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Agile-Adaptive Management Model:

Building the Bridge from Innovation to Business Value

by David Spann

This *Executive Report* provides a model for agile-adaptive management and its associated business practices to help companies define purpose, hire great people, create something innovative, learn from things that work and don't work, and reliably deliver value-added results. The report provides a set of management tools and beliefs used to focus individuals, teams, and entire organizations on simultaneously creating value, building quality products/services, and meeting the customer's constantly changing needs.

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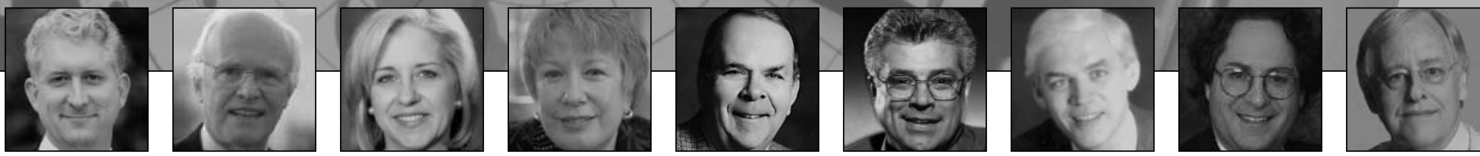

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Agile-Adaptive Management Model: Building the Bridge from Innovation to Business Value

BUSINESS-IT STRATEGIES ADVISORY SERVICE

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by David Spann

The most compelling opportunity in business today may be the ability to sense and quickly respond to changes in the marketplace. Companies like Toyota and Google are making headlines with their agility and adaptability, through concepts such as using small team processes, developing quality products and services, and most importantly creating exceptional business value and customer satisfaction. (Google's stock price at the end of 2005 was up from its IPO price of US $85 to $415 and is projected to go to $600 by the end of 2006.) Likewise, companies in financial services, healthcare, retail, and even construction and manufacturing are utilizing similar practices and seeing exceptional results. Being agile and adaptive, however, is not rocket science. These companies rigorously focus on differentiating their organization in the marketplace, stick with some basic management principles and practices, and enable their people to do great things.

So what should a company do if it wants to emulate this type of success? Should it dedicate one day a week for employees to work on anything they'd like? Will your CFO sign off on brightly colored medicine balls, lava lamps, and assorted gadgets and toys? On free meals, healthy juices, and snacks in abundance? Do you have the space and money to provide a bevy of conveniences like onsite laundry, hairstyling, dental and medical care, a car wash, day care, fitness facilities with personal trainers, and a professional masseuse? Google did all of these things; does that mean you should? No.

You have many options, obviously. If your goal is to use your organization's creativity as a differentiating factor, however, many of the old approaches to managing an organization may not be appropriate. The intent therefore is to offer an alternative model, an agile-adaptive management model that translates business purpose into creative and innovative solutions quickly and reliably. The associated management techniques are pragmatic, familiar, and represent best practices in organizational theory and application. Together, the model and techniques provide one consistent organizational approach to building business value, profiting from changing conditions, and meeting customer demand instead of focusing on separately improving functional areas like technology, engineering, R&D, or manufacturing.

This *Executive Report* begins by detailing what makes up the agile-adaptive management model. It then looks at why some organizations find it hard to implement this type of approach and provides some possible solutions to those challenges. With those questions answered, several techniques are then offered to address how to apply the model. The report concludes with a summary of the principles and practices found in the agile-adaptive management model and suggests that you try something, learn from it, and keep what works.

What I hope you discover, and what others in life sciences, IT, financial services, and government already have discovered, is that the more an organization can define and focus on its value proposition and enable its people to be creative in that pursuit, the more productive it can and will be. Enjoy the journey.

WHAT MAKES UP THE AGILE-ADAPTIVE MANAGEMENT MODEL?

Figure 1 illustrates the ongoing development and iterative nature of the agile-adaptive management model. The steps show how purpose or organizational value can be translated into productive and innovative results, while the arrows describe a continuous integration of innovation and knowledge utility.

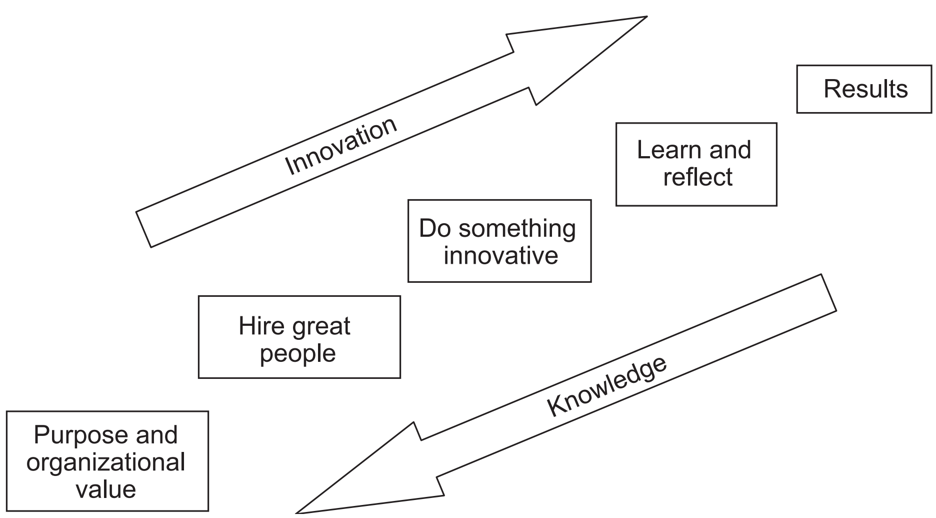

Figure 1 — Agile-adaptive management model.

The first step shows how fundamental purpose is to all things within the agile-adaptive organization and that hiring is a close second in priority. The third and fourth steps of “doing something innovative” and “learn and reflect” occur iteratively. Once the purpose and people are in place, individuals can iteratively do some work, stop, reflect upon what worked well and what could be improved, and proceed with continuous improvements. The final step is to focus on the prize and deliver results in a way that meets or exceeds customer expectations, builds business value, and creates quality products and services. Likewise, the top arrow displays the organization’s ability to be innovative and creative by following these steps, while the lower arrow illustrates that the knowledge created in the process can be used to inform and improve future projects.

This model can be applied at all levels of the organization from the

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executive boardroom to the project and task level. It can be applied to a variety of projects from the most complex IT enterprise deployment project to planning a company party. It begins to breakdown, however, when people act without regard for others and when the organization begins treating the individual as another cog in the firm's machinery.

So now that you have a basic introduction to the model, and before I go into detail about the associated agile-adaptive management techniques, I need to resolve some of the most common barriers organizations will face when they try to implement this approach.

WHAT GETS IN OUR WAY?

I doubt there is a serious-minded CEO anywhere in the US who wakes up on a given morning and says, "I'd like my company to be more mediocre than it was yesterday." And if there were such an individual, I doubt the board of directors for that company would allow much time to elapse before sending that person a pink slip. So if the interest is there, what keeps most organizations from reaching higher levels of success? What typically gets in the way?

Based on my experience, and that of many of my colleagues and others in the field of organizational development, the major impediments tend to be:

- Poor definition of and lack of a clear focus on the firm's value proposition/business purpose
- A lack of common business language and trust across functional boundaries
- Structural issues including hierarchy, incentives, and policies
- Assumptions about time, space, and the nature of human relationships

This section examines each of these obstacles in detail.

Value Proposition(s)

Amazingly enough, the lack of a clear and well-defined value proposition or business purpose is probably the main thing that gets in the way of success. While most organizations do have a vision and mission statement hanging around somewhere, do these statements actually direct the actions of the firm? Do people wonder how they can better align their work with these forward-thinking statements? Are budget items reviewed on the basis of their ability to meet mission-critical or market-differentiating objectives? Can the leadership team define the organization's value proposition(s)? Will team members be able to map the timebox objective back to the business purpose?

The real question is not whether you can answer yes to the above questions, but whether you and your employees are clear about your company's differentiating characteristics. Do you not only walk the talk, but do you talk the walk? Do you find interest in wandering around? Are people excited to show you what they've been doing? Is your intense interest in what they are doing rubbing off on them? Are you talking about the company's purpose as if it were the only reason you get out of bed every morning?

And if you are doing these things, are you also subjugating all work processes to that business purpose? Can you and your direct reports, and their direct reports, and so on, identify how your jobs relate to the value stream of the company? Is your organizational structure assisting or causing unintentional dysfunctions? Are there policies (e.g., in accounting and human resources) that may be inhibiting innovation? Do your incentives and rewards align with what you are asking your people to do?

