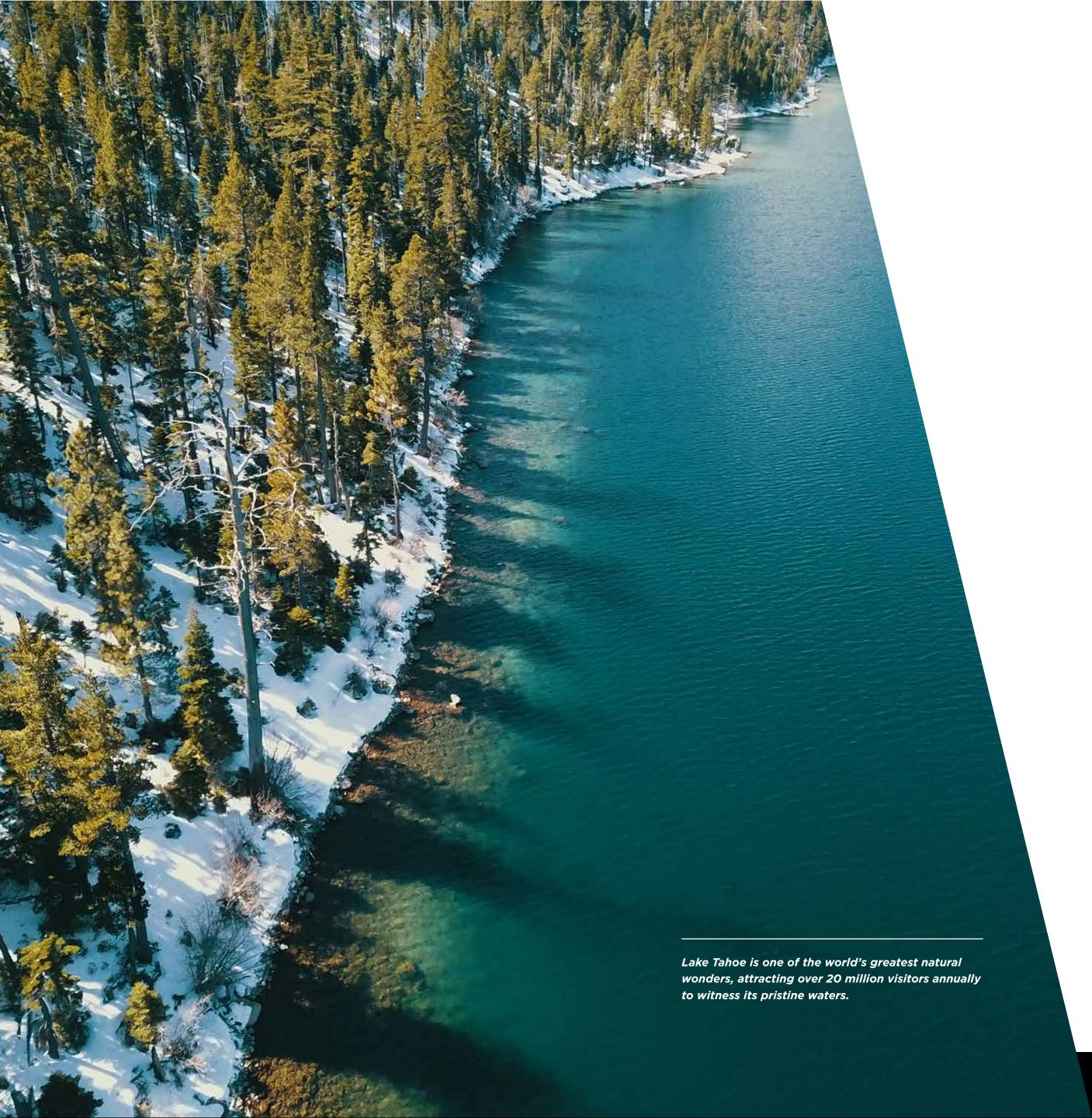# MANAGING VALUE STREAMS WITH VALUEOPS

ESSAYS ON DEFINITIONS, BENEFITS AND HOW TO GET STARTED

BROADCOM ADS THE VALUE IN VALUE STREAM MANAGEMENT

VALUE STREAM MANAGEMENT STARTS AND ENDS WITH THE CUSTOMER

While nothing new among software developers, Value Stream Management has piqued the interest of business leaders, whose success today in large part depends on their very ability to heighten the user experience with the latest technology innovations. Marketing at a fast-food chain, for example, won't succeed without an appetizing social media app. Nor will airlines without self-service kiosks at the airport.

