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In cooperation with APPTIO TBM COUNCIL

Accelerating Business Value with SAFe and Technology Business Management

Introduction

"Accelerating time-to-market is more than a goal; it's a necessary survival skill in today's digital age. An enterprise's success depends on its ability to quickly create innovative digital applications, products, and services that can adapt to new and evolving business models."[1] And yet, it seems that the bigger and more successful the company, the more difficult it is to change.

Today's digital age is unlike any previous era in history, and technology will impact people and businesses in ways that we cannot even begin to conceive. Now, virtually every enterprise depends on software, which is the modern fabric of nearly every product, in every industry.[2]

The Scaled Agile Framework® (SAFe®) is the world's leading framework for enterprise agility—it enables organizations to respond rapidly to changing business models, markets, and technology. To help businesses address the challenges of developing and delivering software and systems in the shortest sustainable lead time, it combines the power of Agile with the contemporary knowledge found in systems thinking and Lean product development.

As organizations learn how to increase business and technical agility with SAFe, they also face another significant challenge—how to manage the massive increase in technology spending that now exemplifies many modern companies. Moreover, many IT organizations do not have full transparency into their spending or have a method for allocating their costs, and therefore may not be able to demonstrate the real value they bring to the business in return for the investment in technology.

Fortunately, there's an established approach to running IT like a business—Technology Business Management (TBM)—which provides technology leaders with standards and validated best practices to measure and communicate the cost, consumption, and performance of business technology investments to their business partners. In turn, IT is better positioned to drive innovation in the enterprise.

TBM aims to solve the four main challenges with this value proposition[3]:

- **Unclear value**—Do internal customers consume IT as if it's free? Do they see the value in IT investment? Can they connect IT's contributions to business outcomes? Does the business think IT is too costly and slow? Can the business compare IT's performance across the company and with industry peers?
- **Uncontrolled costs**—Does IT spending crowd out investments in growing and transforming the business? Is IT spending readily justifiable? Is technical debt accumulating faster than it can be paid down, limiting business agility?
- **Disconnected planning**—Are IT budgets defensible? Do you have drawn-out budget and forecast cycles, which are then locked in annually? Do you lack accuracy, transparency, and accountability of IT spending?
- **Lack of agility**—Can you provide the business with a variety of cost and quality choices for the products and services you offer? Does the business make decisions independent of IT, or are the two true partners?

IT can deliver more value by combining TBM and SAFe:

If you experience any of these four IT challenges, then understanding how TBM and SAFe work effectively with each other is critical to your future business success.

"Many CIOs struggle with tremendous momentum [inertia] in the form of cost structures, staff, skills, and [waterfall] methodologies that prevent them from reacting quickly to new demands. Therefore, many CIOs are adopting Agile methods, DevOps, and tooling. The increased use of automation across the entire organization is reducing resource needs by as much as 40–50 percent in some areas. TBM improves agility by allowing you to change your cost structures, leverage the cloud, exploit decentralized IT decision-making, and use data to make better decisions faster."[4]

This white paper provides an overview of TBM, with an emphasis on understanding the critical connections to SAFe. It also describes how TBM and SAFe work together to help IT deliver more value with more transparency and to achieve greater business agility and partnership with the business.[5]

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What Is TBM?

"The advent of digital, the Internet of Things, and mainstream cloud are bringing new innovative capabilities to the forefront. TBM brings the business translation to these technological advances so you and your people can decide on trade-offs and new investments to improve competitiveness, customer engagement, and the bottom line."[6]

Mike Brady, Global CTO

"TBM is a value management framework to help CIOs, CTOs, CFOs and their teams make effective decisions. The Technology Business Management Council, a nonprofit organization, designed TBM to accomplish the following objectives."[7]

- Reveal the true costs and consumption of services, projects, infrastructure, apps, and more
- Measure the total cost of ownership (TCO) to support managing technical debt and other often-hidden costs
- Accelerate business-aligned decisions with clear, trusted facts
- Empower productive conversations to establish a common language between IT, finance, and business units

TBM's goal is to improve the collaboration between the business and IT, particularly when making decisions about technology investments. This collaboration frequently breaks down because the business lacks the information needed to make informed, responsible decisions.

Besides, business stakeholders do not grasp the real costs of IT that are often presented in terms that are not meaningful to them. For example, the business cannot judge the value of servers or storage, but they can understand the value of a product (e.g., mobile application) or service (e.g., customer relationship management) that is described in business terms.

Further, TBM seeks to replace the confusing, often opaque picture of IT with a clear and complete presentation of costs in business terms while giving leaders the details they need to manage spending, consumption, and performance. As part of this goal, TBM moves the conversations with the business from simply discussing the costs of IT to collaborating on how to produce more value and achieve better business outcomes. Once presented with a comprehensive and understandable 'bill of IT,' business stakeholders are better able to make difficult trade-off decisions between cost, consumption, and performance, such as those illustrated in Figure 1. In turn, the TBM mindset and practices allow the business to become partners in making decisions that improve cost for performance.

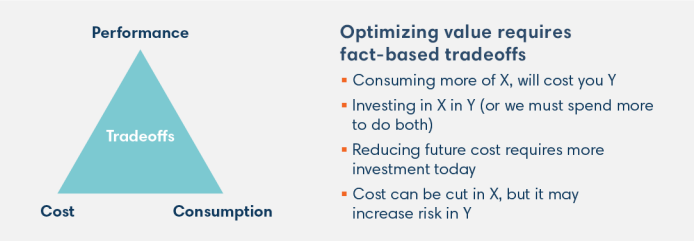

Figure 1: Understanding the trade-offs between costs, consumption, and performance.

The TBM Approach

Ultimately, TBM attempts to communicate the cost of IT along with the business services and value it provides. This approach shifts the conversation with the enterprise from the cost of running the business to investing in growing and transforming the business.

