

ALIGNING BUSINESS ARCHITECTURE AND THE SCALED AGILE FRAMEWORK®

The Value Stream and Capability Terms

A Business Architecture Guild® Whitepaper

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Date: March 2017

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Introduction

Today's business environment demands sound decision making and quick follow through to address global competition and rapid market disruption. In response, more organizations seek proven frameworks to achieve agility, enabling them to remain competitive and innovative. The drive to realize these goals has given rise to increasing interest in both business architecture and the ability to coordinate disparate agile teams using scaling techniques for agile, such as the Scaled Agile Framework® (SAFe®).

Both approaches desire the same outcome: increased organizational agility and delivery of real business value. However, there is a very important challenge facing organizational leaders using these frameworks: both frameworks have identified key terms, but they do not define these terms in exactly the same manner. This white paper strives to achieve clarity by reconciling differences between SAFe® and business architecture definitions.

The business architecture discipline has quickly developed and matured over the last decade. The Business Architecture Guild® (Guild) has led the development of best practices and blueprints to bridge the gap between strategy formulation and solution delivery. The business architecture approach matured through the establishment of a standard framework, codification of best practices via a body of knowledge, certification program, and an emerging metamodel standard. The Guild maintains *A Guide to the Business Architecture Body of Knowledge® (BIZBOK® Guide)* with at least two releases per year and publishes related content via white papers and webinars, including substantial work related to business architecture and agile methodologies.¹

Another recent development is the desire to implement agile approaches to groups larger than an agile team. SAFe® is the leading framework used to help organizations scale agile approaches and successfully manage multiple teams utilizing agile methodologies. One of the principal designers of the framework, Dean Leffingwell, noted in a January 31, 2016, blog that 60 percent of Fortune 100 companies in the United States have SAFe®-trained practitioners. Case studies indicate increases in quality of 50 percent and productivity of 20-50 percent, while simultaneously delivering software more quickly 30-75 percent of the time.²

¹ Elliott, Eric Shayne, Francis Fons, and Alex Randell. "Business Architecture and Agile Methodologies". Business Architecture Guild®. Feb. 2015. Web.

² Leffingwell, Dean. "5 Reasons to Consider SAFe®". Scaled Agile Framework®, Jan. 2016. Web.

Overall Alignment

The authors selected two focal points for this white paper: value stream and capability. However, in evaluation of both frameworks, there are clearly opportunities to continue aligning such concepts as strategic themes and strategies, epics and initiatives, portfolios of all kinds, stakeholders, and more. Additionally, both frameworks align with other related disciplines, such as project management, requirements analysis, process management, case management, and more. Business architecture provides a consistent framework upon which to view these concepts and apply these disciplines. Through framework alignment and reconciliation of terms, SAFe® can provide a framework to implement these business-focused components and ultimately deliver business value.

The two terms this white paper substantially addresses are “value stream” and “capability”. As defined in SAFe®, a value stream is a “long-lived series of steps that an enterprise uses to provide a continuous flow of value to a customer”.³ The *BIZBOK® Guide* defines value stream as an “end-to-end collection of activities that deliver value to internal and external stakeholders”.⁴ The value stream definitions may seem similar at a glance, but the nuances of how each organization incorporates the terms are addressed in the next section.

There is a larger discrepancy in the usage of capability. As defined in SAFe®, capability describes the “higher-level behaviors of a solution at the value stream level”.⁵ The *BIZBOK® Guide* defines a capability as “what” a business does: “a particular ability or capacity that a business may possess or exchange to achieve a specific purpose or outcome”.⁶ From this alone, the *BIZBOK® Guide* suggests a consistent framework with uniqueness that describes a business in whole. In contrast, the SAFe® definition appears to leave room open for dynamic definition of a capability based on usage. These differences are also explored and aligned in a subsequent section.