ValueOps from Broadcom is the first solution to extend the concept of a
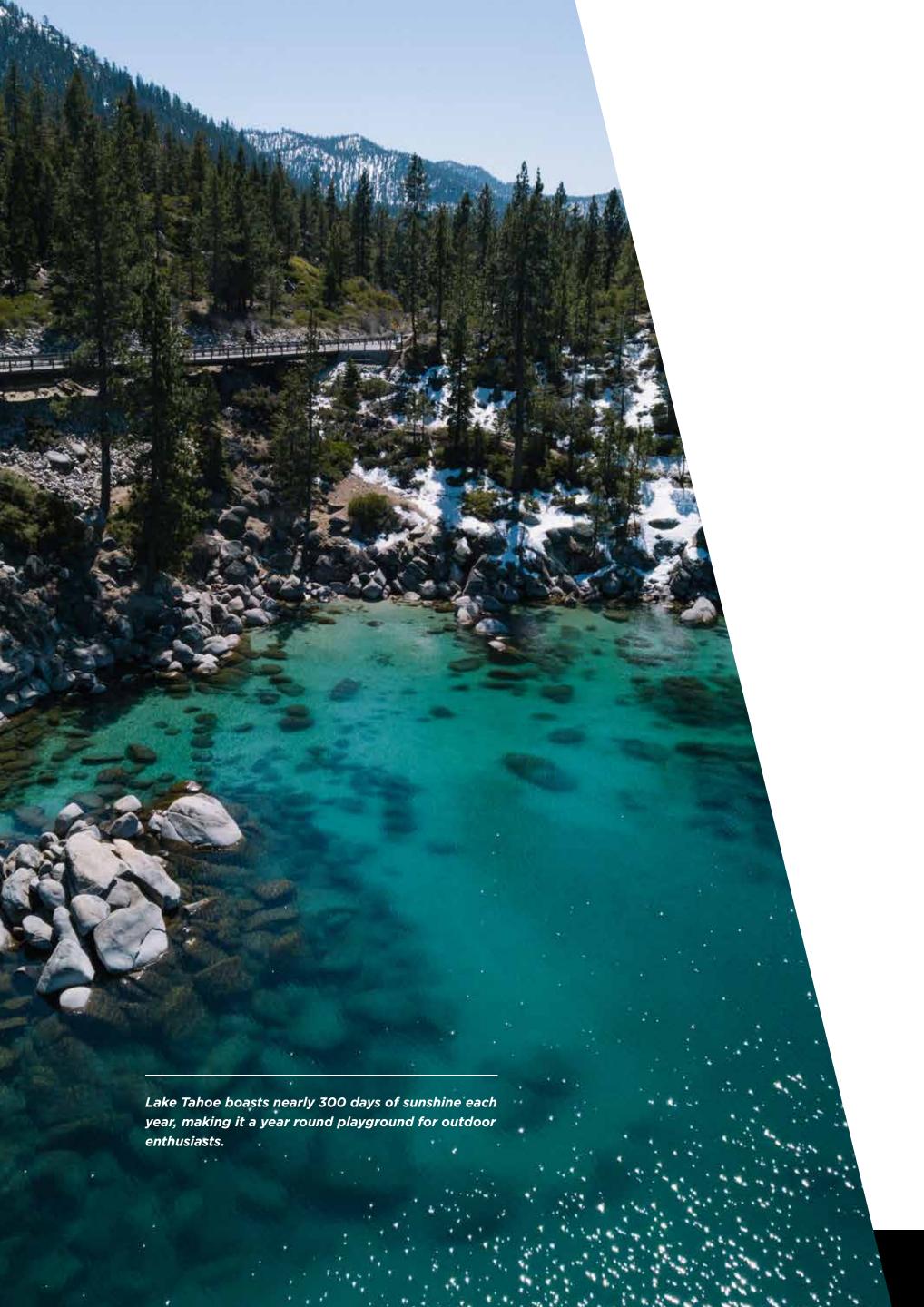
value stream beyond DevOps and operational roles to encompass metrics and capabilities that truly matter to business leaders. **This new leading-edge solution enables them to track value through a continuous product lifecycle, demonstrating significant returns on their investments**.

In a series of essays by Broadcom experts, we will explain our view and show you how our ValueOps solution adds the Value to Value Stream Management.

Lake Tahoe is one of the world's greatest natural wonders, attracting over 20 million visitors annually to witness its pristine waters.

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VALUE STREAM MANAGEMENT: WHY IT'S SO CRITICAL, HOW TO GET IT RIGHT

THERE USED TO BE A SAYING YOU'D OFTEN HEAR: "THE MORE THINGS CHANGE, THE MORE THEY STAY THE SAME." FOR MANY EXECUTIVES THESE DAYS, HOWEVER, FEW THINGS STAY THE SAME.

It's quite amazing to see business leaders navigating and adapting to constant change. This is especially true for digital transformation initiatives in enterprises, which have morphed, intensified, and, most critically, accelerated dramatically. It's not uncommon to hear about timelines for teams' key initiatives being shortened by two to five years. You don't meet this kind of fundamental shift by tweaking around the edges. In order to realize this objective, the vast majority of companies will need to reinvent their organizational and operational models.

More than ever, it will be vital for teams to realize the full promise of Agile at scale. It will be incumbent upon teams to try new ideas by shipping small pieces of new functionality, getting immediate feedback, and quickly determining whether to expand upon a concept or toss it out and try something new.