Changing the business is often the domain of software and systems development and digital transformation, a significant aspect of SAFe. Therefore, SAFe focuses on the areas where IT leaders hope to increase investment. On a related note, according to Apptio, the application IT Tower is the single largest resource tower by spend, and this domain is clearly where SAFe has the most strength.[8] As a result, successful SAFe implementations can be showcases of value that change-the-business investments can yield.

Once the business and IT speak the same language and are on the same page, they can better collaborate to run the business more economically and effectively. Finally, both TBM and SAFe seek to empower product managers with accountability for both the run-the-business and change-the-business spending on their products. While *project managers* of the past largely focused on new development or enhancement work that falls under changing the business, product managers of today often manage the entire life cycle of spending, including traditional maintenance and support activities that fall under running the business. In turn, product managers can optimize those run-the-business activities (e.g., by rationalizing their applications or modernizing their platforms) to free up resources (people, time, and money) for change-the-business investments.

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TBM Taxonomy

To improve alignment between IT, finance, and line-of-business leaders, TBM offers a standard taxonomy (Figure 2) to describe cost sources, technologies, IT Towers (functional areas), products, and services. Essentially, the TBM taxonomy creates a common language, so that terms like 'platform' and 'compute' have the same meaning to business, finance, and IT. The taxonomy was also designed to include the same types of underlying costs, allowing them to be calculated using the same or similar methods. In turn, a common taxonomy allows valid comparisons between technologies and services to peers and third-party options, such as public cloud offerings.

The TBM Council developed the taxonomy and it is maintained by its standards committee, a group of industry IT leaders from companies such as Mastercard, Newport News Shipbuilding, DXC Technologies, MetLife, Intermountain Healthcare, Arizona Public Systems, and Marriott International.

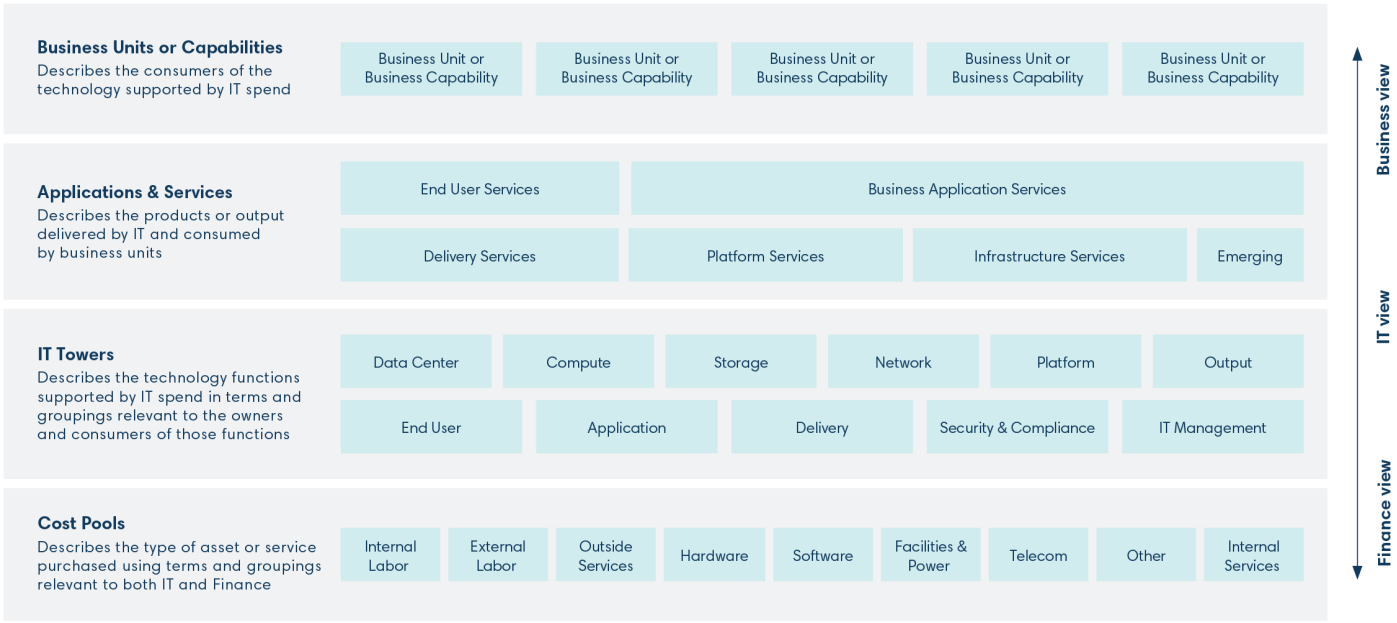

Figure 2: The TBM taxonomy (classification scheme)

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TBM Model

While the TBM taxonomy allows agreement on varying definitions of IT cost components, it does not present the information in a way that can be understood by different stakeholder groups.

The TBM model (Figure 3) sorts out this 'Tower of Babel' by making the connections between the taxonomy cost elements, enabling the information to be presented in a way that's relevant to business stakeholders, IT decision-makers, and finance. Specifically, the TBM model defines the business rules for allocating cost from lower layers (general ledger) to upper layers (business capabilities and units). Implementing the model requires tooling to gather data from various systems and perform the translation between layers.

