

**SAFe® White Paper**

# **Eliminating the Blind Spot: A Proven Approach to Enterprise Technology Strategy Formulation**

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## Executive Summary

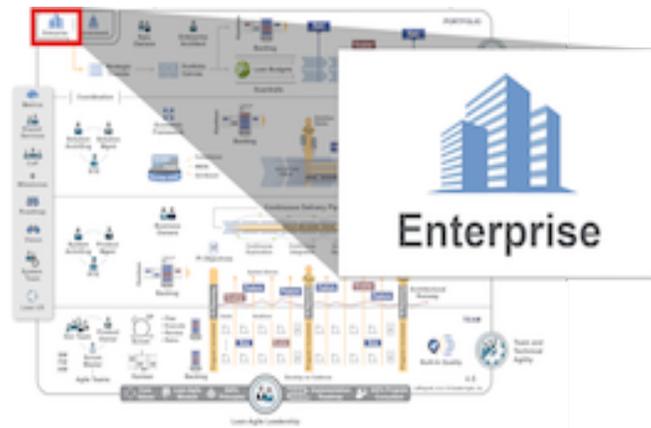
In today's modern era of change, disruption, speed, and opportunity, technology is more important than ever. Business strategies are driving the need for technology change; Technology innovation is also driving industry and business model disruptions and new opportunities. There's a very clear WHY story for investment in technology.

Traditionally, most companies are pretty good at using technology to support single-function or department-specific business needs. Those departmental solutions continue to be necessary and are table stakes, but no longer sufficient. The difference between winning and losing depends on enabling more complex and dynamic business capabilities like agility, seamless customer and employee experience, operational efficiency and margin expansion, globalization, mergers & acquisitions, and product innovation. Learning organizations will have to become great at delivering new kinds of technology solutions. These solutions are cross-functional composites of multiple departmental capabilities. They orchestrate new technologies and capabilities across new systems and existing legacy systems. These solutions have to be architected so that they can be changed at the speed of business change. To meet this growing and changing need, business and IT leadership teams in large enterprises have to change how they think about IT and work together in new and better ways.

The Feld Group Institute helps large enterprises achieve technology-enabled business transformations. Over several decades, The Feld Group Institute team has led (as operating executives), helped (as advisors to CIOs and CxOs and their teams), and enabled (as teachers and facilitators) dozens of such transformations. Our clients and the transformations we've been a part of have included companies such as Frito-Lay, Burlington Northern Santa Fe Railway, Delta Air Lines, Home Depot, Coca-Cola, Westinghouse/CBS, FedEx, Bank of Montreal, and Southwest Airlines. Over time and across those many companies, we've learned important patterns and leadership principles and developed a cohesive framework. We share our knowledge and guidance with the industry, our clients, and leaders who seek us out for perspective, advice, consulting, leadership development training, and a community of peers.

One of the most important principles we have lived by and taught over time is that an organization should think, justify, plan, and architect BIG and also be able to decompose and delegate to manage, develop, and implement SMALL. Thinking, justifying, planning, and architecting BIG allows for aspirational thinking about the "art of the possible" in an unconstrained view and encourages the consideration of and the leadership alignment on enterprise-wide trade-offs, holistic architectural principles and design, and the optimal sequencing from both business and technology perspectives. These broader and longer-range strategic decisions and plans must be decomposed and elaborated into actionable units of work. The execution of this work is then managed, developed, and implemented SMALL to create velocity, quality, efficiency, and the frequent and continuous delivery of business value. Regardless of era, hype cycle, taglines, or terminology, these are the physics required for high velocity, high quality, efficient and risk managed delivery of great software and systems.

As we continue our work in recent years with over 40 large enterprises, we've witnessed and encouraged the growing breadth of adoption of Scaled Agile, Inc.'s SAFe framework for developing and delivering software and systems. We have found that the adoption and implementation of SAFe helps our clients deliver business value faster, build in quality more naturally, and smoothly feed the DevOps and CI/CD pipeline. The SAFe framework is a proven way to manage, progressively elaborate, develop, and implement SMALL - agile, incremental, continuous. However, the SAFe framework identifies the need for, but does not prescribe an approach for developing, alignment with enterprise strategies and objectives – both business and technology.



The Feld Group Institute's transformation framework helps business and IT leadership collaborate to create an Enterprise Technology Strategy to support and enable an Enterprise Business Strategy. The Enterprise Technology Strategy provides the multi-year context, sequencing, and architectural runway within which software and systems development, or execution, can and must enable business transformation. Our framework is a proven way to think, justify, plan, and architect BIG - strategic, enterprise-wide, multi-year.

The combination of these two frameworks, The Feld Group Institute's transformation framework for strategy and Scaled Agile Inc.'s SAFe framework for execution and software delivery, can be very powerful. So, with our clients, class participants, community members, and with the Scaled Agile, Inc. team, we've been doing a lot of thinking and work to clearly articulate the synergies between our approach to strategy and the SAFe approach to execution. We are eager to continue our collaboration in this area.

## **The Transformation Mandate**

Established and growing companies are seeking to reinvent their business models, create seamless omni-channel customer experiences, engage an increasingly mobile and distributed workforce, develop new sources of revenue growth, find operational efficiencies, and get faster at imagining and implementing new ideas. Technology is at the heart of most of this newest wave of innovation. Modern business strategies also call for technology to do more than ever before to enable complex and integrated cross-functional capabilities and the ability to change and innovate at speed and scale. This is what we define as true business agility.

## The Challenge for Large Enterprises

Large and traditional industry leaders theoretically have the required resources. More established companies generally have significant assets such as brand recognition, global reach, strong functional expertise, as well as ready access to capital. But they also have significant challenges that have come from their decades of history and scaling.

Many established companies have built up organizational habits and cultures that promote functional, local, or business unit focus on efficiency, scale, and productivity. And, many of those companies have grown through M&A, which creates more complexity, silos, and duplication. These habits make organizations resistant to change, making new cross-functional forms of collaboration difficult. Most large enterprises are burdened with decades of legacy systems and technical debt. They are often saddled with quarter-to-quarter external financial pressures that punish both risk taking as well as investment in mid-to-longer term changes or returns. Thus, making effective change is not easy for big and established companies that have experienced significant growth in the past.