Lake Tahoe boasts nearly 300 days of sunshine each year, making it a year round playground for outdoor enthusiasts.

VALUE STREAM MANAGEMENT: WHY IT'S SO CRITICAL, HOW TO GET IT RIGHT

THE PROMISE OF VALUE STREAM MANAGEMENT

As executive teams look to respond to their organizations' urgent transformation objectives, value stream management (VSM) has emerged as a key strategic framework. VSM is a lean business practice that offers strategies for optimizing the end-to-end flow of value, from establishing business objectives and investment plans to customer delivery. By applying VSM strategies, teams can achieve these advantages:

• **Boost alignment.** VSM provides a new way to foster trust and enhanced decision making to ultimately bring together teams from across the enterprise.

• **Improve effectiveness.** VSM enables teams to better define and articulate ideas that maximize prioritization and planning. Ultimately, teams can become more effective at delivering customer value.

• **Maximize efficiency.** VSM helps enhance teams' ability to prioritize, plan, and develop value streams, fueling agility at unprecedented scale. By better synchronizing resources and capacity with business priorities, teams can boost the efficiency and velocity of value streams.
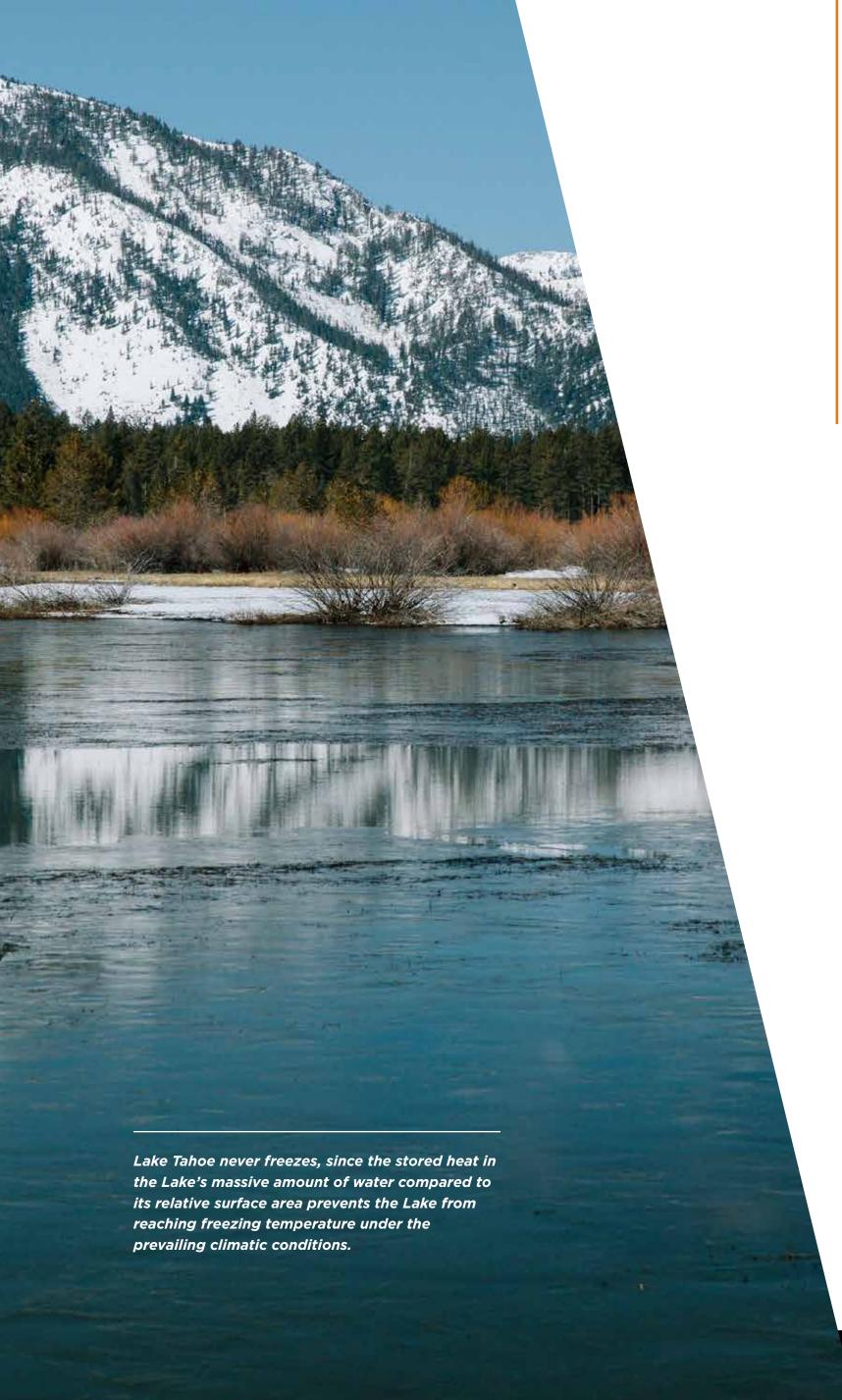
PLATFORM REQUIREMENTS

VSM requires a move from focusing on optimizing separate tools, teams, and departments, toward an emphasis on optimizing the flow of products and services horizontally, beyond IT and across the organization. To address these objectives, teams need a VSM platform, one that enables every role to manage, track, and analyze value streams from end to end, and in a unified fashion, through a consistent value orientation and methodology.

