Introduction

The Business Analytics Program and Keys to Success

Business Analytics has evolved rapidly over the past few years and continues to be a top priority for organizations. It has risen out of the specialties of the information technology teams into the lines of business and all the way to the top of the organization's agenda. In the 2012 IBM CEO Study, 73 percent of CEOs indicated that they were making significant investments in their organizations' ability to draw meaningful customer insights from available data[1]. As a mission-critical system, the CEO now expects analytics to provide information at the fingertips of the teams that run the business.

In our first book, *Business Intelligence Strategy: A Practical Guide for Achieving BI Excellence*[2],we examined how to create an all-inclusive strategy to ensure a Business Intelligence (BI) and Business Analytics (BA) initiative could get off to a healthy start. Having a clear strategy and vision is a critical factor that impacts the ability of an organization to achieve success in a strategic Business Analytics initiative. We emphasized that success is based on the overall business strategy, which must address the future vision for technology, people (culture and organization), and process. The strategy should create a roadmap for how the organization will move forward in a series of measurable successes rather than using a "big bang" approach.

However, strategy alone will not ensure success; *executing* on this strategy is often where challenges arise. When we look back, an article from *Fortune* magazine more than 10 years ago, entitled "Why CEOs Fail," estimated that fewer than 10 percent of companies were successfully executing on the critical strategies the CEOs had identified for their organizations:

> "The problem is that our age's fascination with strategy and vision feeds the mistaken belief that developing exactly the right strategy will enable a company to rocket past competitors. In reality, that's less than half the battle."[3]

Developing the capability to actually *execute* on a winning strategy is the missing half of the equation. Although an organization may have a compelling strategy, it is often challenged in its inability to translate business strategy into actionable plans of achievement.

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[1] "Leading Through Connections: Insights from the Global IBM CEO Study." IBM, Institute for Business Value, May 2012.

[2] John Boyer, Bill Frank, Brian Green, Tracy Harris, and Kay Van De Vanter. *Business Intelligence Strategy: A Practical Guide for Achieving BI Excellence.* Ketchum, ID: MC Press, 2010.

[3] R. Charan and G. Colvin. "Why CEOs Fail," *Fortune*, June 21, 1999.

Today, the number of organizations now linking strategy to execution has tripled to 30 percent[4]—a number that is promising. How has this jump occurred? What are these organizations now doing differently from the other 70 percent? We believe that one factor is the advances that have occurred in technology. Technology is an enabler. Technology can enable companies to process more data, more quickly than ever before. We cannot assume, however, that simply because we can produce reports faster we are adding value. It is only when the technology strategy is linked to the four other "Keys to Business Analytics Program Success" that we can really demonstrate value. In other words, it is not solely the advancement of technology that has contributed to more organizations linking strategy to execution; it is that these organizations have recognized how to leverage that technology. They have learned the benefit of demonstrating value by leveraging technology to support or enable people and processes and ultimately supporting the organizational strategy. So, it may be that because technology is more of an enabler and can support the ability to execute on strategy, it has more pervasive dependencies on the other keys we discuss.

A recent IBM Institute for Business Value study[5] discovered that organizations that use *analytics* outperform their peers by 2.2 times. It appears that a major factor in being able to achieve high performance lies in the ability to seize the advances in the analytic technologies that are available. These new technologies help executives, managers, and employees better monitor their business, plan collaboratively among various stakeholders, and integrate diverse sets of data to be transformed into knowledge.

> A recent IBM CFO study shows that Chief Financial Officers in organizations that make extensive use of analytics report growth in revenues of 36 percent or more, a 15 percent greater return on invested capital and twice the rate of growth in EBITDA (earnings before interest, taxes, depreciation and amortization).[6]

However, many organizations are still in early stages of using analytic technologies effectively. In fact, the same statistic that looks so promising also shows that many organizations still are not linking their stated strategy to their execution of this strategy.

That is because, as mentioned, neither a spectacular strategy nor advanced technologies in isolation will achieve success; they are each important elements but do not stand alone—similar to legs on a stool. A strategy is required to plan, set targets, and goals. The strategy gives legs to the vision and what is expected. Technologies can support an organization to do things faster, quicker, easier, or with more precision—but to collectively understand the expectations and how an organization is going to get there and execute effectively requires yet another set of skills and the creation of a program that will tie the two together.

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[4] Analytics Quotient Study. IBM, 2012.

[5] "Breaking Away with Business Analytics and Optimization." IBM Institute for Business Value, 2009.

[6] 2009 research based on "The New Value Integrator: Insights from the Global Chief Financial Officer Study." IBM Institute for Business Value, 2010.

The Business Analytics Program: Agility and Change

So, you have now crafted your strategy—what next? You need to put your Business Analytics Program in place. As you might expect, each of our organizations has gone through a number of evolutionary steps to reach their current operational levels of maturity. Each of our organizations has taken a different path. Let's clearly state today that there is no single "silver bullet" when it comes to running a Business Analytics Program—no single program methodology—and the strategy, organization, and technology you put in place today will change as your organization matures in its ability to use analytic technologies. You need to expect this, embrace it, and change with it. This is why it is called a *program*—and not a project. It is a collection or succession of projects. We also believe this is why the term "Agile BI" is so popular today. Agility and change are really what a successful Program is about.