Value Stream Alignment

As noted earlier in this paper, business architecture provides a blueprint of the business. Much like an IT architect who identifies the systems, data, integrations, and resources required to maintain an IT organization, business architecture identifies what the business does, how the business provides value, the information required to do business, and the people, business units, and organizations involved.

³ “Value Streams”. Scaled Agile Framework®, Apr. 2016. Web. Mar. 2017.

⁴ Business Architecture Guild®, *A Guide to the Business Architecture Body of Knowledge®*, v5.5 (*BIZBOK® Guide*), 2016. Part 1, Page 8

⁵ “Features and Capabilities Abstract”. Scaled Agile Framework®, Apr. 2016. Web. Mar. 2017.

⁶ A Business-Oriented Foundation for Service Orientation, Ulrich Homann, Feb. 2006, <https://msdn.microsoft.com/en-us/library/aa479368.aspx>

The SAFe® pattern identifies two value stream concepts that are in harmony with the business architecture value stream concept; likely because architecture plays an important role in both practices. SAFe® defines an operational and a development value stream. In the simplest terms, the operational value stream reflects the reason an organization is in business; it is how the organization makes money. The development value stream is how the systems are architected and implemented to support the value offering of the business. By definition, the SAFe® operational value stream is synonymous with the business architecture value stream.

Business architecture defines a value stream as an end-to-end collection of activities that create a result for a customer, who may be the ultimate customer or an internal end-user of the value stream. Key elements of the business architecture value stream include identification of the triggering and participating stakeholders, as well as the value proposition delivered by the value stream, and incremental value items that accrue along the way to achieving the value proposition. To put it simply, the business architecture value stream depicts the value being sought and received — or, in other words, the reason a customer does business with an organization.

Turning back to SAFe®, the operational value stream includes “steps used to provide goods and services to a customer”. SAFe® further defines an operational value stream as “containing the people who do the work, the systems they operate, and the flow information and material to deliver the value to the customer”.

The business architecture value stream and SAFe® operational value stream include the key concepts of people, organizations, information, and value delivery. These concepts are core components of the business architecture framework, providing the basis for business blueprints within an organization that yield a common terminology and business context. The differences that may arise involve the focus business architecture places on a value stream that it be stakeholder triggered, represent a true end-to-end perspective and terminate when the value proposition is achieved. With this understanding, it becomes clear that the concepts between SAFe® and business architecture are in alignment, given that the above business architecture constraints are recognized and enforced.

The difference between the two practices resides in the SAFe®'s development value stream. The development value stream is the way IT organizes itself around the business architecture value stream. A development value stream is the operating model in how an organization is going to use the right people, systems, and data to develop the product, service, or capability that would become part of the future state business model.

When aligning SAFe® Agile Release Trains (ARTs) to value streams, it is critical to consider the business architecture / operational value stream first, followed by the development value

streams to achieve the benefits SAFe® offers an organization, including:

- A single backlog for a SAFe® ART, managed by a product manager that has responsibility for prioritization and determination on epic inclusions and other stakeholder inputs
- Budget allocation by the SAFe® ART and/or value stream, approved by leaders who determine which SAFe® ARTs need additional resources or funding and which ones need less support based on periodic prioritization practices

When SAFe® is implemented, the benefits achieved provide faster delivery of business value and the ability to prioritize work across the organization, rather than by individual or siloed agile teams. Business architecture can provide a structure of existing value streams or help SAFe® implementations identify value streams that are not yet articulated in the business architecture. Further upstream, business architecture helps leaders and strategists articulate business strategies, which SAFe® implementations can leverage to identify strategic themes and budgets.

Business architecture does not and should not, however, unilaterally determine SAFe® ART composition or epic/feature prioritization. There can be legitimate reasons for a train to take on work not associated with its primary operational value stream(s). However, as the value offered to a customer is not likely to change dramatically over time, the SAFe® ART can become well versed in the business context around the value streams, even if it is focused on delivering a component of a development value stream.

