



Brochure

Application Delivery Management

From DevOps to Value Stream Management

The adoption of DevOps practices has been proven to speed the development and delivery of IT projects. But most DevOps teams focus on the technical side of the product delivery. In order to be successful, organizations must understand and manage how their DevOps and digital transformation create value.

The Next Step in Your Transformation Is Creating True Value

Digital transformation sees the adoption of digital technology into virtually all business areas. A key driver of digital transformation is to allow companies to increase the value of their products and services—which should be measured not just by the speed of completion but also by the value added to the business.

International Data Corporation (IDC) predicts increased spending on digital transformation over the next several years. So, understanding how companies can measure a project's value is critical to the success of business operations.

Value Stream Management (VSM) adds that missing dimension by focusing on the business value of DevOps efforts. DevOps metrics are already essential, VSM gives organizations another approach to track the value added to the organization.

To support digital transformation, VSM builds on the current DevOps foundation to include the components of value and financial management. This addition is the next step in DevOps evolution.

The goal of any VSM transformation is to create processes and flows that efficiently bring the highest value to the organization. After all, it doesn't matter how fast you build a component or feature if it doesn't deliver value to the business. VSM ensures that an organization has the measures needed to confirm that the correct and highest value changes are continually flowing through the delivery pipeline.

This article will explore multiple elements of VSM, including value stream mapping. It will then discuss how to use existing DevOps metrics in a VSM context and explore how VSM helps integrate DevOps practices with business strategy.

Elements of VSM

Highly effective organizations understand how software moves through a development pipeline, combining DevOps practices with the Agile development methodologies. But even using these approaches, many projects eventually encounter obstacles that delay delivery.

As such, it is essential to realize that not every software module adds equal value to the product. Some modules may be so critical that the application would be useless without them. Others may be helpful but nonessential, and delays in their deployment would minimally impact the application's value. Yet more might deliver critical and high-value business changes closely aligned with organizational strategy.

VSM aims to provide participants in product value streams with value-based and flow-based information to direct projects and allocate resources effectively.

A key component of VSM is the ability to assign value to the various development efforts and manage the resources required to deliver them. This approach enables teams to deliver maximum value over time.

While incorporating the concept of value might affect resource management and assignment, it shouldn't interfere with the organization's day-to-day activities and processes. For example, a change to capture value and the flow of change should be independent of the tools that implement them.

What is Value Stream Mapping?

Value stream mapping is an essential part of VSM. It starts with documenting the steps in the current process and looking for inefficiencies. These inefficiencies may be lag time introduced by communication delays or redundant task executions that contribute little value. Value stream mapping allows us to look at the current processes and determine whether they add value or cause waste.

Imagine an administrative assistant receiving a report from the finance department, entering the data into a spreadsheet, then analyzing it using the spreadsheet. Then, multiply this task by several assistants across the company and visualize the time it takes.

Using the value stream map might help us determine that reformatting the report to include spreadsheet analytics would reduce the time and effort dedicated to this process. This change provides value to the organization by eliminating redundant manual steps, enabling more timely decisions, and freeing resources for other uses.

Making this change impacts the organization by changing the report development and distribution process. While DevOps practices still handle development and deployment activities, the entire initiative now has value associated with it. Freeing administrative resources for other initiatives adds measurable business value.

VSM uses this value as an additional component to manage scheduling, resource assignment, and the removal of bottlenecks resulting from competition for limited resources. Value stream mapping creates this extra level of visibility into the organizational processes.

Using DevOps-Generated Data to Enhance VSM

Value Stream Management does not replace DevOps. Instead, it enhances it. It allows organizations to understand which changes have the most value and adjust our resource allocation to the changes with the greatest potential return.

Many DevOps measurements are equally meaningful in the context of VSM. For example, some dimensions used in a DevOps context are:

- Lead Time (LT)
- Cycle Time (CT)
- Percent Complete and Accurate (%C&A)

Lead Time measures the time it takes for an idea to be implemented for customer use. It helps answer the question, "If I have an idea, how long will it take to implement it?"

Within a typical environment, LT is a planning variable. However, not all projects are of equal value. All other things being equal, businesses want to see resources prioritized for high-value projects. VSM adds the dimension of value to the product delivery process, enabling organizations to allocate resources and remove bottlenecks to generate the most significant value.

Cycle Time measures the amount of time developers spend working on a change before deploying the change to production. This work is undertaken in "Value Creation" and "Value Delivery" phases. Adding value metrics to provide insights into flow rates and CT allows organizations to determine if CT correlates with value. If it does not, it indicates that a project's value may not have been adequately evaluated when allocating resources.

The Percent Complete and Accurate (%C&A) metric measures how a project progresses along its timeline by comparing this measure to the amount completed to date to the total amount of time estimated. When organizations utilize VSM, the estimated delivery time can be automatically calculated using predictive change metrics. This approach helps determine the amount of time the team spends on changes and corrections.

Suppose testing detects errors in the code. In that case, VSM-aligned processes provide insight into associated rework and process churn, allowing organizations to spike resources so that they can alleviate any bottlenecks created.

The key is that VSM approaches, coupled with typical DevOps metrics, provide transparency into value rather than just increasing the velocity of work getting done. At the same time, VSM helps determine where to allocate resources to work on the changes that will deliver the most value.

VSM Integrates DevOps with Business Strategy

By aligning the concept of value with DevOps metrics and methods, VSM creates a common language that both business and IT can understand. VSM is about return on investment (ROI), prioritization, successful delivery, process improvement, and change prioritization.

With the increased involvement of IT in customer and business-facing functions, change-based ROI has become more straightforward to determine than when IT oversaw essential projects like payroll and finance. It wasn't easy to decide on the ROI because these functions were necessary for operating the business.

In addition to helping organizations optimize their resources, Value Stream Management provides visibility and transparency into change for businesses, ensuring deliverables are on the right track to accelerate growth and drive competitive advantage.

Contact us at:
www.microfocus.com

Like what you read? Share it.



It's often easier to evaluate the value of digital transformation when deliverables include areas such as customer self-service or e-commerce. Delivering an application that includes tailored offerings to a subset of customers is an IT-enabled marketing function. Organizations must determine the functionality based on ROI rather than direct costs. So, VSM constructs a two-way bridge that helps IT express its value and helps the business understand that IT is a value-producing investment.

VSM connects IT projects to an organization's goals. It moves IT from a cost center to an investment center that links to an organization's overall strategy.

Value stream management can help connect every deliverable to the organization's strategic plan. It helps provide insight into strategy, delivery methodology, and the allocation and management of resources.

Next Steps

DevOps transformation traditionally focused on technical outcomes, but to drive successful business outcomes and align with strategic goals, technical teams must now understand and quantify the business value of the work they deliver. Value stream mapping helps by creating additional visibility into the flow of information and change through DevOps environments.

In addition to helping organizations optimize their resources, Value Stream Management provides visibility and transparency into change for businesses, ensuring deliverables are on the right track to accelerate growth and drive competitive advantage.

Learn more at
valueedge.microfocus.com