As these companies grew, the numerous information systems that increasingly automated the business were built for that moment and for a specific need. Most likely, they were each built in narrow functional contexts, using the best technology platforms at the time, managed as one project at a time. This left companies with multiple separate departmental systems and an inability to support cross-functional business capabilities or to change with the pace of business. To compensate, they hotwired disparate functional systems together with a web of point-to-point integrations. The complexity that resulted has become overwhelming. This has caused the implementation of new capabilities to get slower and the risk and costs to increase dramatically over time. Information Technology (IT) challenges loom large as a major contributing factor in why most companies fall short of real innovation and transformation. This can't continue.

The "Digital Transformation" mandate for large enterprises is that every enterprise must learn to become an agile business. If they can't, the consequences are bad over some time frame - depending on the industry. What got them here won't get them there. These companies must change, or they will decline and ultimately potentially face extinction.

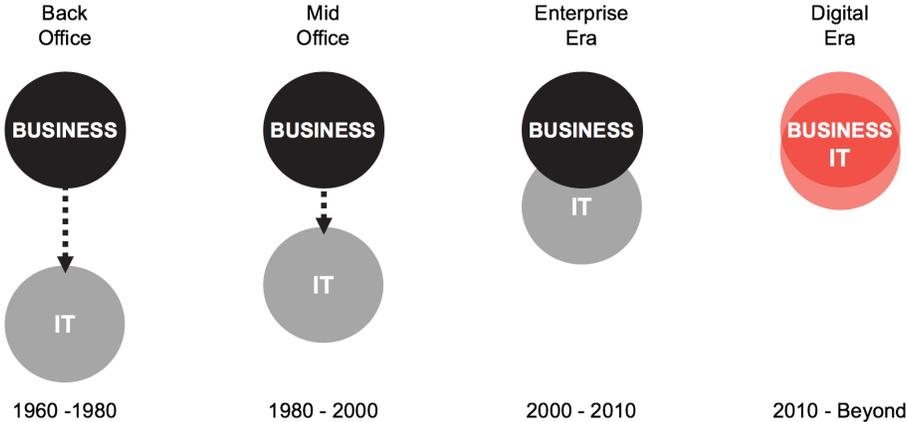
## Becoming an Agile Business: Three Essential Outcomes

The future vision for any business leadership team should be to create a truly agile technology-enabled business model that can continuously innovate at speed and scale. However, a company with technical and organizational rigidity can't achieve business agility. True business agility requires three essential outcomes - Business, Architecture, and Productivity. Large enterprises can no longer achieve business outcomes by any means necessary for short-term, tactical, project, and budget success - adding more rigidity and technical debt (sacrificing architecture outcomes) and more people and money (sacrificing productivity outcomes). Achieving business outcomes at speed and scale in an agile business will come naturally when you build the right organization that can work seamlessly across traditional business and technology organizations and transform a legacy systems landscape into a modern architecture.

Outcomes	Rigid Current State	Agile Future Vision
Business	Function or department specific Limited cross-functional capabilities Fragmented, old applications Time & space latency Slow, risky, expensive change	Functional integration Commonality across value streams Cross-functional growth, efficiency Customer & employee experiences Sense and respond to change Innovation at speed and scale
Architecture	Aging and fragile applications Hotwired or “hairball” integrations Limited reuse and leverage Monolithic, tightly coupled platforms Difficult and expensive change Complex, risky, expensive, slow	Legacy modernization Common data & integration core Reusable components and patterns Plug & play edge heterogeneity Layered, loosely coupled “Built to last” = “built for change” Simple, flexible, safe, efficient, fast Composite solutions
Productivity	Business/IT separation, conflict Slow, bureaucratic, gated execution Over-managed, under-led Atrophy of technical talent Upside down labor pyramids Overdependence on contractors Ever-rising costs or damaging cuts	Seamless business/IT teamwork Execution efficiency, velocity, quality Workforce skills, mix, leverage World-class leadership, culture Productivity bending the IT cost curve

## Business and IT Collaboration

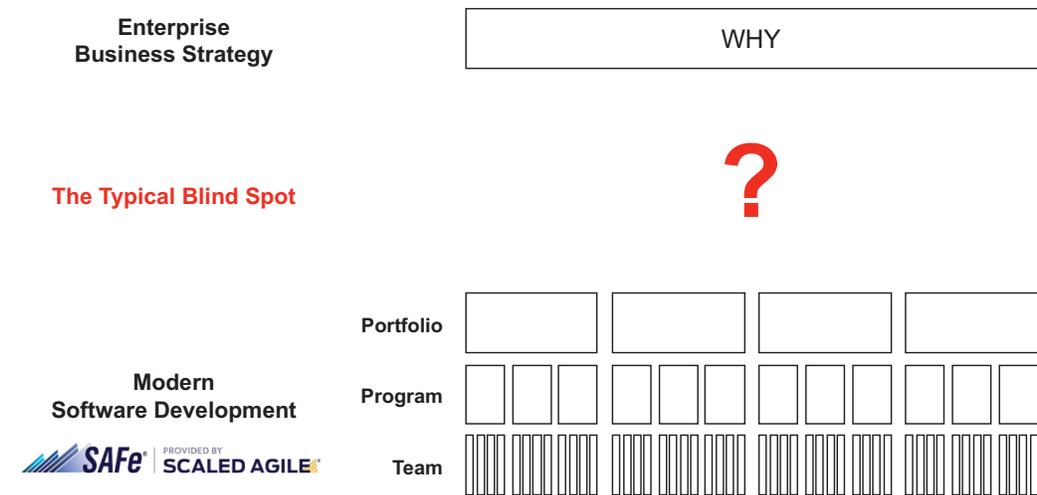
Over the decades and eras of business and technology change, we’ve observed a gradual but steady merging and integration of business and technology.



To succeed in the modern era, to achieve those three essential outcomes, there can be no separation between business and technology. Business and IT leaders must work together to integrate traditionally separate business and technology strategies into one unified plan.