- **A Business Analytics Program <u>is</u>:**
    - How you implement the strategy, people, processes, and technologies to achieve business outcomes
    - Able to address innovation, transformation, standardization, and other dynamic factors
    - A fluid, changing, agile set of teams, processes, and projects
    - A long-term series of activities, plans, procedures, and projects managed by a team characterized by both virtual and structured relationships
- **A Business Analytics Program <u>is not</u>:**
    - A single office and organizational structure
    - A temporary construct to solve an immediate need
    - A set of processes and policies that are rigid and unable to change or adapt
    - A single technology to which teams must adhere

You will notice we specifically point out that a Business Analytics Program is not an organizational structure. This book will discuss the organizational construct that leads and governs the Program—the Analytics Center of Excellence—but this construct is but one component of a Business Analytics Program. While the Analytics Center of Excellence is a key driver of the program, the program itself will have people, processes, and technologies that stretch outside the visible analytics teams.

A Business Analytics Program is largely designed to manage change over the long term—and this change will occur as the Business Analytics initiative matures. The structure and organizational chart will change over time and with maturity, as will the processes, policies, and technologies that are used. In each of the sections we will discuss in this book, you will see us address the question of how to remain agile as the program grows, as well as the importance of agility in the Business Analytics Program.

Business Analytics Maturity

A Business Analytics Program does not develop overnight; it matures over time. The elements that make up the Program will change over time as the Program matures, and program managers need to recognize change and nurture it to achieve the highest levels of maturity.

Over the years, a number of different maturity models have been developed to describe the Business Analytics journey and the readiness of an enterprise to synthesize and organize its Business Analytics infrastructure. Some of these have been devised by academics and others by analysts or technology vendors. These models are descriptive tools that help organizations identify where they reside on a spectrum of Business Analytics implementation. All of the models build a hierarchy of steps, from the most basic implementation of Business Intelligence or reporting through more advanced, coordinated implementations and infrastructures.

As we evaluated our Business Analytics processes during the development of our first book, we quickly realized that the separate paths taken by our enterprises—and our individual teams—still had many common threads. These paths led each organization past very recognizable milestones, and we've seen how these milestones describe the evolutionary steps *every* organization experiences in its Business Analytics development.

It doesn't matter whether your organization is large or small—the same concepts still apply, though each has its individual challenges. Whereas smaller organizations may have fewer resources to rely on in terms of budget or talent, larger organizations also have their difficulties with larger networks of employees and rationalization of individual departmental strategies. At the heart of the matter, recognizing that key elements of people, process, and technologies are required for success and that a concerted effort needs to be made to bring the alignment across the organization is where you will find that success can be achieved.

By examining the characteristics of these milestones, your organization can better understand the challenges (and the opportunities) that lie ahead on your path toward Business Analytics excellence. This exercise is helpful in designing a Business Analytics Program that will support the organization over the long term—and allow you to recognize the various stages and changes that will need to be addressed. You can measure these steps in a variety of ways, but as an example, we will review IBM's **Analytics Quotient (AQ) Maturity Model**[7].

Like the IQ tests that were developed to measure the intelligence of individuals, IBM has developed an AQ test to measure analytic maturity in an organization. AQ measures how ready you are to apply insight to your strategy, processes, and tactics; how quickly you can reallocate resources and reorient your people to make better decisions; and how

7 Analytics Quotient website (*http://www.ibm.com/software/analytics/aq*). IBM, 2012.

effectively you can act based on how well you know your past performance, current results, and future possibilities.

What's Your AQ?

The AQ concept has two core components. The first component assesses the organization's decision-making power and its use of analytics, as well as the culture that surrounds it. Examples of areas examined include:

- What is the quality of the information you use to make decisions?
- How do you measure that quality?
- What is your strategy for leveraging analytics?
- Have you documented successful outcomes of analytics initiatives in your organization?
- What percentage of your decision makers uses analytics to inform and make decisions?
- How do you anticipate future events and results?