When I do an organizational assessment for a client, one of the first things I ask is: How would you describe the mission of this organization? Followed shortly by: How do you define your job within that context and what could this organization do to better meet the needs of its customers? Interestingly, the single most common answer I get from the people building the customer solution is: we need to know what our customers really want because we hardly ever talk with them — someone else does that. In most cases, the firm is taking a guess at what the customer wants instead of really getting to know what the customer needs. Without this knowledge, the firm will not be able to keep its competitive advantage for very long.

Likewise, when I focus on work processes and reward systems during those assessment interviews, I generally find two things: (1) hardly anyone knows how to describe the processes in which they work, and (2) the reward system plays little to no role in motivating them. These results tend to be indicators of other cultural issues, but one thing becomes very clear: the organization's value proposition is not being accomplished as well as the mission statement might imply.

As we'll discuss in more detail later in the report, Niel Nickolaisen, CIO of Deseret Book, developed a prioritization system that classifies projects by the value they bring to the business, specifically into market-differentiation and mission-critical categories. The Nickolaisen strategy and portfolio analysis process, the charter and timeboxing (setting a period of time in which to accomplish some task), and the daily standup sessions (all discussed later in the report) are designed to help communicate the organizational value proposition(s) into business purpose and finally into high-priority work for team members. The goal is to have a clear line of sight between the leadership intent and the actual results created by the organizational effort applied to that intent.

Common Business Language

I am always intrigued by the assumptions we use in our conversations and the impact they have on everyone involved. While those assumptions and their underlying beliefs are correct in enough situations to create and perpetuate our communication patterns, they also end up putting us in embarrassing situations and causing unfortunate problems. Take, for example, a recent conversation between a senior VP for marketing and his IT counterpart. The marketing VP wanted to know if the software application was going to be finished "soon" (meaning next week sometime), to which the IT VP said, yes, it would definitely be finished "soon" (meaning code complete and tested would occur sometime in the next month). Since the marketing VP was counting on the ability to demonstrate the application to a major customer in the next week, this conversation, unchecked, could have resulted in a significant problem. Thankfully, the IT VP checked the marketing VP's assumption and, upon learning about the impending need, suggested a way to use this opportunity to both impress the customer and learn something about the application before they completed the project.

The major lesson in this example is to always check the person's understanding or assumptions before jumping to conclusions or agreements. There are two ways to make sure you do this on a regular basis: (1) check the definitions, assumptions, knowledge, and skill level of the other party before you make binding agreements; and (2) when you are speaking, try to state your intent first, be explicit about your assumption, and question your inferences. For example, because the IT VP was practicing short iterative development cycles, he could help meet both the marketing VP's intent and his own need to further test the product. Left unchecked, however, they would have both been embarrassed, and the company may have suffered.

A greater challenge in communicating well, however, is checking the underlying beliefs that form the foundation for our language, our assumptions and inferences, and the resulting behavior we conduct. Imagine being the captain of the Titanic just before it hit the iceberg; your assumptions and beliefs led you to believe a small piece of ice could never do any harm to such a mighty vessel. In reality, it wasn't the ice above the water but the solid mass below that sank the ship and killed so many people. Likewise, it is our underlying beliefs, values, and assumptions about how the world works that lie below the surface of our behaviors.

The best business example of how underlying beliefs profoundly affect what we say and why is the management metaphor called the iron triangle. You have probably heard it before: there are three factors to project success (time, budget, and specifications or scope), and, in the end, your project can optimize two of the three, but you can never have all three because it's almost impossible to be fast, cheap, and perfect! While this statement is absolutely true in terms of what happens when these constraints are pitted against each other, the underlying belief is what is most interesting and confounding. It basically says that "no matter what happens I believe something bad will always result, and I as the manager need the ability to justify why things went wrong and track and place blame appropriately."

Unfortunately, I think organizations spend way too much time, energy, and money trying to overcome the iron triangle. The belief that something bad will always happen and that I and/or my team need to be protected leads me and others to view the world as being constrained instead of full of options. This forces unnecessary tradeoffs between time, budget, and objectives instead of focusing organizations on how to use those constraints to create business value and customer satisfaction. The result is that managers tend to push people hard, put in more control techniques, and establish tracking systems instead of focusing those same people on creatively building business value. If there is a single important idea in this entire report it would be this: people are innovative and creative not because someone pushes them to it, but because they are drawn to the purpose and the potential outcomes. And our challenge is to help define the language that can do that.

When I began teaching agile-adaptive management five years ago in Westminster College's MBA in Technology Management Program in Salt Lake City, Utah, USA, this same iron triangle belief, or myth as I now call it, got in the way of students, especially experienced project managers. They knew how their success was measured, and it had nothing to do with mission-critical or market-differentiating priorities, timebox plans, or standup meetings. Despite spending many hours arguing that agile-adaptive management delivers, it wasn't until a new belief system based in generally accepted business concepts was discovered that things started to turn around.

The major discovery in forming this new language came from the executives who participated in the "Executive Summit" breakout sessions of the 2003 and 2004 *Agile Development Conferences* in Salt Lake City and the *Agile 2005 Conference* in Denver, Colorado. My role as lead facilitator in each of the Executive Summits was to help the audience discover reasonable agile-adaptive solutions to their most pressing business issues. And, it was through the conversations about what challenged these executives or "what kept them up at night" that a new set of business propositions for managers began to emerge. These propositions or goals fell into three distinct categories:

1. Create business value (normally expressed in terms of ROI).
2. Meet and preferably exceed customer expectations.
3. Build quality products and services.

After several years of hearing virtually the same thing from multiple Executive Summit participants and other senior executives I interviewed outside of the conferences, it finally dawned on me that the language of business wasn't about the iron triangle constraints but was instead about the business objectives or purpose statements these executives offered. While time and money will always be constraints, there was, is, and always will be a greater sense of business purpose:

1. Create value-add for your business.
2. Meet or exceed your customer's expectations.
3. Deliver quality products/services.

While some will rightfully argue that these are tightly interconnected (e.g., quality is normally defined by what customers want), they do provide a different, more forward-looking set of objectives, and they change the focus from constraints to possibilities. Since making this discovery and applying it in my classes and in my consulting practice, I have noticed uncanny results. For example, project teams are more dedicated to translating the business purpose into a high-level development plan; project managers are now more willing to work with other business functions and allow customer input into the development process; cross-functional team meetings are more productive; and negotiations with executive sponsors have also improved because the business purpose is explicit and clear.

We will use the above three business purposes and the venture capital funding model later in this report to meet the best intentions of the iron triangle and the business purpose by fixing the amount of time and budgets allocated, while supporting innovative practices simultaneously.

Organizational Structure

While agile-adaptive techniques can produce significant business results, the third greatest barrier organizations face is their organizational structure — how things work or at least how they are designed to work. In a keynote address at the Utah Information and Technology Association Hall of Fame Seventh Annual Awards Dinner in December 2005 in Salt Lake City, HP's CEO and President Mark Hurd spoke directly to this challenge:

> Fundamentally, HP is a company of technologists — our heritage and our future is in technology. We need to continue to focus on the customer; be simple, more nimble, more market- and customer-focused, and we need to realign our matrix organizational structure to increase accountability and to create a clear line of sight from management to our customers.

Many other companies have also decided to "realign" their matrix organization. Even though the intent to involve all stakeholders is admirable, the resulting network of decision makers becomes so complex that even the smallest decisions become problematic. The result in most cases has unfortunately been confusion over who is in charge and a sense of complacency and frustration on the parts of executives and workers alike. For example, imagine working on three separate projects, each of them under the control of different "bosses," and your functional boss doesn't get along with any of them. Who provides your annual review? Do you align yourself with one of them to promote your own career, or do you ignore all of them and hope someone else recognizes your good work? In a situation like this, who would you identify as being on your team? If someone asked the others on those work projects whether you belonged to their team, what would they say?

What's interesting to me is that instead of changing the organizational structure and work relationships, these firms typically create additional policies with the best of intentions to improve the situation but only confuse and constrain the participants even more.