# The Typical Blind Spot Between Strategy & Execution

Most companies we work with have an Enterprise Business Strategy and are thinking BIG, and most are on their way toward transforming their execution practices for developing and implementing SMALL. Business strategy typically has enterprise-wide perspective, starts top-down, stays high-level, and focuses on business more so than technology considerations. The modern software development factory typically takes a team-specific perspective, starts bottom-up, enables short-term execution, and focuses on technology more so than business considerations. Each of these is important and necessary, but without addressing the blind spot in between, they are not sufficient to drive the kind of transformation large enterprises need. They are not sufficient to drive the three essential outcomes – Business, Architecture, and Productivity.



## Thinking BIG: Enterprise Business Strategy

Senior executive teams and corporate strategy departments, along with their management consulting firm of choice, usually have a high-level enterprise business strategy that articulates key decisions the company leadership is making about “where to play” and “how to win”. And, the strategy will set targets for key metrics like revenue growth, market share, profitability, cost efficiency, customer service or satisfaction, and employee engagement. In most cases, the strategy will outline big strategic themes such as new products and services, market expansion, omni-channel customer experience, supply chain optimization, mergers & acquisitions.

To support those strategic themes, a modern business strategy will invariably call for “Digital Transformation” to enable new business capabilities, drive innovation, integrate systems, processes, and data across functions and increase flexibility for technology to change quickly as business strategies and opportunities and threats change at speed. At a conceptual level, technology and the IT department, play a big role in almost every company’s strategy going forward. The case for WHY technology matters is self-evident and widely accepted at this point. Most Enterprise Business Strategies demand more and better technology faster and cheaper.

But, most business strategies, appropriately, are very top-down and high-level in nature. They don't go far enough to prescribe the WHAT, the HOW, the WHO, or the WHEN that is needed to really drive the strategic business and technology transformation. From a business leader's perspective, this blind spot leaves them without visibility to a plan that really aligns the investment in technology and IT to their strategy. And, they struggle with confidence in whether or not the enablement, value, agility, and capabilities that they need to execute the strategy will actually show up how and when they need it.

## **Developing & Implementing SMALL: Modern Software Development**

As one of many responses to the broad demand for technology, speed, and new ways of working, IT leaders are reacting in the name of "agility" (sometimes ignoring the "business" part of "business agility") and implementing new software development practices such as Product Management, Agile, Scrum, XP, DevOps, and others. The modern technology product companies that have had so much success in disrupting and transforming markets and ecosystems are the inspiration for the growth of these practices in large enterprises in traditional industries. Product Management and Agile Development seek to change how teams work – closely together across traditionally separate business and IT roles – while also delivering smaller bits of business value more quickly, consistently, and with quality. These are positive changes in how software is created, implemented, and maintained. But these modern software development practices are very bottom-up, detailed, and tactical in nature. They help small teams do more, faster and better; they don't typically help determine with the right things to do the right way to support a complex enterprise business strategy and true business agility.

The implementation of the SAFe framework is revolutionizing the use of Agile Development practices in large enterprises, and it's certainly helping many traditional IT development organizations learn new ways to develop and implement SMALL and consistently deliver value and quality in a new way. However, each team, including at the Portfolio level, that's executing in this new way has natural limits to their visibility and perspective relative to the larger enterprise and longer-term context. They can't possibly optimize the architecture (HOW) and sequencing (WHEN) of what they are being asked to build. So, from the perspective of an IT leader and certainly from the perspective of a software developer, the blind spot leaves them wondering if their faster, better work aligns with the strategy of the company.

## **Common Bad Habit: Traditional IT Budgeting**

Annual, project-based budgeting for IT is still the predominant way that large enterprises try to address this blind spot between their Enterprise Business Strategy and their software development factory – whether that's a modern factory or not. There are many powerful drivers of this continuing bad habit.

- Pressure to manage to short-term financial metrics and earnings targets
- Scarcity of technology-savvy business leaders and business-savvy technology leaders
- Multiple independent sources of demand competing for scarce IT resources
- Finance department comfort with tightly scoped financial ROI business cases
- Uncertainty of business and technology futures and fear of putting stakes in the ground
- Difficulty of changing old habits and existing business processes

The fundamental problem with the common bad habit for IT budgeting is that it takes too small a perspective – annual only vs. multi-year, project-by-project vs. investment campaigns, portfolios, value streams, and products. Annual, project-based IT budgeting approaches and processes cause the organization to justify, plan, and architect SMALL. Here’s how that typically plays out.

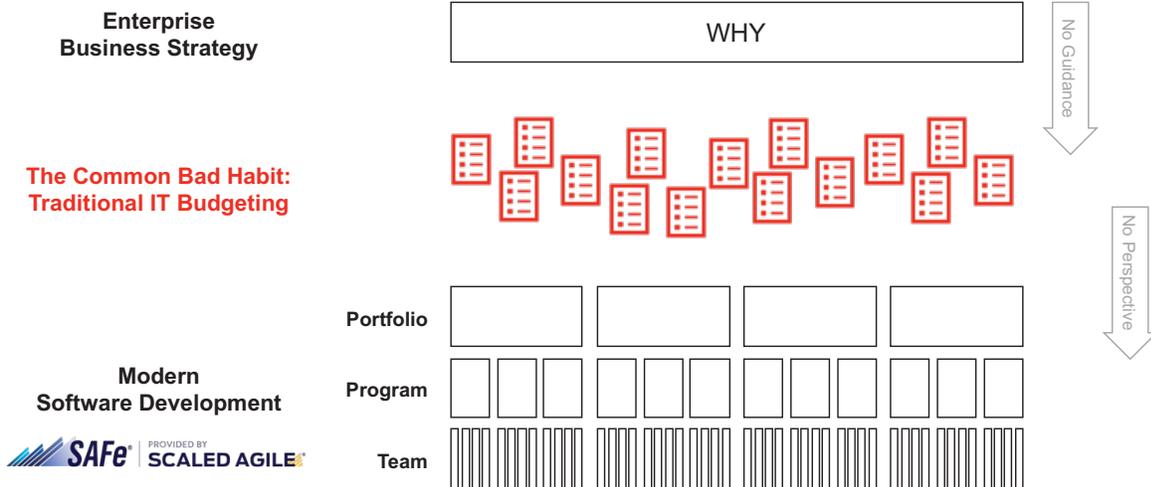
**Short-Term Financial Constraints:** Senior executives and Finance leaders set annual budget targets for “overhead” functions like IT. These constraints are usually based on last year’s spend levels and P&L targets, and earnings per share expectations for the coming year.