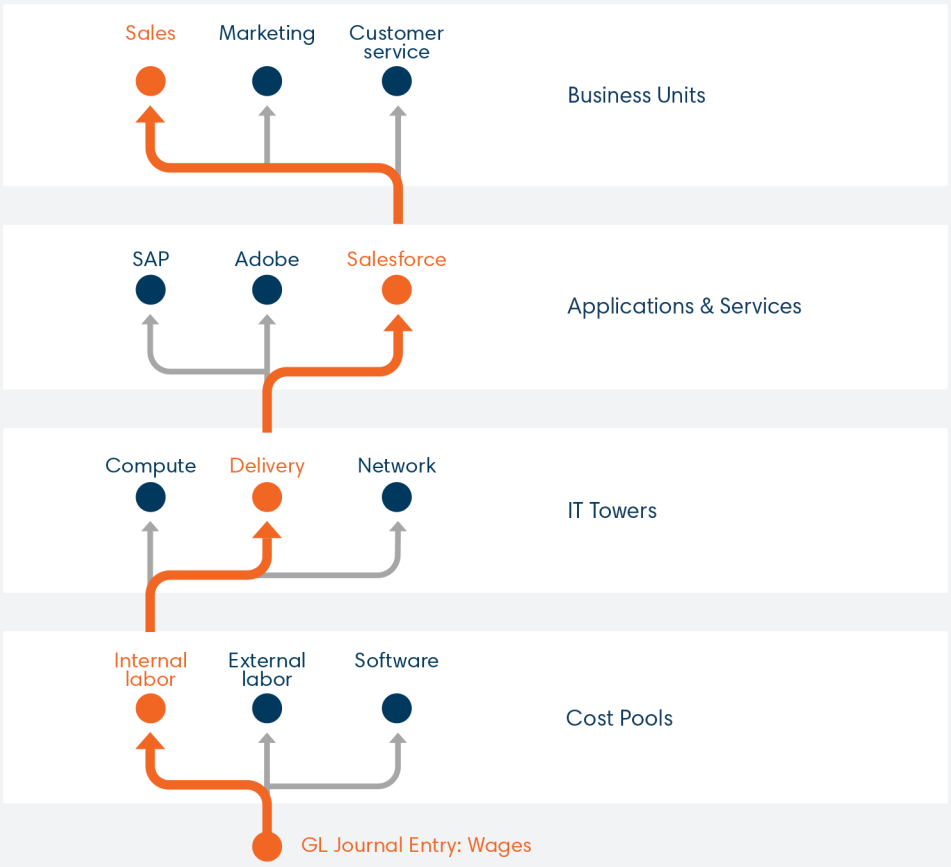

Figure 3: The TBM model (the translation engine between views)

SAFe practitioners who learn TBM will be able to help organizations become more conversant in a new common language for IT. Since TBM includes a standardized taxonomy, SAFe practitioners can also help organizations add specific categories and subcategories to better classify software and systems costs, which can be loaded into the TBM model.

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The TBM Framework

Although the taxonomy and model provide the fundamental language of cost reporting, the third and most essential part of TBM—the business of IT—is best reflected in Figure 4, which illustrates its more strategic aspects. The overriding goal of the TBM framework is to help IT optimize run-the-business and change-the-business spending to achieve better business value, based on the strategy and goals of that enterprise. The TBM framework, which is its most strategic part, is typically where SAFe is positioned and provides the integration point for the two frameworks.

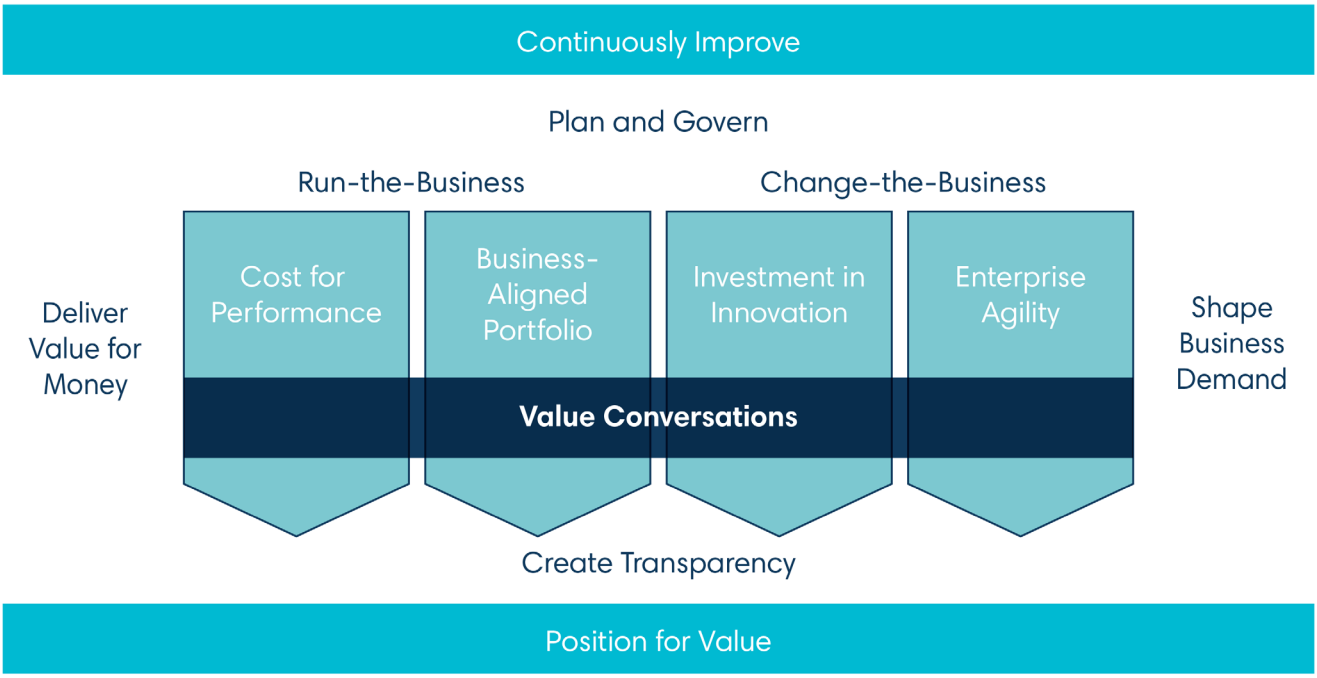

Figure 4: The TBM framework

Since the TBM framework packs many critical concepts into a small picture, the discussion can be simplified by breaking down its ten core tenets into three main categories:[9]

- **Fostering a business culture in IT**, consisting of two organizational elements:
  - Positioning for value
  - Continuously improving
- **Four disciplines for value delivery**, which include:
  - Create transparency
  - Deliver value for money
  - Shape business demand
  - Plan and govern
- **Four value conversations for better business outcomes**. These enable the right discussions with the business and consist of:
  - Cost for performance
  - Business-aligned portfolio
  - Investment in innovation
  - Enterprise agility

Each of these three categories is discussed in the sections that follow.