Whether you are in a matrix organization or in a more traditional hierarchy (i.e., one in which the business units are defined by function), the incentives used to motivate individuals can also have unintentional negative impacts on operations and revenue growth. For example, if sales employees are enticed by their commission structure to "sell everything" and the manufacturing employees are driven to meet the needs of current customers, one group will be pumping more and more sales into the "pipeline," while the other group struggles to meet all of the expectations. Eventually, customers get frustrated waiting for or receiving poor quality products and begin to go elsewhere. Responding quickly and confidently, the sales division will make public promises without conferring with its operational counterparts to ensure the need can be met. This vicious cycle creates obvious winners and losers, acrimony increases, and the original business purpose is completely forgotten. The best solution to this problem is to follow the old business mantra "underpromise and overdeliver," but that takes intent and assurance that the creative process can stay on target as well. To this end, this report offers several management techniques including a high-level development plan, a series of project chartering questions, and a timebox planning process.

Next to the issues of management hierarchy and incentives, an organization's accounting policies may be the next most important structural issue. The reason is that in many firms the accounting function and those who manage it have actually become the de facto center of operations. The issue is not whether control is needed, because everyone understands the need for accountability in this post-Enron, post 9/11 world. The question is whether a firm can simultaneously track costs against a proposed budget while also leaving enough flexibility to meet changing customer expectations. As indicated earlier, the venture capital model will be offered as one way to ensure corporate finances are spent well, but there will be additional information offered on keeping the development process transparent and accountable.

Assumptions about Time, Space, and the Nature of Human Relationships

What we see in terms of human behavior is only the tip of the iceberg. The beliefs and assumptions that underlie those behaviors have much more of an effect on us and our organization than we normally understand. The assumptions we make about time, space, and the nature of human relationships impact how we organize, operate, and generally relate with one another, which when put together affect how well we do in growing and sustaining a business organization.

Likewise, much of the belief structure guiding the agile-adaptive management model also came from considering my assumptions about time, space, and the nature of human relationships. While you don't need to emulate them, you do need to understand my beliefs in order to apply the management techniques offered in this report. Therefore, the beliefs I know I used (there may be some I subconsciously used) to create the agile-adaptive management model are presented in the following sections.

Time

Since time intervals are integral to determining business value and because some people see time as being a constraint while others see it as being limitless, discussing assumptions around time should help provide a context for several of the agile-adaptive management techniques:

> In the United States most managers view time as "monochromic," an infinitely divisible linear ribbon that can be divided into appointments and other compartments, but within which only one thing can be done at a time … . Time is a valuable commodity that can be spent, wasted, or made good use of; but once a unit of time is over, it is gone forever. [11]

What this means in the typical US business culture is that if you say you will be finished on a certain day and/or at a certain time, you are expected to meet that obligation; otherwise, you have either wasted time or at least not put it to its best use.

Time also can be considered differently depending on your rank within an organization:

> The higher the rank, the longer the time horizon over which a manager has discretion … . Senior managers assume that one must plan in cycles of several years, whereas such an assumption may not make sense to the middle manager or the worker, whose time cycles are daily, weekly, or monthly. [11]

The agile-adaptive management model's underlying belief structure regarding time includes the following ideas:

- People will delay the inevitable, even when it is in their best interest to proceed. That's why constraining their timeframe through timeboxing is such a good idea.
- We learn best by looking back at what we did. This is why reflection workshops are important. We also tend to quickly forget specifics or reconstruct details to meet our self-interest; this is why reflection workshops should occur at the end of every iteration or timebox.

Space

From one perspective, since "time is linked with efficiency, one [needs to be] concerned with using it effectively; time can be wasted, saved, or well used; and its efficient use requires a space layout that allows a minimum of wasted time" [11]. Strangely enough, this generally translates into facility layouts that put barriers up like doors and walls and forces people into functional units.

On the other hand, when time is viewed as what can be done productively within a specified interval or increment (e.g., in short iterative agile project increments), the facility where this work occurs may "require open areas, easy access, and comfort, to permit longer periods of contact … for building relationships and for solving complex problems where information is widely scattered and highly interactive" [11].

In terms of its effect on the social construct of an organization, "shared meaning is not what is crucial for collective action, but rather it is the experience of the collective action that is shared" [11]. This implies that if a person or persons cannot fully experience or be present for the collective action (e.g., being on a teleconference, living in another place), shared meaning is less likely to occur.

The agile-adaptive management model's underlying belief structure regarding space includes the following ideas:

- Productive innovation requires client/customer acceptance; without it, the innovation is a solution looking for a problem to fix. This is why we promote getting the development team close to the customer's real environment.
- People need experience with each other to build the familiarity and comfort that precedes trust. This is why teams need to work together and share common experiences.

The Nature of Human Relationships

In the final analysis, the agile-adaptive management model and the associated management techniques are designed to bring out the best in human nature. They support the best of human interactions by working in small teams, depending on joint learning, and providing motivation through self-interest. Conversely, they also help corral the less preferred human characteristics like procrastination and justification with techniques like timeboxing and reflection workshops.

The model depends on people participating, but the greatest challenge in organizational life is to develop a system that enables people to be participants instead of forcing them into hiding:

> At the core of every culture will be assumptions about the proper way for individuals to relate to each other in order to make the group safe and comfortable … this set of assumptions deals more with the nature of the group itself and the kind of internal environment it creates for itself. [11]

The agile-adaptive management model's underlying belief structure regarding the nature of human relationships includes the following concepts:

- Change is painful, especially when we don't see it coming. That's why we try to elicit emerging issues every day in standup sessions and conduct tests throughout the project lifecycle.
- Motivation is created when self-interest connects with organizational purpose. This is why the Nickolaisen model focuses on value propositions and planning sessions to encourage individuals to self-select the

tasks to which they will be accountable.

- A common language and a common use of that language are imperative to understanding what each of us thinks, feels, and believes. This is the reason why some teams post a sheet to record new acronyms and definitions and why the iron triangle was revised.

At this point, you have been introduced to the agile-adaptive model, the beliefs used in its construction, and some possible solutions to the normal organizational barriers you may face. Even though some people define some of the agile methodologies as being light (meaning they don't require much hierarchy or fanfare) the agile-adaptive approach to organizations will obviously take work, dedication, and an interest in creating excellent working environments.

The next section provides some important management techniques to help you implement this model.

HOW DOES AN ORGANIZATION APPLY THE AGILE-ADAPTIVE MANAGEMENT MODEL?

This section focuses on the management techniques that are useful for implementing the agile-adaptive management model. These techniques fall under the steps in the model as outlined below:

- Step 1: [Define] purpose and organizational value
  - — Plan with a purpose in mind
  - — Nickolaisen model for strategy and portfolio analysis
- Step 2: Hire great people
  - — Know what you want
  - — Look below the surface (focus on behavior and performance)
  - — Search for boundary crossers
- Step 3: Do something innovative
  - — Project chartering process
  - — Timebox/blitz planning
  - — Meeting management
- Step 4: Learn and reflect
  - — Leadership review and other reflection techniques
  - — Collaborative decision making
- Step 5: [Deliver] results
  - — Venture capital funding model (iron triangle revisited)
  - — Transparency and accountability

Step 1: [Define] Purpose and Organizational Value

I begin many of my courses with an interactive exercise where a group of six people are given a stack of paper, a pair of scissors, two pens, and one straight edge that has no measurements. The group is told it will be given the specifications for this project and then two minutes to ask any questions it needs before beginning; after that, it will have 13 minutes to complete the project, but it cannot ask me (the customer representative) any further questions. The specifications are as follows: "the customer wants 500, 1-inch squares, cut and stacked." If you were part of this exercise, what questions would you ask?

Plan with a Purpose in Mind

The principal of "plan with a business purpose in mind" is fundamental to everything else in this model. It drives the type of outcomes we might want to accomplish, and it informs the criteria we use to judge the success once a plan or strategy is implemented. Planning processes therefore are only as good as the purpose that drives them. So, based on that opinion, a plan without clear purpose is futile.

Defining purpose though is harder than most people think. We tend to fall back on our scientifically trained education and decompose a problem into a set of requirements instead of understanding what the client or the situation really needs. This approach, while based in sound reasoning, may limit us to building something that not only wasn't wanted, but that also missed what was really needed. For example, when I ask about project purpose, teams often hand over a large pile of specification documents. While that may sound like a reasonable response, my experience says that if in the end we really do build what the customer wants (normally requiring much rework), most of what was said in those documents will be irrelevant. Balancing this need for a guiding purpose and not overengineering the plan to get there is the creative difference between companies like Google and those that want to be like Google.

My suggestion for discovering purpose is to interview one or more end users/customers, preferably in the environment where they will use your product/service. If appropriate, probe for information that describes their current situation, the problem as they understand it, the implications associated with fixing the problem, and the real benefits their work produces. For example, a development team asked to build a new accounting software application will be more effective if the members can see with their own eyes and hear with their own ears what the user currently lacks and, more importantly, discover the benefits that the customer gains from an improved application. In other words, they are searching for business purpose.