**Demand in the Form of Departmental Lists of Projects:** Lacking any clear, top-down, business-strategy-driven direction on the technology WHAT, HOW, and WHEN, each department head is left to interpret what that business strategy means to their department and its technology needs. This department-local translation of the enterprise business strategy into a list of technology enhancements and new development projects.

**Project-by-Project Business Cases and Estimation:** For months during “budget season”, business planners from finance and the departments develop project business cases. IT leaders and their teams of project managers, architects, and developers spend significant portions of their time estimating the costs, time, and people required for each project on the list whether it’s approved or not, whether it’s actually important or not.

**Racking, Stacking, Ranking, and Cutting:** Given a bottom-up, department-generated, long lists of projects with promised benefits and estimated costs, IT and business leaders have a big challenge to rationalize way too much demand vs. the short-term financial constraints of the coming year’s budget. The master list is racked, stacked, ranked, and categorized for the debate. Various methods – some analytical, some political, some emotional, some based on gut feeling – are used to decide the official list of approved projects and, therefore, a list of projects that have been cut or deferred to the future.

This is a lot of work that makes almost no difference. Going into the planning cycle, most large enterprises already know that as high as 90% of the next year’s budget is committed to non-discretionary baseline run and compliance plus existing projects from the current year that will have to carry over into next year. So, all of the time, work, and organizational stress described above amounts to a big fight over as little as 10% of next year’s technology budget. The choices come down to either cutting most of the new or strategic investment ideas or spending more money than intended and watch IT spend continue to grow without the corresponding business or technical value.



The approach provides for vague, limited guidance from the Enterprise Business Strategy down into how departments, portfolios, or business units think about their technology needs. And, the resulting one-year list of departmental projects doesn't provide cross-enterprise perspective or over-time architectural runway to technical teams. The characteristics of this process are:

- Short-term vs. multi-year horizon
- Business and IT as opposing sides in a negotiation vs. true strategic partners
- Demand described as projects vs. capabilities and value streams
- Bottom-up and maximized by function vs. top-down and enterprise optimized
- Focused on business outcomes without regard for architecture or organization outcomes

Therefore, the organization can't achieve the three essential outcomes. Functional business outcomes can be achieved by departmental projects. Applications designed to help the efficiency of one function can be improved, and functional excellence is possible with this approach. But it's almost impossible to get the most strategically important cross-functional outcomes like customer experience, commercial growth, margin expansion, and innovation. Enterprise architecture and legacy systems modernization cannot be effectively planned or operationalized on a project-by-project and short-term basis, so architecture outcomes are never achieved. Technical debt grows and risk, complexity and cost continue to increase. Over time, everything - from planning, to building, to running - just takes more people, more dollars, more time because there is rising frustration and demand without any gains in productivity.

The process of planning and managing technology execution by an annual, project-based IT budget is always insufficient for and most often counterproductive to creating real alignment between business and IT, between strategy and execution, and between current state and future vision. Annual financial budgets are an important reality in business, and they are not going away. We're not arguing that the existence and use of annual budgets are bad. We believe that annual, project-based IT budgets should not be the way that business and technology plans are DERIVED, but rather, they should be an OUTCOME and an ARTIFACT of a better, enterprise-wide and multi-year, planning process.

# Eliminating the Blind Spot

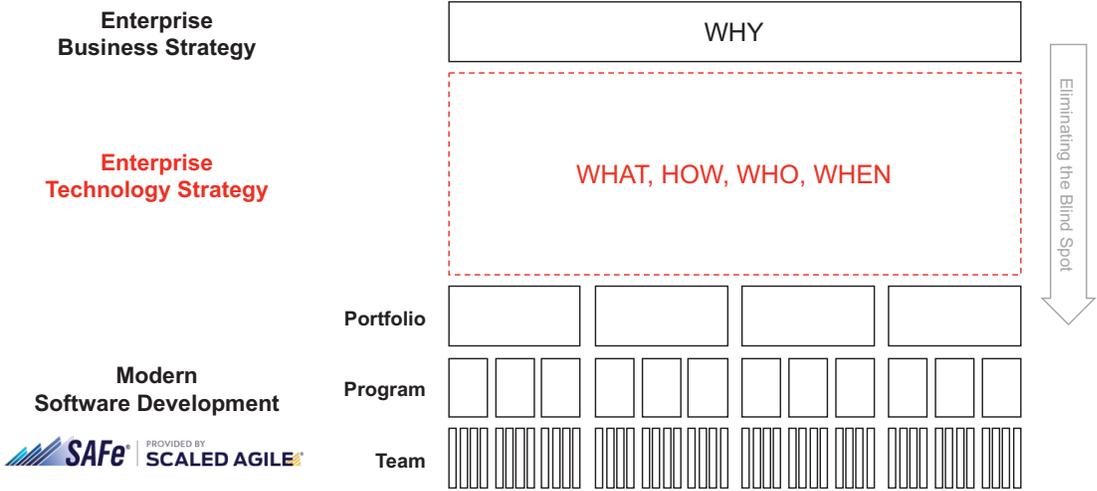
So, there must be a different approach. The Feld Group Institute has helped many large and complex companies with deep legacy technology debt develop an Enterprise Technology Strategy. An Enterprise Technology Strategy eliminates the blind spots and aligns business strategy and IT execution. It also defines a multi-year investment and transformation path required to get from the unsatisfactory current state to the aspirational future vision for the business.

## Formulating the Enterprise Technology Strategy

The Enterprise Technology Strategy is about justifying, planning, and architecting BIG.