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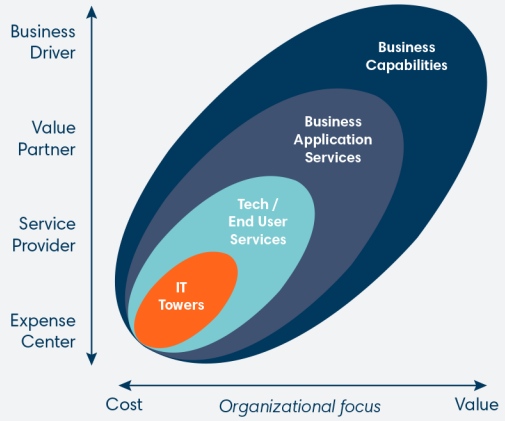
Foster a business culture in IT

TBM helps foster a business culture within IT by making what the TBM Council refers to as two organizational changes: position for value and continuously improve.

Position for value

A fundamental starting point for TBM involves answering the question: How do we position IT for value? Furthermore, how do we create an organizational structure that naturally orients people toward the delivery of value to the customer? Figure 5 shows the different technology business models and partnership levels defined by TBM.

Technology Business Models and Partnership



Ask yourself

- Are you a true partner with a line-of-business leaders?
- Do you and your people collaborate with leaders on business decisions?
- Do you jointly define your business strategy and infuse your knowledge?
- Do you plan together, or is it a 'they plan the business and then we plan the IT' approach?

Figure 5: Four different business models of IT, each of which has a different organizational focus on cost and value

Many businesses view IT as an expense center or a service provider. That perception often leads to budgets and plans being considered as an afterthought. Instead, IT organizations should strive to become value partners who work in close collaboration with the business to meet its objectives, or become business drivers, where technology is the business. Typically, when SAFe is applied in IT, its primary purpose is to support:

- Custom application development
- Development of specialized business applications or configuration of commercial-off-the-shelf solutions (COTS), such as Enterprise Resource Planning (ERP) and Customer Relationship Management (CRM)
- Solutions for finance, accounting, human resources, and more

Therefore, SAFe is already well-positioned to help IT become a better value partner and business driver.

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SAFe's answer to the question of how we position for value is by organizing teams around value streams. This value-driven, organizational design approach offers substantial benefits, including faster learning, shorter time-to-market, higher quality and productivity, and leaner budgeting mechanisms.

In SAFe, organizing around value is accomplished by first identifying value streams in a portfolio and then launching Agile Release Trains (ARTs) to realize them. Each ART contains 5–12 agile teams (50–125 people), who work together on the same set of solutions, as well as all the business leaders and other stakeholders needed to make these solutions successful.

Instead of assigning a new project team for each new solution and request, the ART creates a long-lived organizational, cross-functional structure (e.g., customers, business units, Agile teams, support, operations compliance, security) that brings work to a stable team of people. This structure helps ensure a rapid Plan-Do-Check-Adjust (PDCA) iteration cycle from idea through implementation to deployment and release.

SAFe's organizational approach enables moving from managing projects to developing and maintaining valuable products and services. Managing projects focuses on the completion of tasks, while a product-and-services approach has a stronger and more durable focus on achieving tangible business outcomes.

Moreover, SAFe emphasizes the role of business owners, which are a small group of stakeholders who have the primary business and technical responsibility for governance, compliance, and return on investment (ROI) for a solution developed by an ART. They are key stakeholders who must evaluate fitness for use and actively participate in certain ART events. Consequently, business owners can link IT delivery with the business purpose, helping position the IT organization as a value partner or, in some cases, a business driver.

Continuously improve

TBM proposes that the continuous improvement of IT financial management and operational performance is critical to identifying opportunities to optimize technology costs and investments. Put another way, with better data it's possible to drive value conversations with business peers that justify the cost of IT and drive continuous improvement and value delivery.

The following are some examples of areas that TBM focuses on improving continuously:[10]

- **TBM practices**—Vendor performance, capacity planning and procurement, problem management, service portfolio management, demand management, asset and configuration management
- **TBM operations**—Month-end close, monthly or quarterly bill of IT, quality reviews, performing ad hoc and what-if analyses for decision-makers, setting and adjusting service rates (prices), monthly budget variance analysis, and operational reviews

In SAFe, the imperative for continuous improvement arises from the House of Lean,[11] where the focus is on 'relentless improvement' of delivering value in the shortest sustainable lead time with the highest possible quality. SAFe practitioners put relentless improvement into practice through team retrospectives, the Inspect and Adapt (I&A) event,[12] and the continuous drive toward technical improvement.

SAFe offers the mindset and practices for technical excellence through its Team and Technical Agility competency,[13] built-in quality practices, Agile engineering and architecture practices, and DevOps. Communities of Practice (CoPs) and Agile Portfolio Operations also support relentless improvement, which permits sharing execution patterns across the portfolio and pursuing operational excellence.

The four disciplines for value delivery

TBM promotes four disciplines for optimizing value delivery. These disciplines, described in the following subsections, help improve and accelerate internal IT decision-making by highlighting the sources and costs of waste, which drives corrective action and accountability.

Create transparency

It's important to create transparency by translating spending, consumption, and capacity into mutually meaningful perspectives for technology, finance, and business decision-makers. After all, each group has different objectives, uses specialized terminology, and seems to speak a language that is foreign to each other.