Planning therefore is about describing the initial intent; defining and refining the purpose; and giving a sense of which direction to take. The Nickolaisen model will help further hone the organizational value propositions or business purpose, which should give more context and guidance to those managing and working on future projects/initiatives.

Nickolaisen Model: Strategy and Portfolio Analysis

Nickolaisen's mission-critical and market-differentiation approach to strategy and portfolio analysis is the first step in translating organizational purpose into productive work. It is simple enough for most everyone to understand, and it helps define priorities throughout the organization. It forces tough tradeoffs at the strategic and portfolio management levels instead of unintentionally forcing those decisions on lower levels of the organization. As CIO for Deseret Book, Nickolaisen used this approach to reduce IT project timelines, costs, and resource requirements by 40% to 70%. He therefore was able to focus the organization's attention on the most important work instead of trying to perfect something that didn't really add business value [9].

One of the stories Nickolaisen recounts about paying attention to strategy relates to a time management company. Apparently, this company determined that the length of time it took from customer order to the time the product was shipped was critical to its long-term success. Unfortunately, no one questioned how true this assertion was. So the company spent millions of dollars and several years reducing the turnaround time from several days down to a few hours. In reality the people who order these time management products are so used to ordering months in advance that the turnaround speed wasn't mission-critical (important to the firm's ongoing mission) or market-differentiating (the customer didn't need or want this service).

The basic premise of the Nickolaisen model (see Figure 2) is to prevent this type of misallocation of resources from occurring by comparing all projects or organizational initiatives against two criteria: mission criticality (M-C) and market differentiation (M-D). His experience shows that this technique significantly helps an organization not underinvest in areas where it needs to maintain and improve its leadership position and not overinvest in areas where it could maintain parity.

The quadrants in the Nickolaisen model are as follows:

- **Low M-C/high M-D —** initiatives that provide the firm a competitive advantage and/or preferred customer recognition but are not part of the firm's core competency. For example, most of the major PC manufacturers choose to use the Intel processor instead of making one of their own. Projects or processes that fall into this category may be prime candidates for partnerships or strategic alliances or mergers and acquisitions.

- **Low M-C/low M-D —** initiatives that tend to fall into a basic maintenance-like janitorial category. They can be important, but if interrupted, the organization will survive.
- **High M-C/low M-D —** initiatives that must be done well or the business is at risk, but they do not differentiate a company (e.g., billing, shipping, and accounting). These are all necessary for the company's success, but investing heavily in inventive ways to generate invoices or balance the company finances will generally not gain additional customers or increase market share, even though both of those tasks are vital to the firm's viability. These initiatives should be completed to a parity standard with the rest of the market (i.e., good enough or sufficient enough).
- **High M-C/high M-D —** initiatives that provide the ability to fulfill the market needs better than your competitors. These initiatives should receive the most resources and organizational focus. This is the area in which the organization is betting its future.

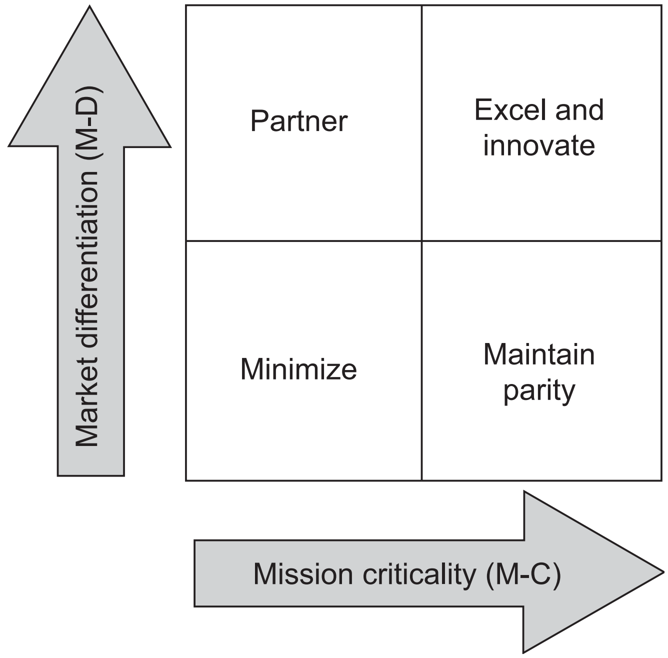

Figure 2 — Nickolaisen model.

As an example of using the Nickolaisen model, imagine a company has gone through this categorization process and has decided that it can best differentiate itself by focusing on its intellectual property in IT. Also imagine for simplification that this company only has a technology group and an operations group. The operations group sells customer solutions and ensures deliveries are prompt, while the technology group puts together the hardware, software, and development expertise to support the operations group. The technology group has also created a trademarked software application that helps customers resolve most problems without ever having to wait for a human operator.

Based on its decision to focus on IT as a differentiating objective, the company has decided that initiatives to improve the operations component will be implemented at market-parity level (high M-C/low M-D), which means it cannot ignore this area of the business, but it doesn't need to make it any better than that of its closest competitor. Conversely, the company has decided the initiatives surrounding the trademarked application and other technology solutions will be what differentiates the company (high M-C/high M-D) and should therefore receive greater focus and investment if they are truly going to be differentiating and able to secure competitive advantage (see Figure 3).

Just to repeat, this does not mean that the operations function is unimportant or that it should receive less budget allocation, but rather allocation will not be

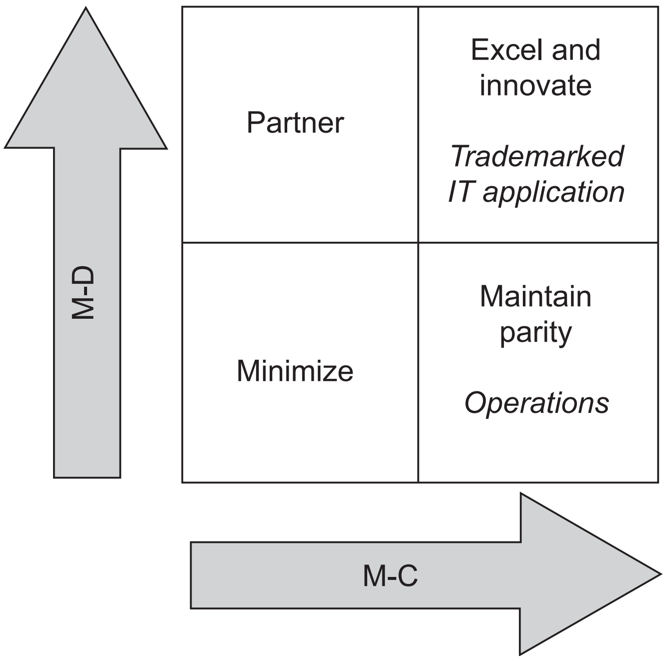

Figure 3 — Nickolaisen model, applied.

intended for a best-in-class operations center — it will meet the industry standard.

Step 2: Hire Great People

Regardless of the business purpose, the people who are going to manage and accomplish the work in an agile-adaptive environment are the key ingredients to success. They must be able to work well together and be independent enough to develop new ideas. Managers and leaders must be able to concurrently balance the need for productivity with the promise of something more valuable just around the corner. Everyone must be accountable for their own work, while the organization must be able to offer responsibility to the lowest levels possible. Eventually, everyone involved in developing a new solution needs to feel involved in creating value and needs to feel like their work is respected.

Know What You Want and What You Are Willing to Give

During the summer of 2005, several colleagues and I conducted 65 personal, in-depth surveys with corporate executives and other technology leaders regarding their ability to attract, develop, and retain top executive talent in Utah [10].

Since the state may be considered isolated (i.e., not on either coast), and the "myths" about Utah's culture sometimes constrain people from moving here, we felt the lessons learned by the most successful companies could help others, both in Utah and beyond, be more successful in attracting exceptional executives. The executives with the greatest track records in terms of revenue and market share said there were three things they did well:

1. Spend significant time with new executive recruits to consider and then integrate their needs and those of their family to the business and the community; essentially, assure the fit is good between the candidate and the management team.
2. Assure the candidate understands the importance of his or her role and determine how excited the person is to be a part of "changing the world."
3. Share the company's resources appropriately: provide sufficient salary compensation and benefits to be competitive, while ensuring ownership/equity that pays well when the company is successful.