Capability Alignment

While the alignment of business architecture and SAFe® value streams is relatively consistent, with a few minor, semantic differences, the business architecture and SAFe® concepts of capability require a bit more review and consideration. This is not to say these concepts are misaligned or not in alignment but rather that the specific language requires practitioners of SAFe® and business architecture to consider their shared vocabulary more thoughtfully when harnessing the power that can be gained by leveraging both frameworks.

SAFe®'s implementation of capability, first found in version 4 of the framework, manifests itself as a volatile element that release trains deliver. In this usage, the capability is not itself a lasting element of the business framework but rather the manifestation of a business outcome.

The first piece of alignment is found in this definition. Again, as defined in the *BIZBOK® Guide*, a capability is “a particular ability or capacity that a business may possess or exchange to achieve a specific purpose or outcome”. While this capability differs from the SAFe® definition, each capability in business architecture has a business outcome. This business outcome is similar to what can be found in the SAFe® definition, from which it can be inferred that SAFe® is focused

on delivering all or part of the outcome of the business architecture capability. Clearly, a goal of SAFe® is to deliver business outcomes, as well as to close the gaps that a business needs in order to deliver value to stakeholders. As such, the differences in capability definition actually present an opportunity to tie the two frameworks together.

Where then is the business architecture capability found in SAFe®? While it is not explicitly called out by name or definition, the emerging SAFe® concept of “feature area” may offer some clues. The feature area is a grouping of SAFe® capabilities; that is, a grouping of business outcomes and value. This grouping concept is similar to the usage of capability of business architecture, which represents so many things around the people, processes, information, technology, stakeholders, and value within the business.

Looking at the different treatments of capability from both the business architecture and SAFe® lenses simply highlights the importance of a transparent, consistent business vocabulary. Aligning the concepts used in SAFe® with concepts present in a business architecture — and vice-versa — allows SAFe® and business architecture practitioners to identify investments in a consistent fashion. Aligning the value, stakeholder, and capability outcome can help ensure SAFe® ARTs work on the highest-priority items that ultimately deliver working software and provide business value.

Conclusion

While this white paper serves as the beginning of this story, it simply cannot provide the whole body of work or a final set of conclusions. Companies and practitioners leveraging a business architecture-empowered SAFe® implementation are already finding increased success when pairing these approaches. These practitioners are writing the next chapters of the story, which will in turn be documented in future white papers and additions to the *BIZBOK® Guide* and SAFe®, as well as be shared in countless articles, presentations, and conference materials. This white paper is a commitment by the leadership of both frameworks to continue the story, share best practices, and incorporate useful guidance in ongoing work on behalf of their communities.

As alignment of disciplines and frameworks continues, bear in mind that one core principle of business architecture involves clarity and consistency of vocabulary. Business architecture, as represented by the *BIZBOK® Guide*, takes vocabulary about the business and about business architecture very seriously. A given business architecture practice is responsible for leveraging and aligning industry frameworks within their enterprise, ensuring that a consistent business vocabulary is leveraged in all aspects of business architecture. This consistency is particularly important because, in practice, teams worldwide are aligning business architecture to a wide variety of complementary business and IT disciplines, in addition to SAFe®. Therefore, utilizing a consistent business vocabulary and framework is not only of benefit when leveraging SAFe® and

business architecture, but also as business architecture and SAFe® are used in harmony with other practices and disciplines.

Speaking a common language benefits all of these practices and disciplines, ultimately providing a more efficient path to realizing business value.

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About the Business Architecture Guild®

A cadre of leading industry experts formed the Business Architecture Guild® to develop *A Guide to the Business Architecture Body of Knowledge® (BIZBOK® Guide)* and to promote best practices and expand the knowledgebase of the business architecture discipline. The Business Architecture Guild® is a member-based and member-driven nonprofit organization dedicated to growing and disseminating authoritative information on business architecture. Contact the Guild at info@businessarchitectureguild.org or visit www.businessarchitectureguild.org.

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