TBM's focus on transparency centers mainly on costs. A clear and complete cost picture allows the business to make informed trade-off decisions. TBM suggests applying four dimensions of transparency:[14]

- **Controllability**—The things you can actually change, from technology platform choices to solution capabilities
- **Optionality**—What is truly mandatory, such as security and compliance, and what isn't
- **Timeline**—The forecasted schedule for realizing benefits
- **Materiality**—Whether changes in consumption will actually affect overall costs

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Traditionally, when making decisions that involved software development, any transparency came with a bold disclaimer: Estimates of cost and timeline may not be reliable due to many unknowns. Agile showed that only after learning occurred was it possible to eliminate or reduce many of the major uncertainties. The larger and more complex the project, the more likely it would suffer wider variances from the original estimates. Transparency is one of the four core values of SAFe. "Without openness, facts are obscure, and decision-making is based on speculative assumptions and lack of data. No one can fix a secret."[15] SAFe provides many practices to provide transparency, as described in the article, "Core Values," on the Scaled Agile Framework site.

Implementing TBM often requires overcoming a difficult challenge for transparency: extracting reliable data from disparate sources. Here, again, SAFe supports the TBM discipline of transparency. Work visualized in an Application Lifecycle Management (ALM) tooling, using SAFe's requirements model,[16] could be included in TBM reporting to more accurately allocate costs of product and services. In addition, SAFe's enterprise backlog model and practices facilitate easier and more accurate Capital Expense reporting. Since the people doing the technical work in SAFe are organized around ARTs and value streams, rolling up labor costs to business units and capabilities and IT towers (defined by the TBM model) is a much simpler task.

Deliver value for money

"Recognition of the business value of IT takes more than a change in viewpoint. In many enterprises, executives must overcome a long history of disappointment if they are to appreciate the value generated by IT … Successful CIOs begin to demonstrate and improve the value of IT by showing value for money."[17]

In today's digital age, it's simply no longer acceptable to operate IT as an expense center. Instead, IT must become a key enabler of innovation, so the business can survive and thrive. Therefore, the foundation of TBM is positioning IT to be a value partner or business driver, as described earlier. This positioning depends on what IT delivers and why the business needs to acquire it from your technology organization.

TBM suggests that delivering value for money depends on being able to answer several questions: Is the IT group properly funded? Does IT offer the right level of transparency? Do you have a strategy for delivering value for money and shaping demand? Do these practices align to your organization's unique value proposition?

In TBM, better-performing IT organizations monitor and improve the cost of business application services, balance technical spending across the portfolio, and continuously assess performance across the portfolio. The question is how do you do that? SAFe applies several principles that work with TBM to accomplish these goals.

While each of its ten principles[18] are applicable to TBM, three of them are most relevant to delivering value for money:

- **Principle #1—Take an economic view** -SAFe's number-one principle can support TBM in several ways, for example, by applying economic prioritization to epics and features, and delivering new value early and often to improve the economics of solution development. This principle also offers five primary trade-off parameters (lead time, product cost, value, development expense, and risk) to better evaluate product development economics.
- **Principle #3—Assume variability; preserve options** -This principle suggests the goal is to manage variability, and to preserve options, providing the controls and flexibility teams need to build great solutions.
- **Principle #7—Apply cadence, synchronize with cross-domain planning** -SAFe events, such as Program Increment (PI) Planning, the System Demo, and I&A, help set principle #7 into motion, providing frequent and regular opportunities to discuss and align value, cost-saving possibilities, and other options with business partners.

Perhaps where SAFe helps IT deliver value for money best is in the application of Lean and systems thinking approaches to strategy and investment funding, Agile portfolio operations, and governance. SAFe helps IT execute more quickly, reduce waste and rework, and manage to business commitments better than traditional (and project-oriented) software development approaches.

Shape business demand

One of the most beneficial disciplines of TBM is shaping business demand. The fine art of helping the business prioritize and make its needs clear, and engage in meaningful trade-off conversations, eludes many technology organizations. Business demand is usually open-ended, presenting IT with a list of urgent requests, all of which seem equally important. At the same time, the IT organization is faced with frequent budget reductions. The result is a never-ending cycle of hyper-demand, cost reduction, and disappointment. It's no wonder that IT often fails to meet the business's needs. Systems thinking, described in SAFe Principle #2, informs us that the problem is with the system in which people work, not the people themselves.

TBM answers this problem, in part, by presenting business partners with an itemized bill of IT (often administered through chargebacks), which provides details of technology consumption. Business partners are thus incentivized to balance consumption with service value. As a result, applying the TBM framework enables more fruitful discussions about cost for performance of IT products and services.

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The success of TBM requires the business and IT to have regular trade-off conversations. SAFe offers the forum for these conversations through Lean Portfolio Management (LPM),[19] which enables the business and IT to jointly agree about which strategic initiatives are worth funding, and review how well existing investments are delivering against their benefit hypothesis. Similar trade-off conversations also occur at the local level via teams and ARTs. Figure 6 illustrates the three main elements of the LPM competency, including each element's key responsibilities.