Generally, these successful companies knew what they wanted and what they were willing to give to acquire the talent. As one executive said, "I invite candidates to my mountain home in Park City; we go hiking, mountain biking, golfing, etc., and if at the end of that time they don't like playing with me or vice versa, then I know it can't be a fit. If they pass that test, then I introduce them to my management team and see what they say."

Look Below the Surface (Focus on Behavior and Performance)

Several of the executives in this study said they wished they had followed the Park City executive's approach and looked at the person's behavior under certain conditions more than relying on the resume and functional interview sessions. In the case of agile-adaptive project management clients I coach, I've found similar results: quite a few companies are disappointed when they hire traditionally successful project managers for their agile-adaptive teams. Most of the problems emanate from the new hire's strict reliance on timeframes and requirements documents instead of putting in place techniques that allow the team to reliably produce great ideas. Eventually, these people become glorified note takers and schedulers, or they leave the project because their behavior just doesn't fit.

In fact, through my work as a management and executive coach, I've found this problem of behavior fit is the single greatest challenge for teams at any level of an agile-adaptive organization. If the person's behavior fits the context or culture, they seem much more likely to be productive, and if not, their best avenue for success is to change the culture to fit their behavior (much easier said than done) or leave. And in the agile-adaptive culture, where team decision making, joint responsibility, and close customer interactions are common, behaviors that lean toward a command-and-control approach just will not fit.

One way to protect yourself in the candidate evaluation process is to put the person in several different environments to see how he or she fits and then ask the candidate and the team how they felt about the experience. Another more typical approach is to take the candidate into several different situations where his or her behaviors might be exposed, for example, to a golf course or bowling alley. The approach I've begun taking is to interview the team and the candidate separately regarding things like how they view time and incremental deliveries, their approach to making decisions, the definition of trust in the workplace, and the differences between accountability and responsibility. At the end of those interviews, I'll share the results with the person(s) making the hiring decision to see if a cultural fit is likely.

Search for Boundary Crossers

When it comes to looking at the performance candidates present in resumes, I suggest my clients look for evidence that suggests the candidate can build collaborative relationships across organizational boundaries. This ability above everything else seems to be a precursor to the candidate's ability to succeed in an agile-adaptive environment. With this background, the candidate can easily learn more collaborative techniques like timeboxing and iterative design. Without this ability, the candidate and the organization will be trying to overcome their historical management instincts as well as trying to apply new group development techniques. While I do believe the "leopard can change its spots" if everyone acknowledges the challenge, it is typically an indicator that the agile-adaptive approach will be in trouble.

One of the easiest ways to find out about the candidate's ability to be a boundary crosser is to ask those who represent the "other side" in an organization and those who might normally be internal competitors (e.g., ask the marketing people about their relationship with someone from R&D or vice versa). You will be looking for your candidate's ability to find creative ways to meet a customer's needs, his or her amicability under fire, the track record of pulling troubled projects out of the fire without throwing someone in as a sacrifice, and so on. Unfortunately, these people tend to be rare because organizations seldom recognize and elevate this type of individual. On the other hand, these are exactly the type of people who will make an agile-adaptive environment successful.

Step 3: Do Something Innovative

The agile-adaptive management model was designed to ensure innovative and reliable solutions are created in reasonably short periods of time. To meet that goal, organizations must understand their mission, hire good people to create innovative solutions, and actually do something productive. They cannot continually stay in a research mode or be hampered by endless planning sessions. They must get something valuable accomplished, and they must learn from the mistakes and from the things that worked well if the individual(s) and the organization are going to grow and improve.

To that end, Chris Argyris, an organizational development researcher from MIT, created an approach called Action Research. His claim is that we learn only by taking action and then reflecting on what happens: "Action conjures up images of individuals doing, executing, and implementing … to produce intended consequences" [2]. It is the result of "individuals as they interact with others in the world of practice … action is not simply the discovery of new ideas or the development of new policies; it is the implementation of these ideas or policies and the evaluation of the implementation's effectiveness." The intent therefore is to do something and then learn from that doing. And in the agile-adaptive methodologies, this is reflected in the philosophy of doing "just enough planning to go forward," iterative development practices, and ample review and retrospective practices.

Project Chartering Process

Once the firm has defined its value propositions and sorted its initiatives into the mission-critical and market-differentiating categories, it may now want to consider putting together a charter for those initiatives/projects. A colleague and I created a succinct outline of questions we think should be considered prior to project initiation. The answers should help an organization translate its value proposition(s) and its portfolio priorities into a high-level development plan and series of working agreements for the specific project/initiative. They will also help set priorities, ensure appropriate resources are allocated, and define the criteria by which "success" can be judged throughout the project.

If the project is complex, the players are new to each other, and the technology solution is totally unknown, organizations may want to complete the entire analysis, which may take as little as two to three days to complete. On the other hand, if the project is being conducted by a team whose members know each other very well and the technology solution is reasonably well understood, the group may choose to review all of the sections below to assure they haven't made any poor assumptions, but not spend much time on documenting anything more than the high-level development plan and the executive sponsor(s) commitment.

Regardless of the need for documentation, the success of this charter depends upon three assumptions:

1. The organization has agreed in concept to the analysis and recommendations made in the chartering process and that the chartering process reasonably translates the company's strategic plan and value propositions.
2. The organization supports iterative and incremental development processes so that the lessons learned can be applied quickly and appropriately to better meet the business objectives at any time.
3. The organization has chosen someone (probably a project manager) to coordinate the expectations laid out in the charter (see below).

Note that this process is iterative so lessons learned from one section in the charter should feed the next process as well as reflect back on those already completed — change is expected even in the creation of the charter document!

Even if a team does not want to call something a charter, it should at least consider the following planning components that make up a charter:

1. **Business case —** the purpose of a business case is to either prove or disprove whether the

initiative meets the organization's value proposition(s), associated goals, and business objectives. What are the market and/or financial reasons for this initiative?

2. **Initial project definition —** the purpose of a project definition is to set the boundaries or scope of work. It answers the questions: Who are the team members? What are their roles and responsibilities? What are the risks, constraints, and assumptions?

3. **Defining the project community and working agreements —** the purpose in this section is to complete the core team list and the working agreements the team members may need to work well together. Who are the stakeholders and how will they be involved? How and when will the project be reviewed? How will the end users/customers be involved/integrated into the development process? Will change requests and issues be escalated above the team? How will decisions be made?

4. **High-level requirements definition —** the purpose here is to define the high-level requirements and business process impacts and to update the risk log so that the project scope is further refined.

5. **High-level development plan —** the purpose of this section is to put the pieces together visually so there is a high-level understanding of which requirements will be done and when they are likely to be completed as well as to plan other things like team building activities, demos, reflection workshops, and retrospectives.

6. **Leadership commitment —** the executive sponsor(s) must play the role of arbiter to ensure the organization's resources are well spent and can support the project going forward. This is also the reason we include the following statement above the signature line:

   Given the Business Case and the answers created through the Chartering Process, I (we) will:

   - Support this project with the needed financial, technical, and human resources
   - Be involved to the extent that my (our) leadership assists the team
   - Initiate the appropriate processes to terminate the project if it is not meeting the organization's, end user's, or customer's expectations

Timebox Planning

In order to "do something innovative" in the agile-adaptive management model, people have to get together and focus on developing an end result. By the time a team sits down to do timebox planning, it understands the organization's value (Nickolaisen model) and how that value is translated down to this project through the charter's business case, working agreements, and high-level development plan. The challenge at this point is to stay focused and not overengineer or go off course. Like a person who wants to learn to drive and so takes the courses, buys a car, puts on the safety belt, and heads off to the interstate, you can't let go of the steering wheel until you get the car back in the drive.

The purpose of a timebox therefore is to bring out the best in human nature by engaging small teams of people to be creative, develop common experiences, and expect great things to emerge. A timebox also helps corral the human tendency to procrastinate, to avoid being tested, and to learn from our mistakes. The point is that we cannot give up the rigor of "just enough" planning, followed by doing things well together and reflecting upon what we have learned. Rigor, routine, and emergence are all, therefore, critical to the success of the agile-adaptive management model.

The length of most timeboxes is typically two to six weeks: Extreme Programming (XP) may be as little as one week, Scrum is typically 30 days, and the Dynamic Systems Development Method (DSDM) is no more than six weeks. I prefer the two-to-three week time horizon so that enough time has transpired to get a good track record of events, but not so much time that people begin to forget the details needed to make future adjustments.

One of the keys to this approach is the ability for team members, not the project manager, to define what they will commit to doing and by when. Likewise, the team needs to assure the timebox purpose is traceable back to the charter and thereby assure a small piece of the organization's overall value proposition is being implemented.

