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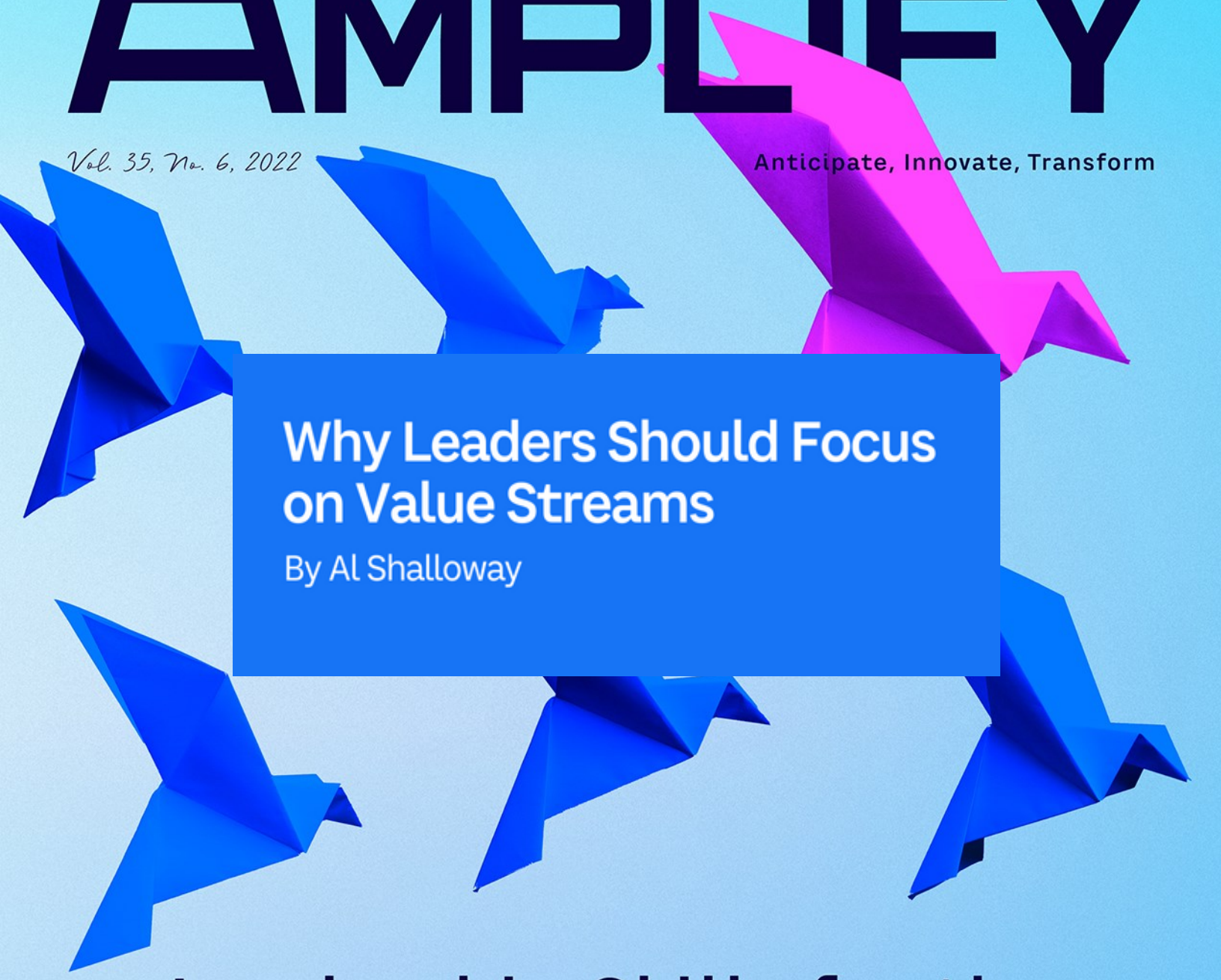

Why Leaders Should Focus on Value Streams

By Al Shalloway

Leadership Skills for the Post-Pandemic Era

SHIFT YOUR PERSPECTIVE

Why Leaders Should Focus on Value Streams

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The pace of innovation and the leveling of the playing field caused by the Internet, Agile, and global markets have made leadership more crucial than ever. Leaders must help their companies pivot in response to changing market conditions; this requires a solid foundation on which employees can build.

Although most Agile implementations start at the team level, there has been much discussion of the need for leadership involvement. This bottom-up/top-down thinking is just updating old-school thinking. Instead of improving on hierarchical models, we need to embrace the essence of Lean: value stream management.