To capitalize on VSM, teams need platforms that address the requirements of both business and technology leaders:

• **Business leaders.** Executives need a platform that provides real-time insights into investments. They must be able to understand, track, and report on the value being delivered by those investments, so they can effectively prioritize based on value. In addition, the platform should aid these leaders in defining and articulating top-level initiatives as actionable deliverables.

• **Technology leaders.** IT executives need to manage teams efficiently, with a single unified backlog. They must have visibility into the status and objectives of the business, and have investment plans directly drive Agile management efforts. Ultimately, they need end-to-end traceability of value streams, so they can seamlessly connect strategic investment plans, funding, business objectives, and key results. In this way, they can provide delivery teams with better visibility into dependencies, risks, scope growth, and funding changes, which helps improve decision making and foster trust.

CONCLUSION

To capitalize on the benefits of VSM, teams need the right platform, one that fosters agile management at an unprecedented scale. To do so, teams require an end-to-end view of value streams, not just across IT but across the entire business. Broadcom's ValueOps solution uniquely addresses these requirements, helping teams establish alignment across tools, teams, and departments. ■

FIVE FEATURES OF SUCCESSFUL VALUE STREAMS

A "VALUE STREAM" IS OFTEN DEFINED AS THE PROCESS THAT CREATES A PRODUCT OR SERVICE YOUR CUSTOMERS ARE WILLING TO PAY FOR. THIS DEFINITION, WHILE TECHNICALLY ACCURATE, IS TOO VAGUE.

That's a problem because getting value streams wrong can cause long-lasting and far-reaching damage for your organization. On the other hand, getting it right can help you stay competitive.

Successful value streams follow **lean principles** and put customer value at the center of work. They ensure that an organization continuously increases customer value and eliminates waste.

Lean thinking, according to **an article** published by Daniela Gîfu, Dan Ionescu and Mirela Teodorescu, changes the focus of management from optimizing separate tools, teams and departments to optimizing the flow of products and services through entire value streams.

These streams flow horizontally, across tools, teams and departments.

Optimizing the entire flow removes waste and minimizes bottlenecks. According to Gîfu, Ionescu and Teodorescu, this allows you to respond faster to changing customer priorities, while boosting your ability to deliver innovative, high-quality and low-cost solutions.

HERE ARE FIVE THINGS TO KEEP IN MIND AS YOU CREATE YOUR VALUE STREAMS:

1. Start at the beginning.

Who best understands what your customers value? It's usually not someone in IT. Many value streams do, however, only include the teams associated with DevOps. Good value streams start with the teams who understand what customers value and who can quantify value based on customer feedback and market research. Without understanding your customers' needs and expectations, you can't know if any of the work being done is actually valuable.

Value streams are not effective if they are incomplete. Every step needs to be defined so wait times and waste can be eliminated from the entire stream. Optimizing flow is much easier if you include all steps.

2. Include all the players.

Do you need to pass legal reviews or external audits? Do the new features have an impact on contracts? Do you need to update marketing or train support agents? Value streams should encompass more than just the development and delivery of a product. All people who are involved in the creation and approval of the product should be thought of when defining value streams. Leaving them out can cause a delay in value realization.

I've seen companies create some pretty innovative offerings, only to have their competition release a similar product with better marketing and support. The team that brought their offer to market first lost market share by not including the entire organization. When it is time to release, the market, company and product must be ready.

Lake Tahoe never freezes, since the stored heat in the Lake's massive amount of water compared to its relative surface area prevents the Lake from reaching freezing temperature under the prevailing climatic conditions.

FIVE FEATURES
OF SUCCESSFUL
VALUE STREAMS

3. It's not all about speed.

Many companies are trying to speed up development, and yet they aren't creating anything of value. It doesn't matter how fast you go if you're creating something no one wants to use. Leaders in many organizations still admit they make funding decisions based on who's asking — and how loudly — rather than any objective criteria. It's time to fund only what your customers will find valuable, or things that will enable more of your organization to focus more effectively on customer value.

Make sure your value streams include a way to spot and stop orphan or zombie projects. Orphan projects are those where the requestor has left the company or changed roles and no longer cares about the project's delivery. Zombie projects are those that IT has completed, but that requestors no longer support or care about. Orphan and zombie projects are a complete waste to an organization and can account for up to 10% of IT spend. Sometimes stopping work can be more valuable than starting it.

4. Find the chasms.

Almost every company has a gap in data. Either teams can't trace how strategies break down, or they haven't put in dashboards at every level to track work. Having data as a natural outcome of the process you use is important — and cost-effective. One Fortune 250 executive estimated that her organization spent $100M annually, solely on rolling up work over the chasm between strategy and stories.