- Considering business and technology together as one
- Striving to achieve all three essential outcomes (Business, Architecture, Organization)
- Justifying investment in and making plans for a multi-year transformational journey
- Thinking about and optimizing for the overall enterprise

With this BIG perspective, leaders should work together to clearly translate the business objectives and WHY technology matters into the specifics – WHAT (capabilities, value streams), HOW (enterprise architecture, operating model), WHO (organization structure, leadership, culture, workforce), and WHEN (sequencing, pace).



## The Game Changers and The Trifecta

It doesn't take more than a few key game changers to make this happen. The leadership for this change in approach and for the formulation and ongoing stewardship of the Enterprise Technology Strategy comes from a key group of people – that we call “game changers”. The CIO has a special role in instigating and providing leadership given his or her technology understanding and vision and a unique cross-functional and cross-BU perspective within the company. And, ultimately, the CEO or COO, heads of Business Units/P&Ls, the CFO, and the head of Corporate Strategy have to lead the charge along with the CIO and his or her direct reports. These are the few leaders in the company that have a full, top-down, enterprise

perspective. Additional game changers can be found in other departmental executives, business architects and planners, product owners, and enterprise technology architects. Regardless of organizational position or title, to be effective, the following are very important characteristics – business and IT/technical savvy, broad perspective, cross-discipline/functional integrator, open-minded collaborator, forward-looking change driver, makes time to plan & lead change, persuasive influencer, optimistic leader.

The game changers and key leaders have the responsibility of initiating the change in approach and leading by example in the initial formulation of an Enterprise Technology Strategy. But this is more than a one-time event or deliverable. The Enterprise Technology Strategy should be a living, rolling, and changing strategy. Ultimately, organizations have to develop the ongoing capability to always be adjusting and extending this strategy as progress is made, as external opportunities and threats present themselves, as the Enterprise Business Strategy changes, and as new technologies emerge.

All top executives in the company and the initial game changers certainly have the responsibility to keep this going. In addition, to really institutionalize and sustain the capability, the organization has to form cross-functional teams for continuous planning. These cross-functional teams are anchored by three key roles that we call “the trifecta”.

**Business:** interprets business objectives and strategies, develops business scenarios, ensures business alignment and progressive elaboration of capabilities, acts as a subject matter expert on business requirements, recommends prioritization and sequencing

**Architecture:** identifies technology capabilities required to meet business demand, brings industry technology insights and architectural discipline into the planning process, optimizes enterprise architecture to support legacy modernization and the building of the common modern technology platform, coordinates technology design work and decision making, identifies previously built or bought components to be consumed rather than built from scratch again

**Management:** leads the overall planning process for estimation and dependencies, turns demand signals and sequencing from both business priority and logical construction sequence perspectives into an integrated and actionable plan, manages the draw-down of each higher level or more conceptual plan into the necessary grain, specificity, and certainty, ensures coordinated execution as appropriate

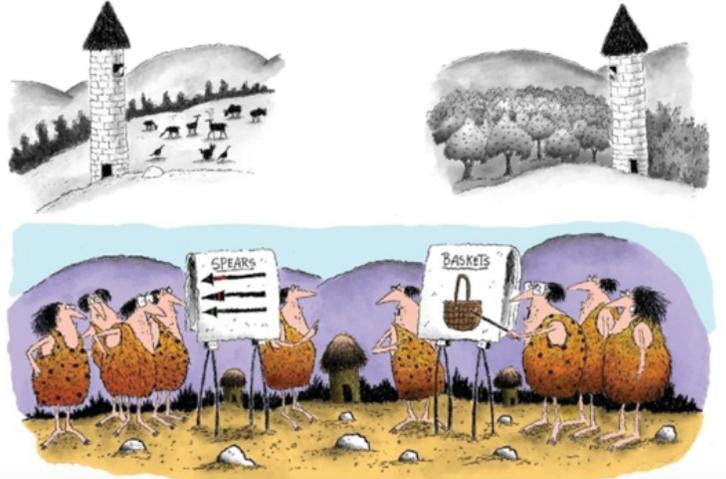
These roles occur and are conceptually similar at all levels of scope from the Enterprise all the way down through the Team. However, at each level the team will be responsible for a different scope and a different timeframe. So, the names of the roles or the terminology used will be different.

Scope	Business	Architecture	Management
Enterprise	Business Planner	Enterprise Architect	EPMO or Portfolio Leader
Portfolio	Epic Owner	Portfolio or Domain Architect	Portfolio Leader or Portfolio Manager
Large Solution	Solution Manager	Solution Architect	Solution Train Engineer
Program	Product Manager	Solution/System Architect or Tech Lead or Senior Developer	Release Train Engineer
Team	Development Team	Development Team	Scrum Master

Regardless of these example names or any other names of the roles, the function and the roles themselves, “the trifecta”, needs to exist at all levels. The cross-functional teams at each level have to have great collaboration. And, within each function, there has to be great communication and bi-directional alignment top-to-bottom and bottom-to-top. That cohesive communication and alignment must be driven top-down by a strong governing body of business and technology leaders.

### Shared Mental Models

The ideal team of game changers, by definition, comes from various backgrounds, level, departments, skills, and language. Based on these varied experiences and perspectives, each individual is likely to develop their own unique mental models and language and to not connect with or understand the mental models or language of others on the team. To illustrate how this can happen, we love to share this picture below from one of our favorite books, *Shadows of the Neanderthals* by David Hutchens.



*Shadows of the Neanderthals*, David Hutchens

The different experiences and perspectives of each group form the different mental models. Then, when the groups get together to achieve a common, like “get food to eat”, they each propose very different plans – each reasonable but each difficult for the other group to understand and agree to. When a diverse team gets together to develop an Enterprise Technology Strategy, they could each be thinking about a completely different set of things based on their various perspectives. Without a common language and shared mental models, it’s hard to imagine this group understanding each other’s thinking and coming to alignment around a strategy. So, a framework and a language are needed.