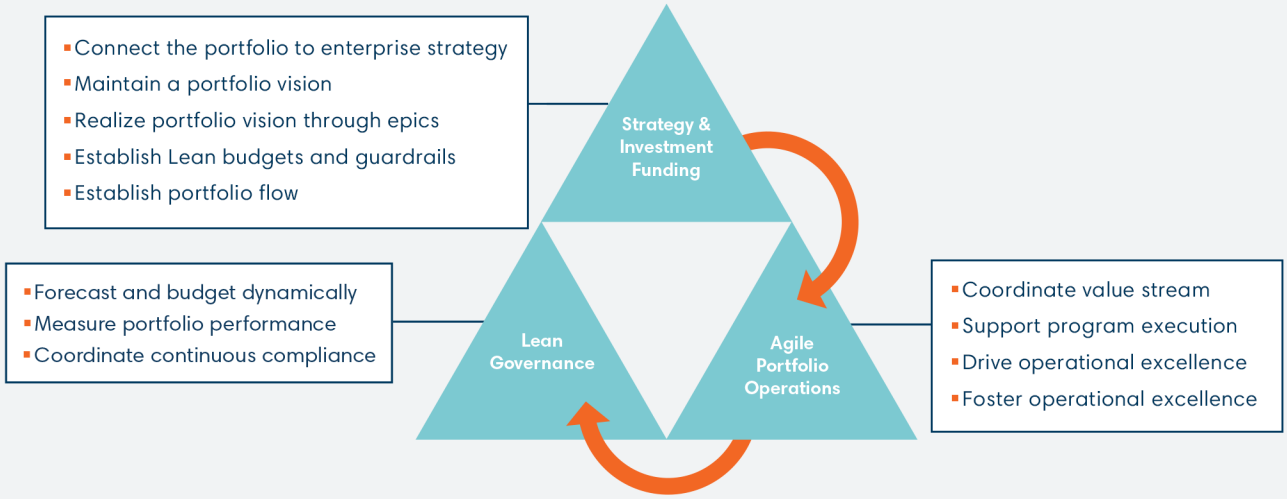

Figure 6: The three core elements of Lean Portfolio Management

Another question LPM helps determine is whether sufficient investment is being made toward change-the-business solutions. SAFe defines several investment horizons (Figure 7), from evaluating promising new solutions (often those with the highest potential for changing the business) to extracting value from legacy systems (often part of running the business). The business and IT can collaborate and agree on where investments should be made in each horizon, ensuring the right balance of investment is being made.

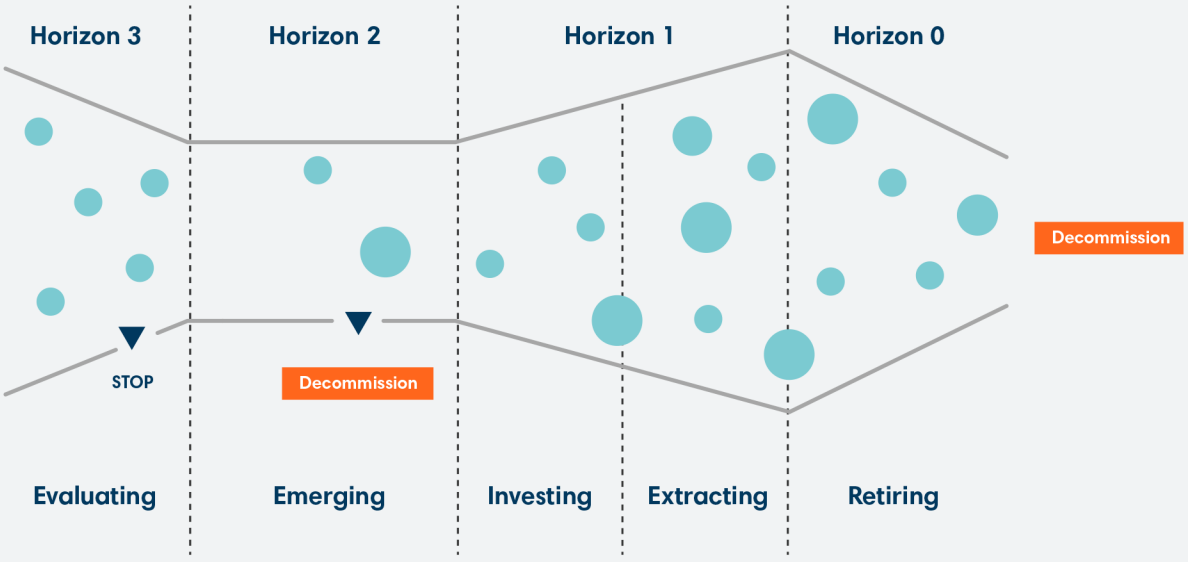

Figure 7: SAFe defines investment horizons, helping to ensure that change-the-business solutions get sufficient attention

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Plan and govern

The plan and govern discipline of TBM is about collaborating with the business to align the IT annual budget and resource plans to the strategic business priorities and manage to the plan. SAFe helps TBM plan and govern by creating, funding, and managing value streams within the portfolio, which determine how the organization will deliver value within a particular budget. As briefly described earlier, the strategy and investment funding aspect of the LPM competency in SAFe is arguably the most important for TBM planning and governance. For example, before making strategic trade-offs, business decision-makers must have a clear understanding of the portfolio's vision and how the business plans to accomplish it.

In SAFe, the vision is defined through the Portfolio Canvas, which identifies the specific domain of concern for a SAFe portfolio and streamlines planning, development, and execution across the portfolio through better alignment. One of the most fundamental questions about planning and governance is are we investing in the things that quickly move the organization toward its strategic objectives? SAFe expresses these objectives as Strategic Themes (OKRs), which act as the yardstick by which one can measure the alignment of work. SAFe, therefore, sets the table for achieving organizational objectives, while also clearly defining the edges of that table. Portfolio budget guardrails ensure that the right mix of investments addresses both near-term opportunities and long-term strategy, that large investments are approved, and that investments in technology, infrastructure, and maintenance aren't routinely ignored. Furthermore, business owners are engaged continuously to guide technology investment over time.

TBM advocates that, in the best IT organizations, P&L leaders understand the cost, performance, consumption, and capacity trade-offs that must be made to meet their strategic goals cost-effectively. With SAFe, these leaders collaborate with IT, in technology and business planning, confident that delivery will stay aligned with their business goals and priorities.