In addition, data must be usable and manageable for every level in the organization. Individuals, teams, managers, directors, vice presidents and C-Levels should all have dashboards and an appropriate level of metrics.

Breaking work into discrete pieces is critical. Regardless of how much we want it to occur, year-long strategies cannot easily break down into stories that fit into two-week sprints. There is too much lost in translation when incremental steps aren't defined. Work breakdowns should look something like this: Objective > Epic > Capability > Feature > Story > Task.

5. Know your work in progress.

Imagine you get to the point where your value streams are set and work is flowing, but there's just one problem: It still seems like nothing is getting done. Often the same amount is being completed by the teams; it's the amount of demand that is the issue. Work in progress isn't just for front-line teams — it needs to be tracked across the entire value stream.

When you map the entire value stream, you not only see how much work teams complete but how much demand is in the backlog. Too much demand also can indicate that the hard trade-off decisions aren't happening at the strategy levels, where they need to occur. Even when development and delivery teams speed up, the demand continues to increase. Quite often, demand is double what teams can actually complete.

CONCLUSION

Ultimately, the ability to skillfully employ value stream management can play a make-or-break role in the entire organization's long-term prospects. Value streams can be very powerful — but only if they include, and are clearly understood by, all levels in an organization. By addressing the five tips above, your teams can improve your use of value streams and ensure they help optimize the delivery of high-value offerings to market. ■

USING VALUE STREAM MANAGEMENT TO BREAK DOWN ORGANIZATIONAL SILOS

IN AGILE CIRCLES, IT'S BEEN A TRUISM THAT "USER STORIES ARE PLACEHOLDERS FOR A CONVERSATION." TODAY, I'D ARGUE THAT SAYING APPLIES TO PRETTY MUCH ANYTHING IMPORTANT THAT GETS WRITTEN DOWN.

It used to be common for businesses to have a culture that accepts people issuing a written edict and assuming everyone will be able to understand exactly what's intended. Those days are over. Leaders can't create plans, throw them over the proverbial wall and expect desired results. Nor can developers create a product and toss it over to QA.

Everything we generate—emails, requirements, strategies, user stories, and more—should be written under the assumption that a conversation will be needed to ensure our intent is understood. This is especially true if someone else needs to take action based on what we write.

USE VALUE STREAM MANAGEMENT TO ELIMINATE SILOS

The issuing of missives that get passed across teams is indicative of a bigger problem: The persistence of silos, and the reality that gaining alignment across these silos is difficult. As these stats amply illustrate, the impacts of this misalignment are huge:

- $1 million is wasted every 20 seconds due to ineffective implementation of business strategy.

- In the US, $102 million of every $1 billion in enterprise IT spending is wasted due to inefficiencies in project execution.

- 61% of organizations say that technology selections are not linked to business objectives.

These statistics show how costly systemic problems in the enterprise can be. Each of these problems can primarily be traced to silos, misalignment between teams, and poor project management. Here's how these issues cost businesses:

- Misalignment between teams, stakeholders, and disciplines causes tremendous friction and waste.

- Business objectives aren't aligned with project requirements, which leads to even more inefficiency.

- Inefficiencies in execution—and, frequently, teams focusing on the wrong work entirely—result in poor ROI and business outcomes.

Ultimately, each of these problems can be solved by value stream management (VSM). VSM requires you to visualize and recognize the walls in your organization that people are tossing work across.

USING VALUE STREAM MANAGEMENT TO BREAK DOWN ORGANIZATIONAL SILOS

START WITH A MAP

VSM starts with creating a value stream map. These maps detail how work flows through your organization. All steps in the process need to be considered to achieve transparency throughout the organization. It is extremely beneficial for everyone involved to understand what other parts of the organization do and how they do it.

For example, if development teams gain a better understanding of user experience and design processes and the steps those teams need to go through, they start to view those designs differently than they did before. Teams may find usability design can be moved ahead of development so bottlenecks are removed or mitigated. This helps all participants in the value stream to make better decisions because they understand the impact those decisions have.

CONCLUSION

Silos cost organizations millions of dollars each year. Those organizations that are harnessing VSM are well positioned to eliminate these silos and the penalties they exact. In fact, through a well-executed VSM initiative, businesses can dramatically improve alignment of their strategic planning and execution. In the process, these organizations can recoup anywhere from 10% to 50% of their teams' potential capacity, and boost their ability to deliver more value to customers. ■

Human efforts to improve clarity are helped by Tahoe's smaller watershed and the abundance of erosion-resistant granite rock.

THINK FAST: HOW TOP COMPANIES ARE CAPITALIZING ON VALUE STREAM MANAGEMENT

OVER THE LAST YEAR, ENTERPRISE INITIATIVES LIKE DIGITAL TRANSFORMATION HAVE TAKEN ON AN ENTIRELY NEW LEVEL OF URGENCY. HISTORICALLY, MULTI-YEAR IMPLEMENTATIONS AND ROADMAPS MAY HAVE SUFFICED. TODAY, THAT'S SIMPLY NOT FAST ENOUGH.

