Update

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Business Architecture:

Part III — Leveraging Value Streams in Business Transformation

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In Part I of this six-part *Executive Update* series on business architecture, we discussed the importance of executive sponsorship and leadership.[1] In Part II, we outlined how business architecture provides the means for shaping and communicating business strategy, transformation roadmaps, and funding models.[2] Here in Part III, we explore how to use value streams as a basis for deploying various business initiatives ranging from large-scale transformation efforts to near-term, high-payback tactical deployments. We discuss the use of value streams in improving productivity and enhancing the customer experience. Before we get into various case study examples, let's recap the role of the value stream in analyzing business challenges and crafting strategies for addressing those challenges.

VALUE STREAM'S ROLE IN PROJECT PLANNING, DEPLOYMENT

Part I introduced value streams, stating that a value stream depicts how "a business delivers end-to-end stakeholder value." Because a value stream envisions value delivery across business units, product lines, and even organizational boundaries, value streams provide a way for all stakeholders to perform situation analysis, craft a common strategy, and implement that strategy based on a consensus-based solution. This is an essential planning concept when multiple, fragmented processes slow or hinder the delivery of stakeholder value.

Consider, for example, a customer of one set of products or services requesting information about, or help with, a different set of products or services. It is not uncommon to find no recognition that an individual or organization is already a valued customer. Parallel, fragmented processes across various business units and product lines — along with different views of customer, account, and related information — alienates customers, business partners, and other stakeholders. Process improvement initiatives only deal with issues such as this from a silo-oriented perspective. Value streams, however, break down these silos so that the business can view a stakeholder in the same way that a stakeholder views the business — as a unified business entity.

With so much of business architecture's emphasis being on capability mapping, beginning initiative analysis and planning with the value stream may seem counter-intuitive, but value streams are an ideal starting point for business planning because of their stakeholder focus. While capability-driven planning enables a focused, synchronized approach to investment analysis, capabilities alone provide limited insights into stakeholder value analysis. Value streams, on the other hand, provide excellent insights into various aspects of the business from a stakeholder perspective.

If, for example, it is difficult for a customer to move through the end-to-end acquisition cycle for a product, then analysis, planning, and investment allocation can focus in on the Acquire Product value stream. This analysis perspective allows executives to balance tactical versus strategic options that deliver stakeholder value while ensuring that the inquiry-to-payment-and-collection cycle is efficient from an internal perspective. And because business architecture supports the concept of value stream/capability mapping, capability-based investments and priorities are determined based on which stages of a given value stream are top priority. In this example, if executives want to invest in common customer recognition, an early stage within the value stream, it would require establishing common pipeline management capabilities. The following case study examples offer insights into how value streams can enable the planning and deployment of tactical requirements and strategic business initiatives.

PROCESS STREAMLINING, BUSINESS PRODUCTIVITY IMPROVEMENT

In our first case study, we focus on using value streams for rapid situation analysis and resolution. A lack of a viable quality review process was the source of significant management concern. A quality review team had been established using manual and spreadsheet-based techniques, but a lack of automation limited the volume and effectiveness of the quality review process. Management wanted the process automated and expanded to cover more situations. The situation had been simmering for some time, and the lack of a solution made frustration grow.

The organization pursued two paths to a resolution simultaneously. The first approach involved traditional, use-case analysis, where a team of analysts spent several months crafting a set of requirements that involved replicating a silo-based portal and docket management application, customized to the needs of the QA analyst. The projected effort to implement this solution was estimated to run more than a year at a cost of several million dollars. In addition, the solution would be highly customized to a single stakeholder type, lack the ability to be easily adjusted to future-state requirements, and limit visibility into who was performing quality work on a given case at any given point in time.

In parallel with the traditional requirements–oriented approach, the business architecture team had mapped out business capabilities and major value streams for the business. The team called one value stream "Review Quality" and employed a counterproposal to use this value stream as the basis for establishing a quality review solution. The business team crafted a vision as follows:

- Any case may be pulled for quality review at any time with full transparency of any interested party.
- Any stakeholder, including managers across various business units, wishing to perform a quality review on any stage in the lifecycle of a given case may do so.