As a minimum, I suggest the following tasks be completed during a timebox planning session (amended blitz planning technique [3]):

- Define a general theme or purpose for the timebox.
- Brainstorm tasks for each requirement/deliverable.
- Allow team members to self-define who will do what.
- Estimate time needed for each assignment.
- Identify dependencies between tasks.
- Optimize with concurrent processes where possible.
- Define risks, assumptions, and other constraints.
- Review the above to ensure nothing is missed.
- Capture/record as appropriate.

In most cases, I also like to insert a step after "brainstorm tasks" that defines each of those tasks according to one of three categories:

1. **Investigation —** those tasks that will inform us more about the criteria or deliverables in this time horizon; this may mean interviewing the customer, doing some basic research, setting up the testing protocol, and etc.
2. **Refinement —** those tasks that help give clarity to the problems, including some tests, prototypes, models, etc.
3. **Consolidation —** in which tests are completed and the deliverables are now ready to be integrated into the system.

This process helps break the requirements into smaller pieces and make the dependencies between them more clear.

Meeting Management

By the time we get around to thinking about meetings, most teams are ready to scream "uncle" and say "I've had enough with this do-learn-reflect cycle of creativity." But like I said earlier, the creative process, while fun in the moment, takes dedication and perseverance. Meetings might be seen as the engine that runs everything else: planning sessions, reflection workshops, issue resolution, and so on. If not done well, the wheels begin to come off the agile-adaptive vehicle.

For me, there are two types of meetings that pertain to the agile-adaptive management model: update and work. The update meeting is where information is shared but no work is done, and work meetings are those driven by purpose and a focused agenda. While other meetings do occur in which updates and work are cojoined or in which there is just dialogue for the purpose of enjoying each other's company, I focus on updates and work sessions to propel the creative process forward.

One word of caution: status meetings (which are nothing more than prolonged update meetings) should be managed with the "just good enough to go forward" perspective. They are typically nothing more than an opportunity for individuals to get up and grandstand or pontificate about meaningless data. Ask them in advance to get their presentation down to the essence within five minutes of speaking, allow five minutes for Q&A, and then be prepared to ask them to sit down. Most of what is talked about in these meetings can actually be sent out in reports or brought up in the daily standup sessions.

The purpose of a daily standup session is to celebrate that which went well the day before, to prepare to attack the current day's workload, and to flag anything that may be coming up in the future that the team needs resolved. It is called a daily standup (or in the evening a "wash-up") session because it is short enough in duration, only about 10 to 15 minutes, for everyone to stand and not get too comfortable. When in the day you schedule your session is not as important as doing it routinely.

Given the list of tasks in the current timebox, the standup session agenda is as simple as:

- What was completed yesterday?
- What is scheduled for today and how can we help?
- Is there anything emerging we need to consider?

Many teams will meet wherever its timebox development plan is posted so it can use this as an artifact within the conversation. Dee Hock's famous work on developing the software applications for Visa includes the following story about one way to set up a daily review:

> An entire wall became a pinboard with every remaining day calendared across the top. Someone grabbed an unwashed coffee cup and suspended it on a long piece of string pinned to the current date. Every element of work to be done was listed on a scrap of paper with the required completion date and name of the person who had accepted the work. Anyone could revise the elements, adding tasks or revising dates, provided that they coordinated with others affected. Everyone, at any time, could see the picture emerge and evolve. They could see how the whole depended on their work and how their work was connected to every other part of the effort. Groups constantly assembled in front of the board as need and inclination arose, discussing and deciding in continuous flow and then dissolving as needs were met. As each task was completed, its scrap of paper would be removed. Each day, the cup and string moved inexorably ahead [8].

While the idea of reviewing your plan every day is a simple concept, and relatively easy to institute, teams can begin to get bored with it if everyone feels the need to speak; the topics then become mundane, and people stop showing up. My recommendation is to set a ground rule that states: "We only discuss topics related to the timebox plan or the project at large; all others can be taken offline after the standup." The key to success is to ensure people are engaged and, if not, to make sure the meeting is adjourned early if nothing else remains to be announced — this is not a problem-solving meeting!

Emerging issues should be managed by the team lead or project manager outside of this daily session and, if appropriate, raised up through the issue-escalation process (agreed to in the chartering process). The intent is to keep the daily standup short, not encumber its purpose with other issues, and ensure upper management is forewarned so it can be helpful in resolving the issue before it becomes a significant problem.

If an issue or some topic larger than what can be accommodated in the standup session emerges during the session or anytime during the day, a purpose-driven meeting may need to be established.

Like in agile-adaptive management, the main ingredient that propels a great meeting is its purpose, along with the capabilities of those invited, the actual agenda, and finally the results of their work together. Because I have attended so many poorly designed and horrendously run meetings, I have begun suggesting clients post the following message on their conference room door:

> If there is not a purpose-driven agenda posted for this meeting, please leave and work on something that does have PURPOSE!

This has actually led to many meetings being cancelled and others being much more productive:

> Jack Becker at Lithonia Lighting calculated that reducing inefficiencies in his organization during meetings would be equivalent to an additional 10 percent improvement in productivity without the cost of hiring new personnel. [6]

If designed well, any meeting in which people need to be innovative will include some form of early divergent thinking and disagreement. Techniques like brainstorming, mind mapping, listing, or others are used to elicit all the ideas in the room. The next step is the toughest: this is the space where people want to jump to solutions but may not yet have a framework within which to act or decide. So time in the "groan zone" will likely be spent on checking assumptions, inferences, and impacts; building decision frameworks; creating prototypes; or other activities that help sort through the previously developed ideas. Convergent thinking is the final leg of a meeting, project, or other initiative, in which all of the great ideas have found a place within an agreeable framework and the group is moving toward consensus and final decision making (see Figure 4).

The goal of purpose-driven meetings is to ensure each participant has the opportunity to share what he or she thinks and to confirm that the participants "can live with and will support" the results of their work. The test of this agreement will occur later when people are standing around the water cooler — will they attest to their support when no one else is around? As a way to help my clients without going through all of the design and management techniques good facilitators use, I suggest they minimally do two things to improve their meetings:

1. Define the purpose for the meeting; think through this carefully, because defining the purpose can either limit you and/or expand the possibilities — it will depend upon your intent.
2. Pose every agenda item in the form of a question; it will feel awkward at first, but when you do it, you realize that maybe the subject doesn't need to be discussed and/or that the question you ask is very important to the answer you'll get, which goes back to purpose, which goes back to why you are inflicting a meeting on the people you've brought together.

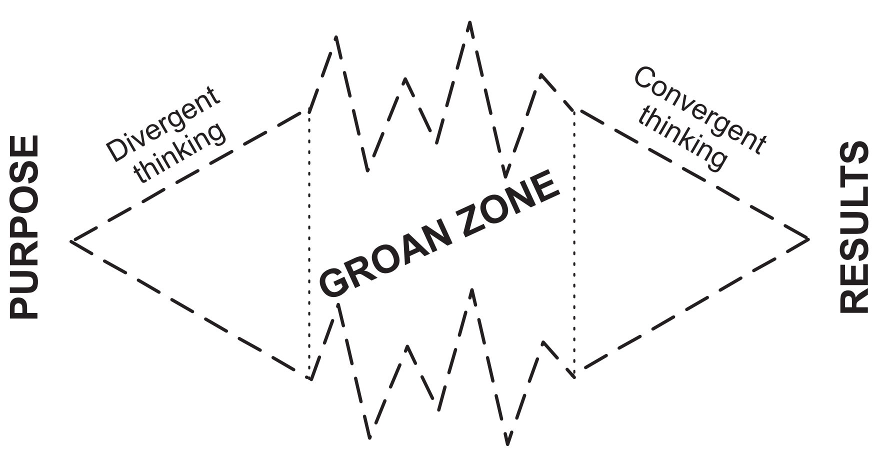

Figure 4 — Groan zone. Adapted from material in Sam Kaner's *Facilitator's Guide to Participatory Decision-Making* (New Society Publishers, 1996).