We recently spoke to customers from three different industries who have successfully harness their value stream management (VSM) strategy to meet their charters for rapid adaptation, including rolling out new products, contending with significant budget reallocations, and responding to major supply-chain disruptions. Following are a few examples of how these organizations were able to realize these VSM advantages.

BOOSTING CROSS-TEAM COLLABORATION TO SPEED ADAPTATION

Recently, customers' dining options and ordering preferences went through drastic changes. Virtually overnight, customer reliance on online ordering and third-party delivery grew to unprecedented levels.

For a team at a national fast-casual restaurant, this meant plans for signing on new third-party delivery partners had to be accelerated. Fortunately, the team had been pursuing VSM for some time. In the process, they were able to establish more effective knowledge sharing and collaboration across different departments, including product teams, digital marketing groups, scrum masters, and planners. Through this cross-team collaboration, they were able to bring on several new delivery partners—while shrinking rollout times from months to weeks. As a result, they were able to quickly deliver more convenience and flexibility to their customers.

THINK FAST: HOW TOP COMPANIES ARE CAPITALIZING ON VALUE STREAM MANAGEMENT

GAINING UNIFIED, ENTERPRISE-WIDE PORTFOLIO VISIBILITY TO MEET NEW BUDGETARY REALITIES

Recently, the aeronautics industry took a major hit, with air travel essentially grinding to a halt within a matter of weeks. For a large airplane-maker the downturn resulted in a significant and unexpected drop in revenues.

This created urgency for identifying ways to reduce expenses. The internal services team had to contend with the fact that many investments and infrastructure elements had traditionally been managed in a siloed fashion. They leveraged VSM to gain a cross-team portfolio view, so they could intelligently identify and eliminate overlap. **Leveraging VSM the team was able to realize savings of approximately $25 million.**

TAKING A DATA-DRIVEN APPROACH TO SCALING BUSINESS AGILITY

Consumer packaged goods manufacturers, like companies in many other industries, recently encountered a range of significant market interruptions, including dramatic changes in consumer behavior and significant supply chain disruptions. For a multi-national snack food producer, these changes meant teams across the organization had to pivot fast, and VSM proved instrumental in facilitating this rapid adaptation.

Through VSM, their teams were able to gain end-to-end visibility of the digital ecosystem. They established upfront roadmaps, and then seamlessly broke top-level initiatives into agile management-based work. Further, as teams started executing, data on work progress and status was rolled back into their portfolio planning views. As a result, they could start tracking progress based on actual work, and move away from inefficient and inaccurate manual status and siloed reporting. This enabled leaders to take a truly data-driven approach to decision making and management. Instead of being consumed by an ever-growing to-do list, teams had a much clearer picture of the efforts that were aligned with top strategies and objectives.

CONCLUSION

In virtually every industry, enterprises continue to contend with increasingly rapid change. In responding to this change, it is those organizations that have been pursuing VSM initiatives that have a decided advantage. Through VSM, teams have been able to improve visibility, transparency, and alignment with top-level business objectives. These capabilities have enabled teams to speed innovation and adaptation, so they can continue to deliver enhanced customer value and outshine competitors. ■

WHAT IS DIGITAL PRODUCT MANAGEMENT AND WHAT DOES IT HAVE TO DO WITH VALUE STREAM MANAGEMENT?

WHILE DIGITAL TRANSFORMATION IS AT RISK OF BECOMING A CLICHÉ, THE UNDERPINNING PRINCIPLES ARE ANYTHING BUT. AT ITS CORE, DIGITAL TRANSFORMATION – OR DIGITALIZATION – ARE PROCESSES THAT ENABLE BUSINESSES TO SERVE THEIR CUSTOMERS VIRTUALLY, INCLUDING INDUSTRIES THAT IN THE PAST WOULD NEVER HAVE CONSIDERED AN ONLINE PRESENCE, LIKE DRY CLEANERS AND PIZZA PARLORS.

If the global pandemic has done nothing else, it's shown business owner the importance of digitally interacting with customers anywhere, at any time.

This is why investment in digitalization is expected to grow $1.2 trillion in 2019 to $2.3 trillion in 2023. As such, companies that previously haven't spent much time thinking about technology are now increasingly investing in understanding how technology is developed, how quickly it can be integrated into their business, and how well it responds to customers' needs.

Digital Product Management is an evolving set of practices that are intended to address the shifts occurring in technology management because of digitalization. As part of Value Stream Management,

DPM allows organizations to fund their most-valuable investments and prove the ROI to the business.

DPM is really a story about the way people perceive spending money on technology. For a long time, companies would decide they needed something from the technology shop – a piece of software or a system – to accomplish a particular goal, like launching a new product or modernizing HR. They would then go through a pretty rigorous process of figuring out what they needed, who should work on it, what it was going to do, how much it would cost, and so on. They would then run it through multiple layers of approval, develop a project charter and send it through one or more steering committees to get it funded.