## The Feld Group Institute’s Transformation Framework

Based on decades of experience across dozens of transformations that we’ve been a part of, The Feld Group Institute has developed a framework for transformation planning and leadership. The framework helps leadership teams align on mental models and a common language across traditional business and IT lines and up and down levels of the organization from those who think most strategically to those who operate most tactically.

Charlie Feld is the founder and CEO of The Feld Group Institute. In his book, *Blind Spot: A Leader’s Guide To IT-Enabled Business Transformation*, Charlie demystifies technology and illustrates a common language for dialogue among business and IT leaders. That dialogue should be in plain English – WHY (do anything?); WHAT (will we do?); HOW (will we do it?); WHO (will lead the change?); and WHEN (what’s the best sequence and pace?). The best leaders can articulate complex concepts and collaborate based on these kinds of simple words.

Over time and in our work with several companies, we’ve operationalized this language for executive dialogue into a transformation framework that is used to formulate, lead from, and continually adjust and extend an Enterprise Technology Strategy. The framework is based on four durable and non-negotiable principles and is organized along three structural dimensions.

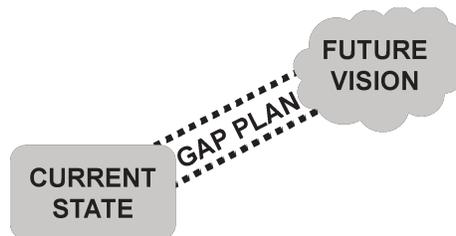
Principles	Dimensions
Always have a <b>rolling multi-year plan</b> . Consciously and regularly adjust that plan for changes and extend it out over time.	Timeframes – Current State, Future Vision, Gap Closing Plan
To achieve true business agility in the modern digital era, there are <b>three essential outcomes</b> – Business, Architecture, Productivity.  Emphasize <b>systems thinking</b> regarding alignment and interaction across all factors in the dynamic complexity that drives technology-enabled business transformation.	Models – Business, Business Systems, Technical Systems, Organization, Economic, IT Operating
Be disciplined about <b>progressive elaboration</b> and bi-directional alignment between enterprise wide plans and the decomposition into work at the team level.	Layers – The Story, The Deal, The Plan

## Timeframes for Multi-Year Planning

**Principle:** Always have a rolling multi-year plan. Consciously and regularly adjust that plan for changes and extend it out over time.

Timeframes provide structure for planning the multi-year investments and journey for the transformation. Also, our framework leans heavily on the idea of creative tension to clarify the need for change, to motivate or create the organizations energy for change, and to set a course to close the gap between current reality and future vision.

“...the gap between vision and current reality is... a source of energy. If there was no gap, there would be no need for any action to move toward the vision. Indeed, the gap is the source of creative energy. We call this gap creative tension.” -Peter Senge, *The Fifth Discipline: The Art & Practice of The Learning Organization*



**Current State:** The Current State starts with the history and is a fact-based story that explains the physics of what got US here TOGETHER “one good decision at a time”. The story should unemotionally articulate “what is”, for better or worse, in a way that is supportable. This provides some new insights for executives and key leaders about how all aspects of business and IT are connected and impact each other and what works and what doesn’t. Most importantly, the Current State establishes a common foundation of understanding from which to build a future vision and plan the early phases of a journey to close that gap.



**Future Vision:** The Future Vision paints an unconstrained picture of “what things could look like... and work like... and deliver impact like...”. The picture should include the three essential outcomes – Business, Architecture, and Productivity – that the company must achieve in order to become an agile business 3-5 years out. This picture clarifies and confirms alignment on a shared understanding of the future business strategy and the capabilities and key business processes that the business needs to execute that strategy. The Future Vision goes beyond just the business vision and establishes an enterprise technology vision that articulates the simpler legacy systems environment, the new technical capabilities, and the modern enterprise architecture required to meet those known business outcomes and

provide the agility to change quickly and inexpensively over time. The Future Vision also helps business and IT leadership teams to agree on a shared view of an economic model for investment and value recognition and how great architecture, organization, and operating model processes will lead to productivity. For the Future Vision, the team should not be held back or restrained by concerns about what might or might not be possible or if, how, or when things could happen. This should truly be an unconstrained and aspirational view of what should be, what could be.



**Gap Closing Plan:** Given a fact-based story about the history and the Current State and an aspirational picture of the Future Vision across all three essential outcomes, a gap is identified. In most cases, the leadership team can rally around a mantra of “what got us here (Current State) won’t get us there (Future Vision)” and creative tension or the call to action is established. The Gap Closing Plan defines a roadmap for getting to the desired Future Vision from the Current State. The roadmap should define and justify multi-year investment campaigns that lead to the achievement of business and architecture outcomes over time. This includes the prioritization, chunking, and sequencing of the delivery of business and technology capabilities. In addition, the roadmap identifies leadership actions, decisions, and changes that need to be made to the organization, processes, and investment models in order to enable the delivery of new capabilities in a new way to gain productivity. The Gap Closing Plan aligns business and IT leadership teams on the changes, priorities, people, timing, funding, investment across multiple years.

The order and pacing of this multi-year plan are critical to set up the best chance to manage the transformation from an unsatisfactory Current State to a desired Future Vision. The best plans strike a balance and find a way to make an early turn or change in direction and momentum without launching or biting off too much change too soon for an organization. Over the years, we’ve learned patterns in the flow and dynamics of this change process. Those patterns have led us to phases of the journey or the Gap Closing Plan that have proven to work over time – Strategy, Making the Turn, Up & Running, Hitting Stride, and Sustainability. The initial formulation of the Enterprise Technology Strategy happens in the Strategy phase of the journey. Then, during every phase of the journey and as business and technology change, that strategy and plan get elaborated, refined, adjusted, and extended regularly and frequently.

## Models for Systems Thinking

**Principle:** To achieve true business agility in the modern digital era, there are three essential outcomes – Business, Architecture, Productivity.

**Principle:** Emphasize systems thinking regarding alignment and interaction across all factors in the dynamic complexity that drives technology-enabled business transformation.