The four value conversations for better business outcomes

TBM advocates that, in the best IT organizations, P&L leaders understand the cost, performance, consumption, and capacity trade-offs that must be made to meet their strategic goals cost-effectively. With SAFe, these leaders collaborate with IT, in technology and business planning, confident that delivery will stay aligned with their business goals and priorities. The four value conversations for better business outcomes TBM offers four value conversations (Figure 8) that help foster a true partnership between the business and IT. These conversations focus on the trade-offs between cost, consumption, performance, features, benefits, capacity, and risks in the pursuit of better business outcomes. The first two TBM conversations—cost for performance and business-aligned portfolio—are typically in relation to running the business, while the latter two conversations—investment in innovation and enterprise agility—are usually change-the-business discussions, which include both growth and transformation business initiatives.

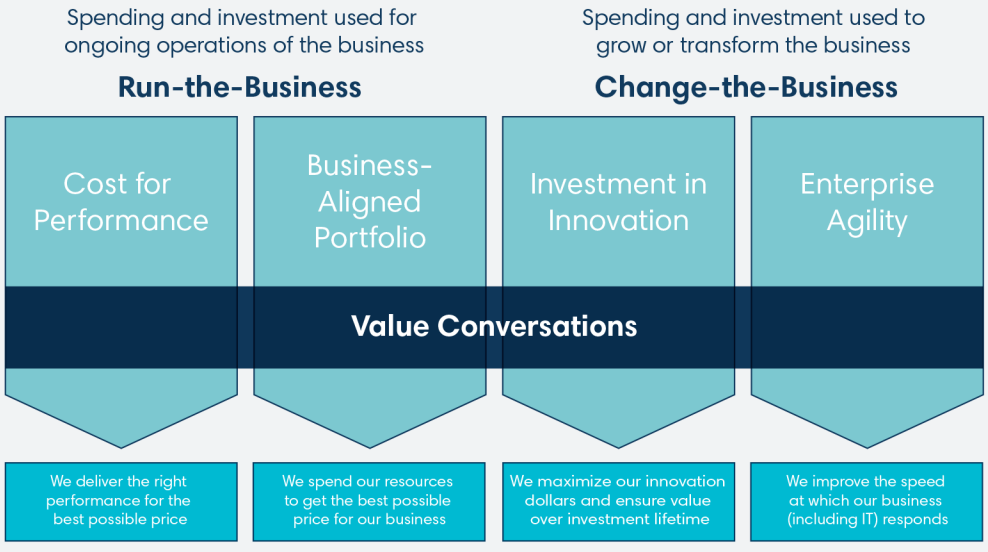

Figure 8: TBM value conversations

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Cost for performance

Cost for performance conversations are centered on delivering technology solutions to the enterprise as efficiently as possible, enabling IT to focus its time and resources on the right technologies, services, and providers for the business. TBM leverages the bill of IT to identify unit costs or consumption patterns that may be excessive. Unit cost can be a good indicator of efficiency, enabling comparisons to external providers or industry peers. The goal is to identify areas of waste, such as excessive levels of service quality or levels of redundancy greater than what is needed to properly operate the business.

In SAFe, Agile teams work in a fast, flow-based system to quickly develop and release high-quality business capabilities. Instead of performing most testing at the end, Agile teams define and execute many tests early, often, and at multiple levels. In this fashion, building in quality ensures that frequent changes do not introduce new errors and actually lowers the transaction cost of creating new functionality. In addition, Agile teams create designs that continually evolve to meet current and future business needs, which improves cost for performance and customer satisfaction.

With TBM in place, business owners and their stakeholders learn the cost of developing, maintaining, and supporting products and services on a more continuous basis, better enabling the value of IT investments to be understood.

Business-aligned portfolio

Business-aligned portfolio conversations are about how to deliver the most value for the current level of spending. For example, do we spend our resources on the initiatives that get the highest possible return for our business? TBM suggests organizing the IT portfolios of services, projects, vendors and technologies to be optimized and aligned with the goals of the business. Doing so involves trade-offs, such as shifting people, resources, and time spent on items in each portfolio. For example, application rationalization and data consolidation initiatives, driven by cost for performance conversations, can lead to simplification of the technology portfolio and an IT organization that can better adapt and respond to change faster.

"Managing your innovation portfolio as services [or products] instead of projects also conveys a number of benefits. First, CIOs tend to establish a stable team for each of their services. Team members learn to work better with one another and have time to become experts in their services. A stable team roster for each service also improves productivity."[20]

As discussed earlier, SAFe works with TBM to accomplish the goal of moving from projects to products and services by organizing teams in value streams and ARTs. What's more, the Lean Portfolio Management competency in SAFe offers several practices for moving from traditional to Lean-Agile approaches for managing the technology portfolio of solutions and investments. These practices foster a business-aligned portfolio for software and system development initiatives.

Investment in innovation

Investment in innovation conversations are about how to allocate the proper amount of people and resources to develop and maintain new and enhanced products and services to improve business innovation. The main focus here is to ensure that the technology organization spends enough money on new and enhanced services and on business innovation and governs these investments wisely. These conversations require a more comprehensive oversight of innovation initiatives and programs, while shifting to a service-oriented approach for managing investments.

Here again, SAFe helps address investments in innovation through the LPM competency described earlier in the Plan and Govern section. Specifically, SAFe's Lean budgets and guardrails help ensure that the mix of investments addresses both near-term opportunities and long-term strategy. Additionally, most organizations will generate more good ideas than they can fund. SAFe's participatory budgeting and economic prioritization practices help address this demand overload, while ensuring that value streams receive the necessary funding to run, grow, and transform.

Enterprise agility

Enterprise agility conversations are about how to respond and adapt more quickly to new business opportunities and threats.

By adopting SAFe—and applying its well-described set of values, principles, and practices—organizations are able to achieve enterprise agility and realize greater individual and business benefits. However, achieving enterprise agility is no small feat. Therefore, SAFe provides an Implementation Roadmap,[21] based on proven organizational change management strategies, which describes the steps an enterprise can take to implement enterprise agility in an orderly, reliable, and successful fashion.