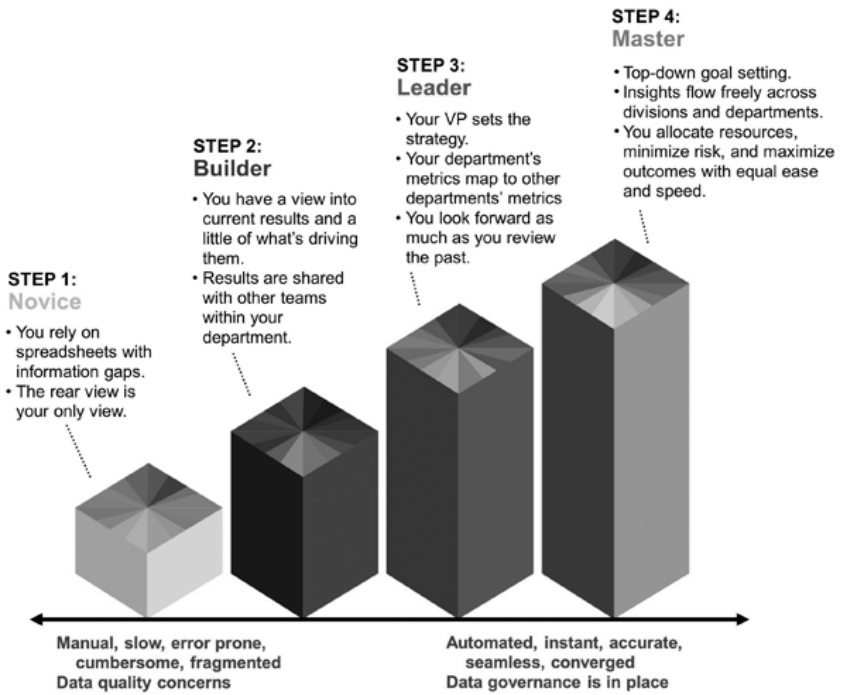

Figure 1: Analytics Quotient (AQ) Maturity Model

The second component of the AQ Maturity Model maps the numerical score in the first component to one of four stages of increasing analytical maturity (Figure 1). Again, like IQ, the higher you are on the scale, the better your organization is likely to perform.

The AQ Maturity Model looks at various elements that derive from strategy, organizational and cultural behavior, as well as the technologies used in the organization.

After completing the *academic* exercise of assessing the AQ of an enterprise, there are practical benefits in understanding where your organization fits into the spectrum of analytics sophistication.

First of all, larger organizations are the first to recognize that different areas/silos within the enterprise will probably exist at different levels of analytic sophistication. For instance, the AQ of a particular department or subsidiary may be at a significantly lower level of sophistication than that of another department or subsidiary.

This is not necessarily a negative state of affairs, but a natural result of how analytics is moving and being adapted through the organization. Yet, by mapping those areas using the AQ Maturity Model, the organization can identify where assigning more resources may deliver greater value as a whole. Once AQ has been assessed, the Business Analytics Program can use this maturity rating to further assist those sectors of the organization, to raise their AQ to deliver better, more consistent analytics to the benefit of the business strategy and the success of the organization as a whole.

Second, as the organization changes its business strategy over time, the Business Analytics Program can better target those areas with specific suggestions—including added technology and training—to help those areas better succeed.

Finally, as the organization progresses through the various maturity levels of Novice, Builder, and Leader toward mastery, the ability of the organization to respond to new strategic challenges grows as well. The AQ Maturity Model demonstrates, first, how the program must keep agile and changing. The goal is not to have a monolithic technology infrastructure but an *open and collaborative* structure that is capable of adapting to new requirements. Assessing the AQ of an organization enables management and teams to see new opportunities. These new opportunities are derived from understanding the diverse analytic silos and then assisting them to grow and mature in a way that will deliver success for the organization overall.

Organizations will also go beyond Business Analytics Program agility to experience value in performance outcomes. By nurturing the capabilities of Business Analytics within the enterprise, we have seen our organizations grow in robust information resources that support the decision makers in their daily tasks. This results in IT efficiency, business efficiency, and business effectiveness and transformation of the organization by moving from strategy through to execution.

By now, you may have a Business Analytics Strategy in hand—you have a vision, and you have informally begun collaborating with business champions in the organization to define your goals. You have a vision of how the strategy will be implemented, and you've assessed your organization against the AQ Maturity Model—now where to start? It's time to put the formal Business Analytics Program in place and get moving!

The Business Analytics Program

Many organizations overestimate the ease by which a formal Business Analytics Program is put in place. They may not recognize the breadth of impact the program will have on the organization. It is often believed that the hard decisions are over once you choose a technology. The technology in itself has been identified at times as the easier part of the equation. It's the people, processes, and culture of the organization that can often present continual challenges.

Like the strategy that goes before it, the Business Analytics Program needs to constantly maintain and adapt its various components. A few analytic experts sitting in a line-of-business (LOB) department using a flashy new tool don't equate to a successful Business Analytics Program. Nor does an IT team with a data warehouse. Quite the contrary. A Business Analytics Program singlehandedly run by a few members of an IT team is likely to experience many political roadblocks. While a program has to start somewhere, it is also premature for an organization just dipping its toes into analytic technologies to explain to the executive team a vision of a complex Business Analytics Program with cross-departmental collaboration, and dedicated resources with technology standards, without internal proof points on how it has made an initial difference. This is why a vision that includes change and maturity over time is necessary.

Figure 2: 5 Keys to a Successful Business Analytics Program

In the next several chapters, we discuss the five essential elements—or *keys*—that we believe need make up a successful Business Analytics Program (Figure 2). And we share some practical advice you can start using today as you create a program that is right for your organization's maturity and culture.