> *Instead of worrying about bottom-up or top-down adoption, leaders must look at how value gets created and how people use what has been created.*

The adoption of Agile and Lean has shown that attending to value streams helps leaders improve both the internal and customer processes of their companies. The former is necessary to adapt and pivot quickly; the latter is essential for innovation.

Consider for a moment what truly innovative companies like Amazon, Apple, Tesla, and Google have in common. They've all changed how their customers live. Excellent past products like the Xerox machine, the fax machine, and CD players have also done this. Technologies change, but true innovation is always about improving people's work lives and/or home lives.

Instead of worrying about bottom-up or top-down adoption, leaders must look at how value gets created and how people use what has been created. They must attend to their value streams to create alignment and be able to pivot quickly. And they must attend to their customers' needs as well to foster innovation. The two are tightly related. This article discusses how leadership can set the stage for innovation, alignment, and meaningful employee contributions by attending to value streams.

What Are Value Streams?

Value streams refer to actions taken to create value for customers. A stream starts with an idea for adding value to the customer and ends when the customer consumes the value resulting from the idea. Value stream mapping involves looking at how an idea evolves and exactly how/when it becomes value consumed by the customer.

Most executives are interested in the following:

- Innovation for their customers
- Avoiding the waste of developing products that are not useful
- Being able to quickly deliver value at a reasonable cost
- Being able to provide a great customer experience with both quality products and excellent service
- Having an effective sales organization
- Creating an excellent environment for employees to work in
- Lowering risk

Achieving these goals creates business agility: quick value realization that's predictable, sustainable, and ensures high quality. Value streams facilitate that achievement in the following ways:

- **Innovation for customers.** Innovation can improve how customers live and work, reduce prices, or improve quality. The first requires attending to *customers'* value streams. The second two require us as leaders to improve our own value streams.

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- **Avoiding the waste of developing products that are not useful.** Quick feedback from value streams helps us avoid developing poor products.
- **Being able to quickly deliver value at a reasonable cost.** By watching how value is being added, we can see when the steps we take end up creating work that we didn't need to do. By removing waste, we lower our costs and speed up time to delivery.
- **Being able to provide a great customer experience with great products and service.** By focusing on how the customer works (their value stream), we can improve it in ways they may not know are possible.
- **Having an effective sales organization.** Sales organizations must work closely with their development organization to effectively deliver products to the organization's customers.
- **Creating an excellent environment for employees to work in.** Employees get frustrated when hard work does not produce results. Better value streams enable better employee experiences.
- **Lowering risk.** Risks include project overruns, building the wrong product, and poor quality. As we improve our value streams, we lower our risks.

Classifying Value Streams

There are many ways to classify value steams. We can classify them as follows:

- **Customer value streams** — how customers use our product. Innovation is primarily about improving these value streams, whether that's using the product/service, getting support for the product/service, or setting up to get (or actually getting) the product/service. Attending to customer value streams enhances the possibility for innovation.
- **Operational value streams** — the workflows deploying the product/service and supporting customers (e.g., call centers, deployment, installing servers).
- **Business-enabling value streams** — the workflows for the internal processes of the company from the customer's perspective. This is non-value-adding work but still required to sustain the business (e.g., legal, HR). All too often, they become bureaucratic and inhibit customer value.
- **Development value streams** — the value streams creating the ones just mentioned. They are not linear as the others are and are better thought of as value stream networks. But the concepts and what to look for in them are very similar. Effective and efficient value streams enable an organization to quickly provide high value at low cost.

The Benefits of Attending to Value Streams

Attending to value streams means the following:

- Be aware of them.
- Notice how they interact with each other.
- See how changes to the way work is being done will affect the overall productivity in the value stream and any related stream.

This is usually done with value stream mapping, but there are other, more efficient ways. One way is to consider what an idealized value stream would look like and contrast your existing one with it. It's a type of Pareto analysis for value stream mapping.

Consider how Apple's iPod and its supporting music services changed the way people listened to music. By creating products and the systems people used, customer value streams changed. Breakthrough innovation usually comes from providing value to the customer by attending to how *they* work and designing our systems to positively influence that.

In most organizations, people are busy, but the work moves at a snail's pace. By attending to value streams, we can see what is really happening and how to improve it. This also highlights system constraints across all the value streams mentioned. Attending to value streams guides us in improving our development work while lowering its costs.