Timebox and Meeting Example

As we end the discussion of management techniques from the "doing something innovative" step, the documentation above may seem a bit overwhelming. The following example may help prove that once you get the hang of these tools they really can help. This example comes from a student (a product manager) who applied timeboxing and daily standup sessions in one of the world's largest financial institutions:

> The line managers and team members who conduct the user application testing have many other responsibilities and daily workflows that they need to complete. Therefore, it is very easy to put off the development of test plans and test cases for an upcoming release. Oftentimes, the testing is done on the fly with no preparation completed prior to the testing period, which can lead to lackluster testing and potential production problems down the road.
>
> We just completed a release testing period last week, and I implemented the two agile principals of timeboxing and daily standup meetings during this testing cycle. I organized a meeting with my team members two weeks prior to the start of the

> testing period, and we developed a timeboxed plan for testing preparations. During the testing phase, we had 15-minute daily standup meetings where each team member described what they had accomplished the previous day, what they were going to accomplish that day, and any problems or obstacles they had encountered. The timeboxed plan led to thorough preparations for the testing period, and the daily standup meetings increased communication and accountability within the team.
>
> After the last day of testing, we had a debrief meeting where each person shared their thoughts on what went well and what could be improved for the next release. The implementation of these tools was a huge success, and I received positive feedback from my team. This was the smoothest and most organized testing cycle that we have had since I have managed the team, and we had no production issues after the software migration.

The key, therefore, is not so much in the planning, but in the doing, the being, and the learning that follows the "good enough to go forward" planning process.

Step 4: Learn and Reflect

The fourth step in the agile-adaptive management model is the main creative step once there is clear purpose and organizational direction, good people have been hired, and something innovative is occurring. In this section, individuals and teams are asked to iteratively review what they have done and how that action affects others and define what they might do differently in the next iteration. It depends on the development process being iterative and incremental, and it relies on individuals being interested in how their behavior and performance affects the intended outcomes.

Leadership Review and Other Reflection Techniques

We learn best from that which has already occurred. This is why many CEOs look for executive candidates who have gone through a significant business failure and proven they can learn hard lessons with subsequent success. The only way to learn and not repeat the same mistakes is to stop long enough to consider what took place and then put into application those things you want to keep and try differently. The person who needs to do this the most is the leader, whether that is the team lead, the executive sponsor, or someone at a higher level. If others see these leaders being reflective and transforming their behavior and performance, they will be more likely to do the same.

The role of a leader in this agile-adaptive management model is to define and sustain the corporate environment/culture in which great things can occur, be patient long enough for exceptional things to emerge, and deliberate throughout to ensure things stay focused on what is most important: the organization's value proposition(s).

I recently had lunch with a prospective client. He is the CEO for a fast-growing online retail company, and he had brought both his CIO and his COO with him to discuss my approach to agile-adaptive management and the potential for using me in his company. After a bit of talk about family, snow, and politics, he abruptly said, "So what is the biggest thing you think we need to tackle first?" (Please understand that I knew very little about this company and very little about the individuals except for the conversation we just had.) Without hesitating, I said, "We'll need to begin with you."

After a stunned silence, I said, "let me restate that; you are the leader of this company, people watch your every move, they came to this company because you were there, and they will leave if something happens to you. While that's honorable and rewarding, it is exceptionally limiting. Imagine what would happen if you got hit by a bus. Who would carry on your legacy? Likewise, I will surmise by the way you changed subjects so quickly during lunch that you probably do the same thing to these guys [both of them smiled, and my prospective client chuckled]. So what I'd like to do is begin with you, help you think through your leadership expectations, and, if you are willing, have you consider the impact you have on your people."

What I've found over time is that change may percolate up from the bottom like it has with agile software development, but eventually it needs support from above. Likewise, in those rare cases where agile-adaptive management has top management support, those below may be waiting to see if the "brass" can walk the talk before they step out too far. In either case, leadership matters to the longevity of agile-adaptive management practices. And the most powerful way for leaders to understand this role is to ask for and receive meaningful feedback.

Unfortunately, leaders can't normally walk out of their office, go down the hall to the conference room, and ask their top team to give them feedback. Unless both parties are experienced in giving and receiving feedback, leaders will get pontifications and stories of grandeur but rarely will they get anything that helps them improve their leadership ability. That typically takes a third party trained in executive coaching to help set the stage, possibly send out a 360-degree review, and facilitate a discussion to get actual behaviors that the team wants to keep, those it'd love to see change, and possibly the ones that really need to stop.

The following three techniques are my favorite facilitative techniques to help teams and leaders learn from what they have experienced and set the next iteration up to take advantage of those lessons. I have found that without this process of introspection, the real purpose is hard to discover and harder yet to create. And without iterative learning, reflection, and a formal process to capture what was shared, the people working in the next time period or on a future initiative are more likely to relive the same mistakes your group had to conceal.

The three techniques are:

1. **WWW/WCBI —** this technique is both my favorite and the one people seem to use most easily. The letters stand for What Went Well/What Can Be Improved. I use this technique after every meeting, especially if I am new to the group or if the subject matter is difficult. This review is not to define what was good and bad about the meeting; it is about the future and what we should continue doing and or consider changing.
2. **Keep/try/eliminate —** this is a technique Cutter Consortium Senior Consultant Alistair Cockburn offers [3], and one I've found very useful for reflection workshops held at the end of a two-to-three week iteration. Basically, you ask everyone to brainstorm the practices they want to keep doing, those they may want to try in the next iteration, and those they would like to eliminate if possible. The first time you do this, the team members will spend most of their time defining what each word means to them, but after that team members get used to the approach and even bring up wild and crazy ideas that can really make a difference. One group actually held a wake after a terrible experience because it had heard something like that would ease its concerns. It did, and the project moved forward.
3. **Team assessment —** this is a technique Cutter Business Technology Council Fellow Jim Highsmith offers in his book *Agile Project Management* [7], and one I've also found very useful for reflection workshops. While the keep/try/eliminate technique can include everything from a testing procedure to a person's behavior, the team assessment technique goes directly to assessing both performance and behavior. Once you get input from the team about where it thinks it is on the scale, open the conversation up to why it made that assessment and then ask if there is anything the team wants to change in the next timeframe.

Collaborative Decision Making

The process of making decisions, who gets to make them, and when is probably the single most important measure of empowerment in the work environment. In fact, if people are given the responsibility with no authority to make decisions regarding that initiative, they tend to be less accountable and certainly less motivated over time. This is the death knell for an agile-adaptive project.

To combat that vicious cycle, I recommend the team, during the process of establishing working agreements in the charter, discuss what decisions it can make, the way it will make them, and how and to whom the others will be escalated. If the decision is within the prevue of the team, and the decision moment is upon it, I suggest the team use the "fist-o-five" technique. Once the choice is clear, ask everyone to hold up their hand with one to five fingers pointing upward (please refrain from vulgarity in this moment):

- One finger means the person is completely on board with the choice.
- Two fingers means I may have a few issues but nothing really to worry about now (we'll pick those up in the daily standup sessions).
- Three fingers means I have issues that need to be resolved before I can feel comfortable moving on.
- Four fingers means I have enough issues, and they are serious enough that I may need to block this choice.
- Five fingers means stop; there is something critical we have not yet discussed.

If everyone shows one or two fingers the decision is made and recorded. If there are any threes, fours, or fives, stop and ask, "What would it take to move you to a one or two?"

This is the moment most managers fear: where one person could block the team's momentum. If the manager steps in, however, and makes a decision without that action being agreed upon in advance, the trust will disappear almost immediately and will take time to be reestablished. The manager, team lead, executive sponsor, or other type of "supervisor" needs to let the team work out this dynamic. Like in everything else in this agile-adaptive management model, the team will have time later to reflect back on its actions and consider how it can do better in the future.

There is another challenging moment in the life of an agile-adaptive team and that is when priorities must be set. Given that the stakeholders should be present, there may still be a question about what comes first. One approach to keeping individuals, teams, and management focused on accomplishing the project's most important objectives first is to use a technique called MoSCoW (pronounced like the city). The letters M, S, C, and W refer to the varying degree of priority that an item (requirement, deliverable, etc.) receives based on the customer need and/or the "fit-for-business" metrics, as follows:

- "M" is a **Must**, or the minimum useable subset; there is no way to work around these components, features, requirements, etc. Items labeled as must need to be delivered in order to provide a functioning and useable product or service. Without all of the must items completed, the timebox or iteration is not completed.
- "S" are items that **Should** be completed. They are items for which other workarounds or options may exist, but if they are accomplished, they will have substantial value to the system and/or the customer/end user.
- "C" is **Could** and refers to items that are nice to have but not absolutely necessary to the success of the project. These are the "bells and whistles" that can be developed or added later as the project progresses and time and budget permit.
- "W" refers to **Will Wait.** These items are not included in the current increment or timebox but may be delayed for further

reevaluation during future development cycles. If they are being discussed in a facilitated workshop, they will probably end up in the parking lot for future consideration.