Automation requirements varied dramatically by value stream stage, but automating just a single stage of the value stream delivered a significant percentage of the automation required by quality reviewers. Solution architects used the value stream and related vision and, working directly with the quality review team, created a rapid deployment solution for the stage that delivered more than 75% of the automation requirements for quality review analysts. The approach involved using agile analysis and deployment techniques to craft a new front-end environment that interfaced with back-end applications as required. Work previously done by spreadsheets was eliminated or automated based on an incremental rollout schedule. Through this initial deployment, which took less time than traditional use-case analysis, the business prioritized upstream and downstream stage automation, which aligned to the value stream vision.

Using the value stream/capability map established by the business architecture team, solution architects automated docket management, case file management, and other essential capabilities as dictated by each stage of the value stream. These capabilities became SOA services within the new architecture and would be reused across additional value streams as progress on related initiatives moved forward. As a result of this new value stream approach, the traditional proposal to replicate a legacy application leading to limited functionality was shelved. Benefits to the new value stream approach included:

- Faster delivery of a solution that leveraged new technology and avoided replicating stovepipe legacy solutions
- A more flexible solution that managers could leverage across multiple business units, as well as originally targeted quality analysts
- Delivery of a solution driven by the business vision and prioritized by stakeholder requirements
- Employment of a reusable case management approach that could then be applied to more complex value stream deployments over the long term

This case study demonstrates that value streams, in particular, and business architecture, in general, can be applied to tactical requirements that align with agile analysis and deployment approaches while establishing a foundation for longer-term, more strategic solutions. One additional benefit is that business architecture has

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the ability to shortcut traditional, cumbersome requirements analysis approaches that have been slowing down rapid deployment of business solutions.

CUSTOMER EXPERIENCE ENHANCEMENT

Our next case study focuses on enhancing the customer experience, which for many organizations is a strategic objective. This scenario involved a multiline financial institution with various different products, any of which a given customer could own. When customers contacted the organization, they were often not recognized as a valued customer. In addition, customers could not change their basic contact information and expect all business units and product lines to recognize them. Finally, there was little if any customer self-service. The challenges facing this organization were more far-reaching than a single business unit could address. The business required a more strategic approach.

Having established a set of value streams and a capability map for the business, management set about using them to pinpoint where and how to address and prioritize major challenges. The goal was to focus on the biggest payback items first and then expand on various solutions for use on a more generalized basis. Management initially identified two value streams as top priority: Manage Customer Portfolio and Acquire Product (see Figure 1).

The first value stream focused on the management of customer information as well as the ability to see a customer's portfolio of products. The second value stream would enable customers to acquire a new financial or insurance product. Note that "customer" is defined as any stakeholder that either owns or is in the process of establishing an account or policy. The following collectively summarizes the vision for these value streams:

- Customers are always recognized regardless of the number or type of products they currently own or owned in the past.
- Customer self-service is enabled to whatever degree is determined appropriate by corporate policy.
- Customers can view their product portfolio and modify customer-specific information at their own discretion and have it reflected across all business lines.
- Common user interfaces are enabled for internal and external stakeholders with levels of access managed by the authorization level of the user/stakeholder.

Additional customer-facing value streams, not shown in Figure 1, include Maintain Account and Process Claim/Default. These value streams should also adhere to the above vision statements. The current-state IT architecture did not align to this vision and significant technology changes would be required to ensure that account management, customer management, and claims/default management capabilities aligned to this new vision. The value streams, however, provided executive teams with a foundation for considering a long-term vision for improving the customer experience.

Priorities for improving the customer experience, which initially focused on these two value streams, involved the simple routing of customer requests to all product lines, customer recognition, common customer notification, portfolio viewing, and a common approach and interface for the Acquire Product value stream. Solution architects, when considering the common business capabilities shared by the Review Customer Portfolio stage of the Manage Customer Portfolio value stream and the Onboard Applicant stage of the Acquire Product value stream found that pipeline management capabilities were required for both value streams. As a result, the project evolved along the following steps:

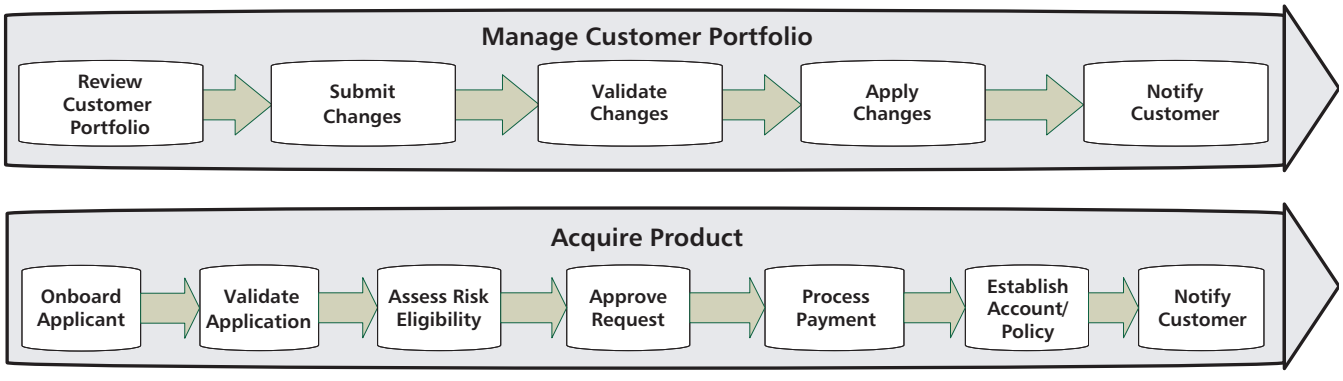

Figure 1 — Manage Customer Portfolio and Acquire Product value streams.

1. Establish a common interface that can be shared across all value stream deployments.
2. Architect a "case management" framework as an implementation strategy for each value stream.
3. Leverage the capability map to create a shared data model, establishing a common view of customer information across a customer's portfolio.
4. Deploy each stage of the Manage Customer Portfolio value stream, automating the user interface and requisite capabilities for each stage, left to right.
5. Expand usage across business units, gradually replacing or displacing current-state front-end views.
6. Reuse deployed capabilities, where applicable, to repeat this deployment cycle for the Acquire Product value stream.

The above steps summarize the major concepts to be employed, but an actual vision and roadmap would involve significant planning and be developed to a much greater degree of detail. This would include planning and budgeting concepts, which we discussed in Part II of this series. It is important to note, however, that these types of projects build upon a common business and IT architecture, leveraging automated capabilities and value stream deployments in building block fashion.

SUMMARY

We discussed two case study approaches to using value streams in planning and deploying priority business initiatives. The first example, involving a Review Quality value stream, demonstrated how value streams can enable rapid deployment of tactical requirements. This case study showed how business architecture can help shorten and streamline traditional business requirements analysis by providing a common baseline from which to build out tactical solutions to pressing business challenges.

The second case study, involving the Manage Customer Portfolio and Acquire Product value streams, showed how value streams can be used to incrementally deploy larger-scale, more strategic projects. In this example, value streams provided an overall framework that management could use to craft a case management strategy, create a phased deployment plan, and prioritize business capabilities that could be automated within an SOA and orchestrated across various value streams.

In Part IV, we will discuss the use of the capability map in establishing an underlying foundation for long-term, robust business solutions. This discussion will include how to use the capability map to establish a business-driven data architecture and application architecture.

ENDNOTES

[1]Ulrich, William. "Business Architecture: Part I — Why Business Architecture Matters to Business Executives." Cutter Consortium Enterprise Architecture *Executive Update*, Vol. 14, No. 7, 2011.

[2]Ulrich, William. "Business Architecture: Part II — Business-Driven Transformation Strategies, Roadmaps, and Funding Models." Cutter Consortium Enterprise Architecture *Executive Update*, Vol. 14, No. 8, 2011.

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Mr. Ulrich currently serves as VP of the Business Architecture Guild, Cochair of the OMG Business Architecture Special Interest Group, Editorial Director of the Business Architecture Institute, Director-at-Large of the Business Architecture Society, and is a member of the EA Advisory Board for Penn State. Previously, he was cofounder of Triaxsys Research and served as KPMG's Director of Reengineering Strategies prior to leaving and forming his own company in 1990. Mr. Ulrich has also served on the faculty of Northeastern Illinois University and facilitated numerous workshops, including sessions for SEI. He has lectured internationally to thousands of business and IT professionals and has testified as an expert witness on the use of IP within the computer field. Mr. Ulrich continues to serve as a software forensic and litigation support expert in technology-related cases. In 2005, he was awarded the Keeping America Strong Award by Rear Admiral Kevin F. Delaney (Ret.). Mr. Ulrich has authored hundreds of articles appearing in major publications, including *InformationWeek* and *Computerworld*. He is coauthor of *Business Architecture: The Art and Practice of Business Transformation*, *Information Systems Transformation: Architecture-Driven Modernization Case Studies*, and *Legacy Systems: Transformation Strategies*. He can be reached at wulrich@cutter.com.