Why a Shift Is Required

> We do not think and talk about what we see; we see what we are able to think and talk about.
>
> — Edgar H. Schein, *Humble Inquiry: The Gentle Art of Asking Instead of Telling*[1]

If we think about hierarchies, we will see their effects and try to improve them. If we instead think about

value streams, we will see the effects of value streams and try to improve them. Hierarchies are a structure we use to organize our people; value streams represent the actual work we're doing. Let's explore the difference that shifting our focus creates.

The first thing to notice is that our work cuts across the organization and, therefore, across management hierarchies. If we look at workers involved in creating a product, they almost always report to several people. This requires the alignment of many people, often with disparate motives. Managing the work instead of the people creates an opportunity for better alignment.

Managing Within a Hierarchy

Hierarchies tend to have those responsible for the hierarchy manage the people under them to ensure they are:

- Working on the right things
- Working well
- Fully occupied

This seems so natural we don't even think about it. But it means the focus is on the people in the silo, not the workflow cutting across the silos. This results in delays when handoffs are made between silos.

Consider how focusing on silos affects value delivery. If we attend to silos and demand that managers lower costs, they will focus on doing their work more efficiently. However, this may lower the overall efficiency of creating value. W. Edwards Deming once remarked:

> A system must be managed. It will not manage itself. Left to themselves, components become selfish, independent profit centers and thus destroy the system…. The secret is a cooperation between components toward the aim of the organization.

Reflect for a moment on projects you've seen in the past. Using Table 1, we can look at the people doing the work and the work itself (when it is being worked on and when it is waiting to be worked on).

When we look at the people doing the work, we focus on a small part of the workflow. We tacitly assume that improving each step improves overall productivity. But this means ignoring the cost of handoffs and the waste due to slow feedback. It also makes it costly to pivot quickly.

Attending to value streams forces us to look at how long it takes to go from concept to consumption. Because people are busy and working on many things, projects often take longer than if people focused on just one project. We irrationally allow less important projects to slow down essential ones by having people work on both simultaneously.

Many people point to multitasking as a significant cause of waste. It is a significant one, but not the key one. Consider the cause of multitasking (people working in multiple value streams). People are being interrupted and are interrupting others. This results in work waiting in queues. While multitasking may cause a 10%-20% drop in efficiency, work waiting in queues creates unplanned work in the form of fixing bugs, working on the wrong things, rework, and so forth, which is much more costly.

Focus on Delays, not Eliminating Waste

Business leaders talk a lot about eliminating waste, but this mantra comes from the manufacturing environment where we can easily see waste. As a car is being built, mistakes are visible. In knowledge work, the situation is completely different. First, we can't see everything and often don't know when we have an error. Second, things like design and planning are not

WATCHING THE PEOPLE	WHAT'S UNSEEN ABOUT THE WORK
• People are busy. • They multitask because they are both interrupted and have to wait for others. • Their focus is on their work. • People are measured on how busy they are, not on how much overall value is being created.	• The work starts and stops. • Work items spend time in queues. • No one is managing the work itself. • Work is tracked where it is, but no one tracks how much time work spends waiting in queue.

Table 1. Observing people and workflow

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wasteful as they are often considered in manufacturing, causing a lack of agreement over what waste is.

With a bit of reflection, we can see that almost all the waste of product development stems from delays in workflow. In particular, when an error is made but not quickly detected, it usually takes more time to fix the error while increasing its impact. When there is a significant delay between when information is obtained and used, it can make the information less useful. This is yet another reason for quick feedback and reduced delays. The mantra needs to change from "eliminate waste" to "eliminate delays in the workflow." Squeezing out delays also, obviously, shortens time to market.

What Analyzing the Inherent Problem Teaches Us

Value streams shift the focus from the people doing the work to the work being done. This includes what is being worked on and how it is being worked on. This shift is part of Lean's suggested shift from managing people to managing the environment within which people work. People can self-organize and do what's necessary. But those doing the work don't always see the big picture. This is management's role: helping all the pieces come together. Focusing on value streams helps us:

- Shift our focus from people to the work.
- Stop managing hierarchies and start managing value streams.
- Stop trying to go faster at any step, but have fewer and smaller queues, so work flows faster.
- Align people around the value to be realized.
- Shift from focusing on the utilization of people to removing workflow delays.

Focus on Handoffs Between Teams

Handoffs are never good. But handoffs between different teams are worse than handoffs within a team. Across-team handoffs usually incur delays because the other team is working on other things. Handoffs of this type not only cause delays, but typically also result in lost information. Understanding the importance of this encourages better talent organization.