For each of Current State, Future Vision, and Gap Closing Plan, it’s important to think holistically about all of the factors and interrelationships that make up the dynamic complexity of

business and IT transformation. Our models are designed for thinking through each relevant aspect individually and deeply so that, most importantly, those aspects can be put together into a “system” of how things have worked, should work, and need to change over time. These are the models that we use to break down, analyze, and then put back together and interrelate to ensure systems thinking.



The first three models together describe the WHY and WHAT of the transformation. This is what we call “Setting the Agenda” for change. The Future Vision and Gap Closing Plan for these models is mostly determined by the Enterprise Business Strategy and the demand that strategy places on the technology applications and architecture.

 BUSINESS **Business Model:** Shareholder value drivers; Unique customer value proposition; Business operating model; Metrics & business outcomes; Strategies and capability enhancements to achieve outcomes; Priority, sequencing, interrelationships

 BUSINESS SYSTEMS **Business Systems Model:** Core business processes or value streams; Capability model for business and technology capabilities – common vs. unique, existing/enhance vs. new develop; Applications – business value, technical health, future dispositions; Data types, content, and domains; Conceptual systems model

 TECHNICAL SYSTEMS **Technical Systems Model:** Enterprise reference architecture; Layered, loosely coupled; Hub/Core/Platform common services & data; How software and data should be developed; Infrastructure components; How technologies are assembled

The remaining three models are called the “Enablement Models” which are used to describe the WHO, HOW, and, to some extent, the WHEN (pace based on funding) of the transformation. The Future Vision and Gap Closing Plan for these models is mostly determined by the people, funding, and processes it will take to deliver on the business and technology agenda and to help the IT organization become more effective and efficient – and agile – over time.

 ORGANIZATION **Organization Model:** Structure of the IT organization and relationships with the business organization; Leadership expectations and placements – right leaders in the right roles; Culture for collaboration and innovation/change and business and IT interactions; Workforce mix and talent management

**ECONOMIC**

**Economic Model:** Justify big investment campaigns over multiple years; Business value tied to IT investment; IT economics and productivity – real operating levers to reduce baseline/run costs and free up resources for investment/build; Do more with same or less

**IT OPERATING**

**IT Operating Model:** Business/IT governance for investment, sequencing, and pace – ongoing adjustment and extension and tradeoffs for the Enterprise Technology Strategy; IT/IT governance for the interactions and collaboration required for cross-functional, strategic solutions and technical architecture outcomes; Processes for Planning, Building, and Running including SAFe, DevSecOps, and Service Management

## Layers for Progressive Elaboration

**Principle:** Be disciplined about progressive elaboration and bi-directional alignment between enterprise wide plans and the decomposition into work at the team level.

Our framework calls for progressive elaboration, in other words putting the Enterprise Technology Strategy together in what we call layers. The layers in our framework are called, from top to bottom and in order of how they should be formulated – The Story, The Deal, and The Plan. Each layer of the strategy is a full Enterprise Technology Strategy in scope and covers each of Current State, Future Vision, and Gap Closing Plan, for each of the models. The differences in each of the layers comes in the time horizon considered, the level of detail, and the certainty or level of commitment. Formulating the strategy in layers helps ensure alignment of ideas and collaboration along the way as well as flexibility to adjust over time.



**The Story:** Formulating the Enterprise Technology starts with facilitating alignment and building a shared case for change by working together to tell a topline story. Using “The Story” as the name of this layer indicates that this is to be told as a story or a conversation with big themes and major dynamics and key concept pictures. The Story is meant to start the dialogue and should be mostly in business and executive language. In this layer of the strategy, the most important goals are to make a clear linkage between the Enterprise Business Strategy and a few big IT initiatives or campaigns and to create a case for change and the creative tension between Current State and Future Vision. The Story also takes a rough-cut at the chunking, prioritizing, and sequencing as a first hypothesis for the Gap Closing Plan.

Artifacts for The Story (Future Vision, Gap Plan, All Six Models):

definition of three essential outcomes – business, architecture, productivity; strategic choices; strategic themes and the digital transformation mandate; storyboards or scenarios; “ability to” statements; multi-year investment campaigns and total spend goals and constraints; conceptual architecture; organization structure; workforce mix targets; L2 capability model; operational value streams; unconstrained chunking and sequencing of business and technology capabilities; business/IT board established



**The Deal:** With imaginations captured and alignment across stakeholders confirmed, the business and IT game changers are ready to work together on “The Deal” next. The Deal is about business and IT leadership coming to an agreement on enterprise optimization of the investment, changes, outcomes, timeline, pace, and sequence to be committed to and pursued over the course of the next 3-5 years. To make this happen, the Deal layer of the Enterprise Technology Strategy gets more detailed and data-driven about the Current State starting point and further develops the clarity and specificity of the Future Vision across all models. Using rough order of magnitude ranges of time and money estimates and applying feasibility constraints and productivity targets related to the Organization, Economic, and IT Operating Model, The Deal is a clearer and more realistic scenario for the roadmap or Gap Closing Plan. And, the Gap Closing Plan identifies a “beachhead” as the first area of focus through which to drive majority of transformational change in the early stages of the roadmap. The work here is a collaborative negotiation and set of well-informed tradeoff discussions that result in a deal that becomes the Multi-Year Plan from which each successive Plan of Record is drawn down.

Artifacts for The Deal (Future Vision, Gap Plan, All Six Models):

L3 capability model; capability demand tied to strategic themes and sequenced/prioritized into a roadmap across campaigns; target timing of all three essential outcomes; development value streams; enterprise reference architecture; the cube based on technology information model; portfolio/legacy dispositions & modernization plan; defined beachhead; organization, economic, & operating model constraints; productivity levers, targets, and plans; workforce & financial justification and deal; business/IT board sign-off and commitment