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Apptio: Agile Investment Management

The metrics in TBM are supported by solutions, such as Apptio, that categorizes KPIs and metrics into four categories, which are depicted in Figure 9. Of course, organizations can implement their own reporting solution if they have the TBM knowledge and technical expertise to build their own custom solution using data warehouse technologies. SAFe supports a wide variety of metrics[22] that help answer many of the questions posed in the KPIs and measures in Figure 9.

Financial Fundamentals	Delivery	Innovation & Agility	Business Value
▪ IT Spend vs. Plan (OpEx & CapEx variance) ▪ Application and Service Total Cost ▪ Infrastructure Unit Costs vs. Target / Benchmarks	▪ % of Projects On-Time, On-Budget, On Spec ▪ % of Business-Facing Services Meeting SLAs	▪ % of IT Investment on Run, Grow, Transform the Business ▪ % of Project Spend on Customer-Facing Initiatives	▪ Customer Satisfaction Scores for Business-Facing Services ▪ IT Spend by Business Unit ▪ % of IT Investment by Business Initiative

Figure 9: Example TBM KPIs and metrics[23]

Conclusion

Applying TBM with SAFe provides a powerful combination to enable IT to deliver more value with more transparency, and to achieve greater business agility and partnership with the business. Together, these frameworks help IT shift run-the-business spending to change-the-business investment, which results in faster and better business value, aligned with the strategy and goals of the enterprise.

For IT organizations doing agile, who hate the inefficiencies of their project-centered finance model, Apptio's Agile Investment Management solution will help them to plan and prioritize the optimal mix of portfolio investments by considering the resource costs and capacity, accelerate value delivery and optimize resources.

SAFe provides principles and practices for technologists and business professionals to collaborate on changing the business, including how to implement the TBM organizational elements of positioning for value and continuously improving. SAFe also demonstrates how to put the four TBM disciplines—create transparency, shape business demand, deliver value for money, and plan and govern—into action. Furthermore, SAFe fully supports TBM's four value conversations, especially investment in innovation and enterprise agility, which are areas of the Scaled Agile Framework's greatest strength.

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Learn More

To learn more about TBM and SAFe:

- Read *Technology Business Management: The Four Value Conversations CIOs Must Have with Their Businesses* by Todd Tucker. Technology Business Management Council.
- Read *SAFe 5.0 Distilled: Achieving Business Agility with the Scaled Agile Framework* by Richard Knaster and Dean Leffingwell. Pearson.
- Learn more about Apptio's Agile Investment Management. https://www.apptio.com/products/agile-investment-management/
- Find TBM training at https://www.tbmcouncil.org/learn-tbm/education-and-certification.
- Find role-based SAFe training and certification at scaledagile.com.
- Read the "SAFe 5.0 Introduction" White Paper at https://www.scaledagile.com/resources/safe-whitepaper/.
- Read about real-world implementations at scaledagileframework.com/case-studies.
- Browse the Framework at scaledagileframework.com.

Bibliography

1. *SAFe Distilled 4.5: Applying the Scaled Agile Framework for Lean Enterprises* by Richard Knaster and Dean Leffingwell. Pearson.
2. "Bringing the Benefits of Technology Business Management to your organization." Apptio. SlideShare: https://www.slideshare.net/Apptio/bringing-the-benefits-of-tbm-to-your-organization
3. SAFe knowledge base: www.scaledagileframework.com

Endnotes

1. Knaster, Richard. "Why DevOps is not enough." https://techbeacon.com/devops/why-devops-not-enough
2. SAFe Distilled 4.5: Applying the Scaled Agile Framework for Lean Enterprises by Richard Knaster and Dean Leffingwell. Pearson.
3. Tucker, Todd. *Technology Business Management: The Four Value Conversations CIOs Must Have with Their Businesses.* Technology Business Management Council.
4. Tucker, Todd. *Technology Business Management: The Four Value Conversations CIOs Must Have with Their Businesses.* Technology Business Management Council.
5. https://www.scaledagile.com/resources/safe-whitepaper/
6. "Bringing the Benefits of Technology Business Management to your organization." Apptio. SlideShare: https://www.slideshare.net/Apptio/bringing-the-benefits-of-tbm-to-your-organization
7. Tucker, Todd. *Technology Business Management: The Four Value Conversations CIOs Must Have with Their Businesses.* Technology Business Management Council.
8. https://www.apptio.com/resources/research-reports/unpacking-app-it-tower
9. Tucker, Todd. *Technology Business Management: The Four Value Conversations CIOs Must Have with Their Businesses.* Technology Business Management Council.
10. Tucker, Todd. *Technology Business Management: The Four Value Conversations CIOs Must Have with Their Businesses.* Technology Business Management Council.
11. https://www.scaledagileframework.com/lean-agile-mindset
12. For a description of the Inspect and Adapt event at the end of a Program Increment, see https://www.scaledagileframework.com/inspect-and-adapt/
13. https://www.scaledagileframework.com/team-and-technical-agility
14. Tucker, Todd. *Technology Business Management: The Four Value Conversations CIOs Must Have with Their Businesses.* Technology Business Management Council.
15. http://www.scaledagileframework.com/safe-core-values/
16. https://www.scaledagileframework.com/safe-requirements-model/
17. Richard Hunter and George Westerman. T*he Real Business of IT: How CIOs Create and Communicate Business Value.* Harvard Business, 2009
18. https://www.scaledagileframework.com/safe-lean-agile-principles/
19. https://www.scaledagileframework.com/lean-portfolio-management/
20. Tucker, Todd. *Technology Business Management: The Four Value Conversations CIOs Must Have with Their Businesses.* Technology Business Management Council.
21. http://www.scaledagileframework.com/implementation-roadmap/
22. http://www.scaledagileframework.com/metrics
23. "Bringing the Benefits of Technology Business Management to your organization." Apptio. SlideShare: https://www.slideshare.net/Apptio/bringing-the-benefits-of-tbm-to-your-organization

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