Step 5: [Deliver] Results

Without results, all of the previous steps in the agile-adaptive management model (i.e., having purpose, hiring good people, doing something innovative, and learning/reflecting) are superfluous. The individual(s) involved in innovative activity must also be focused on delivering something valuable in a timely fashion, or they open the door for competitors to beat them to market and/or for the innovation to become less valuable to the customer/end user. In fact, the inability to timely deliver something of value was one of the main concerns stated by the participants in the agile Executive Summits and the reason why time and money constraints cannot be ignored. The challenge is not to ignore those constraints but to incorporate them along with the more important business goals of the organization.

Venture Capital Funding Model (Iron Triangle Revisited)

As stated in the section on developing a common business language, the iron triangle is a metaphor for those who believe there are three factors to project success: time, budget, and specifications. Since I didn't like the justifications and conflicts that came from focusing solely on those constraints, I felt encouraged by the three forward-looking business objectives consolidated from the Executive Summits in 2003, 2004, and 2005:

1. Create value-add for your business.
2. Meet or exceed your customer's expectations.
3. Deliver quality products/services.

Given that time and money will continue to be constraints, the question then became: is there a way to use these constraints to our advantage instead of constantly using them as justifications or blame? Since many of the agile-adaptive methods discuss time management (e.g., Scrum's 30-day sprint cycle, DSDM's two-to-six-week timebox, XP's one-week iteration), and DSDM explicitly mentions the need to fix budgets over a timebox, it seemed that there might be a way to use both the iron triangle and the new business objectives in the agile-adaptive management model.

The breakthrough came after several conversations with my MBA students, many of whom were also involved in the financial industry. These discussions proved that an organization wanting to focus on its business propositions and use the iron triangle to its advantage should manage its financial assets similar to the way most venture capitalists (VC) manage their portfolios: set target dates for market penetration, fix the budget to release dates, and focus on building the best quality products and services possible with those scarce resources. In fact, most VC firms will release funding only after they are satisfied that the previous funding was applied well and the go-forward plan also proves valuable.

While most non-VC funded companies do not manage their resources this way, they might be more inclined to do so if the other business units were all functioning with agile-adaptive or lean business practices and if they better understood the advantages of linking the accounting function with the value-added purpose of those other business units. For a great introduction into this approach, consider reading *Real Numbers* [5] *Throughput Accounting* [4], and *Agile Management for Software Engineering* [1]. Representatives from the accounting function should also be introduced to the Nickolaisen strategy and portfolio analysis process, chartering, timeboxing, and some of the project-tracking techniques agile-adaptive teams tend to use. The organization will benefit by including someone from the accounting function on the design team (discussed below) so that the accounting policies are not intentionally creating barriers for the new agile-adaptive teams.

Agile-adaptive organizations may therefore need to change their budgeting systems along with their development protocols to best meet the organizational and customer-focused needs. In summary, the best way to integrate the iron triangle constraints and the organization's value proposition(s) is to put in place the venture capital funding model.

Techniques in the venture capital funding model include:

- Fixing the time in short intervals called timeboxes, sprints, iterations, etc., so everyone knows when the "working product" will be available for testing, deployment, shipping, etc.
- Fixing the initial budgets for a project and/or a given timebox unless a change increases the ROI (even then the executive sponsor should sign off on such a change in budget allocations); release funds only if targeted functionality is produced.
- Allowing the functionality to vary in ways that maximize business value, customer satisfaction, and quality products/services to meet the organization's differentiating value proposition and ensure collaboration among internal stakeholders and the customers/clients/end users they serve.

Breaking the triple constraint or iron triangle myth is a profound paradigm shift for most executives, project managers, and team members, because they have come to believe in its contrived truth and have gotten used to the pattern of justifications and blame that result in most projects. The impetus for this shift, as tough as it might be, will come from these same people as they see dates being hit, budgets being utilized well, and customer satisfaction increasing.

Transparency and Accountability

Agile-adaptive practices will always tend to focus more toward the nimble than the accountable, but they do offer answers to both. This tendency for flexibility, however, may also work against agile-adaptive management. For instance, I heard a CFO recently say "agile and adaptive practices may be fine for the small, entrepreneurial firm, but once your organization gets to the size mine is, more control and accountability is needed." If you heard something similar, you might have changed the subject, tried to argue that the agile-adaptive practice is all about reliability anyway, or, if you were really bold, argued that the main challenge in large organizations is culture, communication, and leadership, not the agile-adaptive management model or its associated practices. My experience says that none of these approaches would really resolve the speaker's concerns.

The issue of control and accountability is real. In today's post-Enron, post 9/11 world, leadership teams need to offer more detailed guidance to financial markets, continually improve their accounting practices to meet expectations from regulations like the US's Sarbanes-Oxley, and accordingly meet even tighter scrutiny by their board of directors. While some teams may want unsupervised trust extended their way, these financial, accounting, and productivity expectations cannot and will not allow it.

So what's the answer? Can we have reliable agile-adaptive practices and accountability? Can we simultaneously meet Mark Hurd's objective of creating "a clear line of sight between management and the customer" and provide opportunities for creativity and innovation? Or are we destined to give up on agile-adaptive techniques in large organizations that exceed the leader's span of control? My first instinct used to be to agree with the premise that it is not for large organizations. I am convinced now that I was wrong and that they do provide some very real and preferable solutions.

Even though the agile-adaptive management model focuses on developing and delivering productive innovations, it simultaneously encourages and expects the peer support and peer pressure necessary to keep everyone on task. In fact, my experience is that unproductive and uncooperative individuals cannot long suffer the transparency and personal accountability expected within agile-adaptive methods, so they leave and/or find ways to step up to the team's and organization's expectations. The challenge for agile-adaptive managers is not to add control but to provide the visibility and transparency needed to keep the project connected to the larger organization's mission.

The challenge comes when teams are located away from an executive sponsor, the work is dispersed to teams in different places, and/or the team members are working on too many assignments at one time. Any of these factors cause fragmentation and confusion within even the best performing teams. They are structural and organizational problems, not problems of motivation or intent, and, in either case, they cannot be rectified by policies or procedures; the basic practice needs to change. In some cases, software and hardware can help bring people face to face for short intervals of time but that virtual reality needs to eventually be fed with real human contact.

Along with well-written throughput or value-add accounting policies, some basic group processes, a reasonable organizational structure, and the possible assistance of well-designed software, managers can be assured that agile-adaptive techniques can provide the same if not better assurances of transparency and accountability needed in today's security-focused society.

These techniques include:

- Short iteration planning cycles that force teams to do the most important work first, identifies who will be responsible for that work, and allows a project to be stopped or realigned early instead of waiting for larger repercussions.
- Daily standup meetings focused on what was accomplished yesterday, what will be done today, and what is emerging or potentially getting in the way; these emerging issues are then escalated when appropriate.
- The planning and task management process posted and therefore fully visible to each of the team members and management.
- Customers, business analysts, executive sponsors, and other stakeholders involved throughout the project so that problems can be found early and rectified before they become large issues.
- Plans, schedules, and accomplishments reported only when they are absolutely required, and posted publicly for everyone to see at any time.

These practices along with others found in the agile-adaptive toolbox can meet most of the needs an organization has for accountability and control. However, I have begun insisting that organizations that want to establish agile-adaptive practices within their organizations also establish a cross-functional design team to ensure issues of accountability, security, communications, and so on are considered and resolved. The key to making any process, including an agile-adaptive one, more accountable is to ensure the people involved can trust each other and the organization to be supportive when problems do need to be discussed.

SUMMARY

While the balloons, toys, and fringe benefits of Google's culture do not define its underlying beliefs, or the reason for its success, they are the things that those individuals in that place have found make sense for their environment. This report was designed to help you see that the process of discovery, reflection, and application is hard work, but it does have enough structure for results to be creative, innovative, and simultaneously productive. The agile-adaptive management model was offered as a stepwise approach to creating that knowledge and innovation, and the associated management practices were provided to show at least one approach to implementing that model.

The intent of the report was to introduce the agile-adaptive management model for the entire organization to consider, changing the focus from improving individual business units like engineering, R&D, IT, and others to translating the business purpose into creative and innovative solutions across the organization. The associated management techniques are pragmatic, familiar, and represent best practices in organizational theory and application and are transparent enough to provide appropriate accountability. Together, the model and techniques provide one consistent organizational approach to building business value, profiting from changing conditions, and meeting customer demand.

In the end, we are left with that which we have done, the lessons learned from that activity, and the enjoyment we created in the process. I hope you find as much enjoyment and productivity in this agile-adaptive management approach as I, my students, and my clients have.

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