**The Plan:** Once the Deal is in place there is organization commitment to a multi-year, enterprise-wide roadmap to achieve all three outcomes – Business, Architecture, Productivity. The Plan layer of the Enterprise Technology Strategy is the 18-to-24-month Plan of Record that becomes the coordinated execution plan to manage across Portfolios, Agile Release Trains, and Teams. This plan factors in full and detailed constraints and expected future benefits of the enablement models – Organization, Economic, IT Operating – to increase precision and certainty of estimates. And, as a result, the people, funding, and process transformation plans that support the delivery of business and technical capabilities is formed. Early on in a

transformation journey, this Plan of Record should allow for a significant share of the resources to continue to work in a business-as-usual way while focusing the best people and the change efforts on a particular, well-selected and defined subset of the enterprise strategy. Over time, as the organization begins to learn and demonstrate value in the new way of working and the new architecture, the Plan of Record should be adjusted and extended with an increasing percentage of the resources working in a new way and delivering new capabilities. At every point in time along the way, The Plan layer of the Enterprise Technology Strategy should be fed into the Portfolio level SAFe planning and further decomposed and planned all the way down to the Team level of execution on a 2-week cadence of delivery. Also, this Plan of Record can, at any time be used as a source from which to draw down a 12-month annual budget if that's what the organization needs for financial management purposes. And, in this case, unlike the "common bad habit" scenario described above, the annual IT budget will have been created with holistic, top-down, enterprise-wide, and architecturally led thinking and is, therefore, mostly likely a strong plan that will lead toward the desired Future Vision.

Artifacts for The Plan (Future Vision, Gap Plan, All Six Models):

cross-portfolio/cross-functional solutions and planning and sequencing of campaigns; portfolio epics and enablers; reference architecture & implementations; styles & stacks; work organized by operational & development value streams; elaborated & planned beachhead; transformation plans focused on the beachhead; work sequenced, interlocked, & constrained horizontally and vertically; commitments to workforce & financial resources; commitments to collaboration, dependencies, & delivery; annual operating plan or budget drawn down; resources allocated as committed; work fed down into build operating model (such as SAFe) for decomposition, elaboration, sequencing & planning

**Rolling Wave Planning**

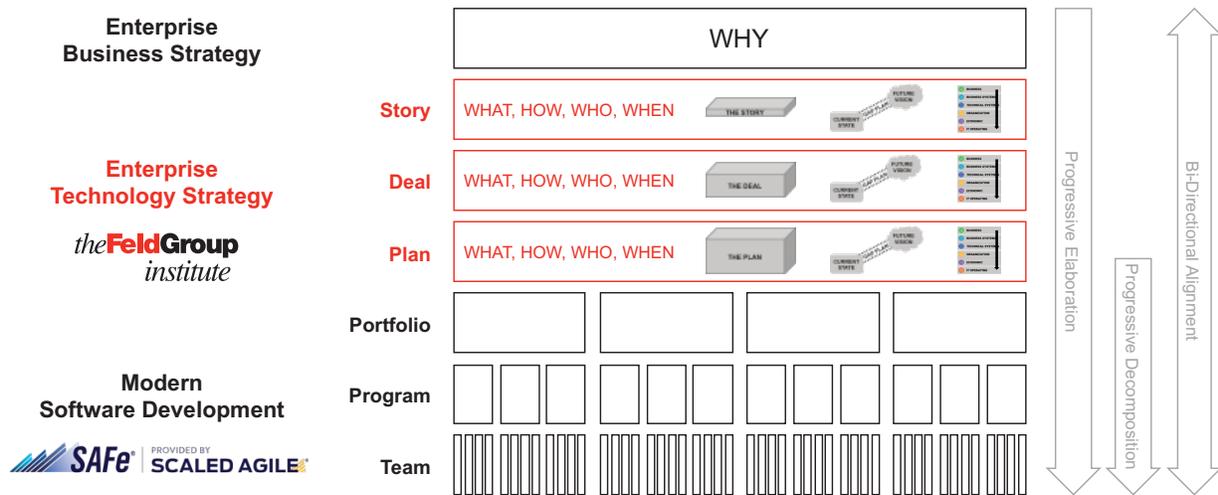
Planning in layers as we've described here happens in a particular sequence when beginning a transformation. The initial alignment takes place by doing the Story, or topline, version of the Enterprise Technology Strategy. Given buy-in on the Story, more detailed planning and negotiation begins to shape the Deal while some early change moves can begin. Following executive agreement on the Deal, the change continues to build some momentum and gets focused on a key area of the business while the Plan, for the first 9-18 months of the journey gets created in more detail and certainty to become the execution Plan of Record.

Once the transformation has started in this way, then the ongoing governance, adjustment, and extension of the Enterprise Technology Strategy must become a strong organizational capability. These layers must be revisited, revised, reassembled, extended out over time and agreed to again at any time when there is a significant business or technology change and on a regularly scheduled cadence.

Layer	Time Horizon	Minimum Frequency for Updates
The Story	5 Years	Annual
The Deal	3 Years	Semi-Annual
The Plan	18 Months	Quarterly

# Conclusion

The Feld Group Institute has a proven framework for transformation and for formulating and leading from an Enterprise Technology Strategy. Scaled Agile, Inc.'s SAFe has a proven framework for modern, agile, software development. When combined together in a large enterprise, the active use of these frameworks by strong business and IT leaders eliminates traditional blind spots between business strategy and technology execution.



The Feld Group Institute’s approach to transformation planning and leadership majors in thinking, justifying, planning, and architecting BIG – multi-year, enterprise-wide, all three essential outcomes. The resulting Enterprise Technology Strategy takes input from and clarifies, the WHY from the Enterprise Business Strategy and translates that into the WHAT, HOW, WHO, and WHEN. This provides the context for effective, modern software development. SAFe is the most successful and widely adopted approach for large enterprises to learn agile software development practices and transform their ability to develop and implement SMALL – continuous delivery of business value in a high-frequency cadence with necessary quality and minimal risk.

SAFe and TFGI Transformation framework complement each other and together create alignment across business and IT, from top-down business strategy to team-level execution and development of software, and across Portfolios, Agile Release Trains, and Teams. Large enterprises whose business and IT leaders commit themselves to each of these two frameworks – and more importantly to the integration and synergies of these two frameworks – set themselves up for success in this modern era of digital transformation. As a combination, The Feld Group Institute’s and Scaled Agile Inc.’s frameworks are the best way to plan, lead, execute, and deliver on the three essential outcomes – Business, Architecture, and Productivity – that are required for true business agility.