This was not change-friendly. With every adjustment, the process was repeated because the funding might change. It was a rigorous, onerous process that emphasized control over innovation. As companies increasingly embrace the new digital world, they're recognizing the old business operations need to materially change in order to support an ever evolving digital mode of operation and interaction with customers.

WHAT IS DIGITAL PRODUCT MANAGEMENT AND WHAT DOES IT HAVE TO DO WITH VALUE STREAM MANAGEMENT?

HOW DPM IMPACTS THE ENTERPRISE

Regardless of the business model, the ultimate goal is to create synergy within the organization so that everyone is working together. This is especially true with digitalization because it breaks down geographic barriers, enabling companies to change, monitor and integrate technology from anywhere in the world.

For instance, a retail company in Europe might decide it wants to deploy a new mobile shopping experience on the continent. Instead of allowing branches in different countries to choose their own technology, plans and processes, the retailer decides it's better to have one common experience across all countries.

Once the company rolls out the mobile platform, it has to coordinate the various components across siloed business units. It needs a new model for managing the investment because each branch is now investing in a co-funded operation versus just being responsible for its own.

In addition, a mobile platform has no definitive end date. Instead, it's an enduring asset that will last as long as we can make it work for us. That lack of clearly delineated end lines mark a complete shift from a project-driven model to a product-driven model, where you can effectively manage the company's value streams.

Moving to DPM is not as simple as changing labels. You can't simply change project managers into product managers, or say that you once funded projects and now you're funding products, while continuing to do the same processes. Instead, companies must recognize that real change is required.

HOW DPM CREATES REAL CHANGE

Real change requires companies to identify the products, which sounds obvious and easy, but it's not:
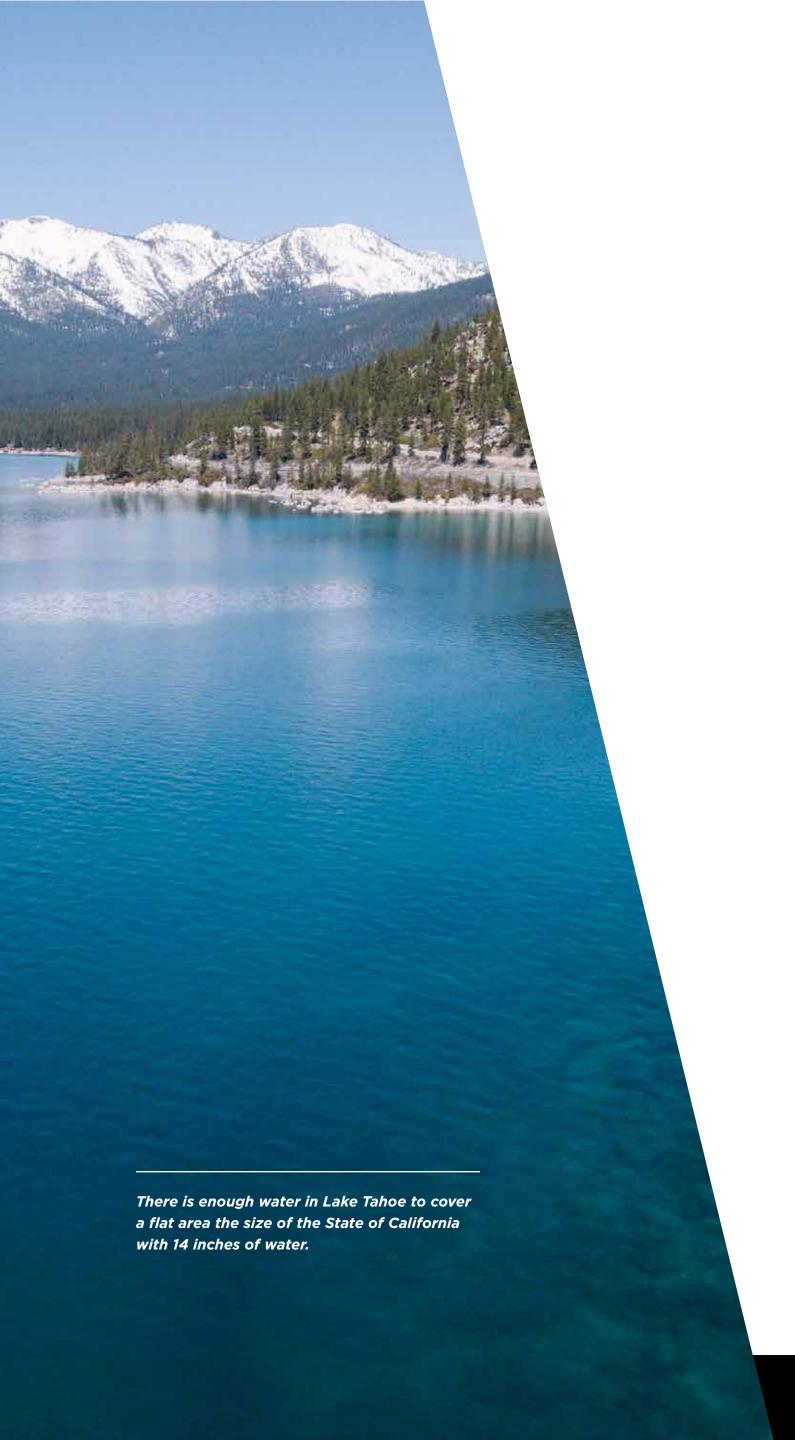
• **A product is sustained:** A product is any recurring investment into technology that has an indefinite lifespan.

