



The good, bad, and ugly of Value Stream Management

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Telecommuting has fuelled major investments in remote working, Robotics and IoT, and digital services and offers have helped to keep employees and customers safe during the pandemic. The next normal requires organizations to continue their journey towards digital savviness and those who lack in digital investments will be laggards and fall behind.

[According to McKinsey](#), enterprises can accelerate their digital transformation by transforming their core or through the creation of new businesses. No matter which path you choose, post-pandemic digital transformation will be fuelling the need for ongoing software innovation and delivery, and will be a top priority for many enterprises.

The adoption of DevOps ([according to the DevOps Institute 23% at enterprise level and 42% at project level in 2020](#)) and Agile have supported software innovation and delivery even before the pandemic. However, as the stakes are extremely high in staying alive and competitive, executive leadership has been adopting a value lens with the purpose to ensure that the software and services developed, deliver value for the employee or customer – meaning revenue.

The software industry has seen amazing organizational transformations leveraging new methodologies like DevOps and SRE (to name a few) to improve innovation and software delivery, but plenty of enterprises still struggle to know exactly what value is being derived from these efforts and the additional IT investments. Questions of business value and customer satisfaction, Return On Investment (ROI) and whether their approach is successful keep coming up in conversations with both IT and business leaders. All of them are hungry for Key Performance Indicators (KPIs) that proof the increase in quality of software products and can provide details on positive impacts on customer and employee experience.

Value Stream Management is not really a new thing

Toyota is frequently credited for the invention of Value Stream Management (VSM). However, [Charles E. Knoepfel has mentioned the flow of materials as early as 1918](#). Even so his work was focused on improving the maximum efficiency within production environments, this management philosophy is a critical pillar for today's VSM. Today, about 19% of survey respondents are deploying VSM within enterprises (among others) according to the [2020 Upskilling: DevOps Skills survey conducted by the DevOps Institute](#).



VSMs key benefits are software quality, velocity, cost, and risk reduction

To understand the benefits, one must look at the hierarchy of processes. Value streams are the highest level and examine the work across organizations, functions, or departments. The goal is to eliminate waste and disconnection. The process level is work within a process, function, or department. The goal is to increase efficiency and quality within the process. And the task level is that of steps which are performed within a process. The goal is to standardize the way of work. By understanding the interdependencies and details within the value streams, the interacting processes and the different tasks performed within the different teams, quality and velocity improvements can be made while cost and risks can be reduced all with the goal of optimizing continuous improvements. When starting at a value stream level, it enables a product team to develop an integrated, top down, strategic transformation plan for key processes and depending tasks.

THE GOOD: Conversations are shifting from the “What” to the “Why” of VSM

The continuous evangelizing and the success stories from organizations which have adopted VSM and the continuous demand for improved software delivery with associated value has finally settled the discussion on what VSM really is. Now the conversation has shifted to the “Why” VSM is so important. As CIOs and business technology leaders are aiming to accelerate into high performing software delivery teams, the balancing of business value versus resources is the biggest driver – and benefit – for VSM.

- **VSM is finally being adopted for the right reasons.** When VSM has been implemented to reduce staff sizes or add work without eliminating waste, or is focused too heavily on just the technology, the transformation is bound to fail. Even so there are some organizations which might have adopted this type of VSM approach, the [true adopters are leveraging VSM for sustainable and continuous improvements around velocity, quality, efficiency, and performance.](#)
- **VSM stakeholder map is expanding as organizations shift from a project to product approach.** Digital transformations and the demands for digital services and products have accelerated tremendously. Such efforts include a broad set of owners across the value delivery chain and organizations are shifting from the traditional project to a product approach. This discipline, which incorporates methodologies like Agile and DevOps, is responsive to user feedback and changing market conditions, and encourages fluidity and mid-course adjustment in lieu of tying all budgeting and staffing decisions to an initial project plan and it includes members from a variety of teams such as program management, business teams and representatives across the software delivery value chain.



THE BAD: Total commitment is still a challenge, but it is changing.

The single most significant key to a VSM implementation is that all stakeholders of the value chain must make the transformation through total commitment of VSM theories, concepts, and tools. For example, if the planning team and the development team adopts VSM as a concept and solution but the Ops team is not included, key customer feedback details which arise from the support stages are lost. Therefore, the total commitment across the value chain plus executive support must be present to drive change. The software delivery stream is a complex network of linked stages and activities, and organizations need to understand what happens before ‘Dev’ in the plan, design, and creation stages, and after ‘Ops’ in the customer feedback and support stages.

THE UGLY: Existing silos prohibit progress

Silos within IT still exist, and, in these silos, leaders own a function, department, a set of processes and are responsible for key outcomes. In the traditional sense these teams are doing well with high output, solid performance, and their projects. And all are happy with the achievements. Unfortunately, this is a very narrow focal point as there are conflicts in priority and goals of these projects, dependencies are causing additional toil and potential blame. Ultimately these organizations are hindering value instead of delivering value from a holistic perspective no matter if they deliver software or services. These leaders need to change their focal point from working on projects towards delivering products. New organizational roles like a product owner are being inserted. These product owners can see the abysmal, suboptimal work being performed across the value chain.

The Newton’s law in action

Applying VSM to transform how value is delivered across the software delivery chain means to analyse and understand the findings, prepare for a reaction to the findings and initiate changes whatever they are. [Newton’s laws state that every action has an equal and opposite reaction](#) – it is a simple theory. The difficulty lies in understanding the reaction, preparing for the reaction, and working with the reaction. Failure to understand the relationship that a VSM transformation has with the entire business will cause an unexpected, and unwanted, result.

The Agile Manifesto states “Build projects around motivated individuals. Give them the environment and support they need and trust them to get the job done.” This principle is a critical requirement for organizations who truly adopt Agile and is supported using value stream management as measurements and details across the value stream are shared and are accessible by all team members. Having such broad available information across



a value stream makes people see waste and allows them to uncover true cause and value without finger pointing which then results in trust and motivation.

Always enjoy life to the fullest!

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