Understanding the Value of Quick Flow

Imagine we have an enhancement to an essential product that took six months to build but would have taken only two months if the people working on it had focused exclusively on it. Ask yourself, "Would it have been worth paying 20% more to get this enhancement out the door in two months instead of six?" The answer is almost certainly "yes."

Now ask yourself, "How would you do it in two months instead of six?" You'd have to cut down on delays between steps, and doing so might require some people not being fully utilized. Removing delays would likely reduce a lot of unplanned work. So having a little slack time for a few eliminates a lot of waste that many people would otherwise have to deal with.

When we stop focusing on the utilization of people and focus on removing delays in the workflow we get a greater ROI than almost any other action that can be taken.

> *Value streams shift the focus from the people doing the work to the work being done.*

What Executives Must Do

Attending to value streams is consistent with the goals of executives. After all, they want higher value quickly and at a lower cost. By creating clarity about what is to be built, they can better identify what needs to be worked on. By encouraging managers to shift from managing people to managing value streams, waste is lowered, as is cost. Both of these reduce time to market.

This approach also helps companies respond faster to changes beyond their control. While we can't predict which black swan events will occur, we must be able to respond to them quickly. By being quick to adjust to market conditions, we can make others adjust to us rather then us adjusting to them.

People in silos tend to focus on improving the work of the silo, and most organizations' personnel systems encourage this. But this can inhibit the value that can be created by improving work across the value streams. Executives must direct people to focus not just on their work but also on the value being delivered by value

streams. This usually requires a shift in how people are evaluated (HR). It is not fair to expect people to work for the good of the company if they are being evaluated on what they do in their team. Other internal functions, including procurement and legal, will also require focus shifts.

Executives must create the awareness, motivation, and permission to create value streams that are mostly independent of other value streams. The people in these value streams will almost certainly need to have all the skills necessary to create and deploy the new products.

They must also create clarity on the strategy of the business. They must encourage product management to focus on the most critical initiatives and not be distracted by items of lesser importance. The company must deliver essential value quickly while being able to pivot as needed.

A Warning About Agile Pilots

Many consultants suggest starting an Agile pilot project by creating an Agile (often Scrum) team. This involves taking people from across the organization to create a cross-functional team to get some small project done. There is a risk to this not typically mentioned. A project of this type: (1) is almost certain to succeed, (2) doesn't prove anything, and (3) sets a bad precedent that may cause problems.

Projects set up like this nearly always succeed because having all the skills needed in a team that is not being interrupted will create a three- to tenfold improvement over projects where not all the needed skills are present and that get interrupted. If they use an Agile process, they may get another threefold improvement.

But this experiment is not scalable. After a few teams are formed this way, other teams won't have the capabilities to do the remaining projects. There is no attention paid to how to get people who are needed on multiple teams working across all those teams. Intra-team dynamics are quite different from inter-team dynamics. This approach only deals with intra-team dynamics.

A better way to start is to pick a value stream to improve. Find the people necessary to work on it — and ensure that they are not needed for other value streams. This will enable business leaders to learn how people in different areas of the organization can work together.

Companies need to focus on shortening time to market more than on lowering costs. Doing so requires direct attention to the work being done, which is best identified by focusing on value streams.

Reference

[1]Schein, Edgar H. *Humble Inquiry: The Gentle Art of Asking Instead of Telling*. Berrett-Koehler Publishers, 2013.

Al Shalloway is the founder and CEO of Success Engineering. He is a recognized thought leader in the areas of Lean, Scaled Agile Framework (SAFe), Kanban, Scrum, design patterns, Acceptance Test-Driven Development, Lean management, value-creation networks, Lean product management, and more. Mr. Shalloway's focus is on providing an effective Agile-at-scale approach for large organizations, which includes helping internal change agents be self-sufficient in training their teams in a cost-effective manner. He is the creator of the FLEX system, which is the heart of the Project Management Institute's Disciplined Agile Value Stream Consultant (DAVSC) workshop. Mr. Shalloway has cowritten five books ranging from Design Patterns *to* Agile at Scale. *He is an international speaker and a former Scaled Program Consultant (SPC) Trainer and contributor to SAFe. Mr. Shalloway earned master of science degrees in electrical engineering and computer science/mathematics from the Massachusetts Institute of Technology and Emory, respectively. He can be reached at al.shalloway@successengineering.works.*

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