• **A product is managed against a strategy:** There is somebody who's in charge of its care, upkeep and success, and this person or team is also responsible for communicating product's value.

• **A product has a common audience:** A product should serve a common, consistent group of stakeholders that can be easily identified in a few words or phrases. Here the customers are key contributors.

• **A product has a common delivery organization:** It should have an entirely dedicated delivery organization. This enables firms to make a single decision at the beginning of the fiscal cycle to fund a delivery team versus making constant funding transfers for every change made to a product or service.

One of the major benefits of Broadcom's ValueOps solution is its flexible nomenclature, which allows a company to call its products by any name, including platforms, systems and capabilities.

For instance, a government agency might not think it has any products and, thus, struggles to understand how to incorporate DPM in its handling of value streams. However, by drilling down with specific questions about funding – What do you fund? What do you call the things that you fund? How do you distribute your money? – the organization is able to identify its products as something called "capabilities."

The next step is to determine if you use product managers or project managers. Project managers are tasked with finishing a particular job and then move on to something else. By contrast, product managers are responsible for the indefinite, long-term care of the product.

Finally, identify the stakeholders benefiting from the products, as well as the organization responsible for its delivery. By going through all of these steps, any company can identify the products comprising their value streams. ■

AFTER A RAPID EMERGENCE, VALUE STREAM MANAGEMENT IS HERE TO STAY

THE CONCEPT OF VALUE STREAM MANAGEMENT (VSM) WAS INTRODUCED SEVERAL YEARS AGO, WITH THE PRIMARY ADOPTERS BEING DEVOPS LEADERS.

Historically most business executives tended to view VSM as a long-term strategic initiative, rather than an urgent imperative.

That all changed when the pandemic hit. Traditionally risk-adverse business leaders started taking fast, bold actions to make their businesses digital. Functional teams' focus shifted from running the business to transforming the business. VSM suddenly went from being an interesting concept to a matter of business survival.

Originally, the goal of VSM was to improve efficiency by identifying and eliminating waste. Today, the objective is shifting from efficiency to effectiveness. In addition, teams are looking to provide all stakeholders with end-to-end visibility — from planning to production. Rather than focusing on the flow of value, VSM needs to be concentrated on creating value. Moving from project management to digital product management is the best way to achieve this.

DIGITAL PRODUCT MANAGEMENT

Digital product management is not just a fancier way of saying project management. Products must be defined by a set of measurable key results. This approach typically requires significant organizational and process transformation. Fundamentally, people need to rethink and redefine how they fund and how they execute.

For example, with digital product management, funding is very matrixed. Functions like IT operations and capital for hardware and equipment still need investment. In addition, products also need to be funded, and this funding spans technology teams and domains. Consequently, reconciliation needs to happen in both a top-to-bottom and end-to-end fashion. Tracking top-down investments within a silo is fairly well understood, but tracking products along multiple dimensions, from funding to value delivery, is an entirely different prospect.

Teams need feedback loops that provide visibility into the operational value stream. They need insights into things like status, delivery, and incremental funding needs. Unless you have a well-defined model to follow, this is where things can become really challenging.

There is enough water in Lake Tahoe to cover a flat area the size of the State of California with 14 inches of water.

AFTER A RAPID EMERGENCE, VALUE STREAM MANAGEMENT IS HERE TO STAY

AGILE AT SCALE

Digital product management and VSM can be especially difficult for very large organizations. Many of these businesses have embraced agile at scale and may be employing the Scaled Agile Framework (SAFe) to align people and processes. This means executing these efforts:

• Defining products, product lines, and value streams.

• Organizing funding mechanisms and feedback loops.

• Handling all the hidden dependencies and considerable reconciliation that needs to occur.

The challenge is that these enterprises may have thousands of teams, with massive levels of complexity and volume. Contending with this scale and complexity simply isn't possible without having the right tools in place.

CONCLUSION

Over the past several months, VSM has emerged as a critical success factor. As teams continue to adapt to their quickly evolving imperatives, the importance of VSM will only increase, which means VSM is here to stay. To be successful, teams will need to leverage standard models that span VSM and digital product management, so they can effectively support both operational and delivery value streams.

At Broadcom, we've been focusing on helping enterprise teams harness the potential of VSM for some time now. Through our extensive engagement with many of our largest Clarity and Rally customers, we've defined a standard model for integrating these two products to specifically address the challenges and complexities associated with VSM and digital product management. We call it ValueOps. ■

The water temperature near the surface typically cools to 40 to 50ºF during late winter and warms to 65 to 70ºF in late summer.

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For more on Value Stream Management from Broadcom please visit **vsmsummit.com**