



The CutterAdvantEdge Commentary on Investment Systems and Operations

Balancing Act: Building a Successful Data Management Program

Data management programs are never born or executed in a vacuum. The successful program is seen as a means to a greater end—achieving the firm's medium to long-term strategic objectives. The road to achieving those objectives is peppered with demands to make tactical corrections, to “add value” and to deliver incremental improvements. Ultimately, the data management program serves many masters, each with a separate agenda, and that's as it should be. But program overseers must be vigilant to keep the firm's strategic objectives clearly in mind.

Building a successful data management program involves large systems with significant organizational impact, so the program must have a firm foundation accommodating three axes: the Mandate, the Factions, and Market Forces. The Factions and the Mandate must be balanced against each other, and both must be balanced against Market Forces. The axes of the foundation can be thought of as the practical impact of market forces and human nature on the implementation of large systems requiring significant organizational change.

The Mandate

Why You Need a Mandate

Building a successful data management program requires a serious investment of time, effort, staff, and money, which usually need to be diverted from other priorities. More than one firm has mothballed a young data management system or relegated it to niche status, due to the high cost of on-going development, which sometimes rivals the initial investment. Enthusiasm must be balanced by cold logic; aspiration must be balanced by application. Firms must achieve that balance, and in doing so, they define their Mandate.

What the Mandate Does

The Mandate postulates a vision while defining a path forward. It directs creation of a mission statement and guiding principles that reflect and embrace the core values of the organization now and into the future. It identifies the program as a priority initiative for the enterprise. And it articulates an obligation to build a world-class program that treats data as an asset that can be leveraged for competitive advantage.

The Mandate also recognizes the need to avoid impractical, unattainable idealism as well as short-sighted, tactical “pragmatism.” It identifies core capabilities to be delivered by the program. It recognizes the need for the program to achieve specific synergies and alignment with approved platforms and other enterprise initiatives such as server consolidation programs. The Mandate sometimes prioritizes the operational and system needs of specific data domains by specific dates.

The Mandate asks for determinations of adequate funding, appropriate staffing levels, and technology infrastructure appropriate for supporting multiple concurrent phases. It acknowledges that no budget issues are foreseen for the duration of the program, with the caveat that all programs are subject to the annual budgeting process.

The Mandate must factor in worst case scenarios while protecting it through its entire lifespan from attempts by the Factions to modify and subvert the stated goals.

Concerns Impacting the Mandate

To gain approval for a multi-million dollar, multi-year data management project, the executive team charged with defining the Mandate must first determine if a data governance program is needed at all. If the answer is “yes,” they need to fund, staff, and define the efforts involved. They must answer numerous concerns, which often arise from lessons learned on past efforts, and from skepticism that the firm’s needs can be met by either established models or popular technology trends. Then the team must address myriad specific concerns involving the following factors:

- increasing operations and technology staffing
- keeping operational and technology aspects in synch
- maintaining momentum through changes in the management team
- assigning a program champion
- determining how long the solution will serve the firm’s needs
- determining whether to build vs. buy
- attaining required supporting infrastructure
- ensuring that the system will be able to accommodate new types of instruments, new regulations, and new types of market data.

The Mandate emerges as these concerns are explored and resolved. But the answer to one question is the ultimate deciding factor for whether to move forward with a data management program: In the long run, does this solution deliver new capabilities and enhancements at a reasonable cost?

The Factions

The goals of the program are going to draw reactions from across the organization that vary widely depending on the nature of the required changes and their perceived impact. A Faction will coalesce around each required change, defined by how the Faction members embrace or reject the program’s goals, and an individual can belong to multiple Factions simultaneously. The Factions can undermine or transform the Mandate and potentially challenge the success of the program.

The Fearful

This Fearful Faction comes in two varieties: the Fearful Managers and the Fearful Individual Contributors. The Fearful Managers fear their department fits poorly into the proposed operational model and are ripe for dissolution. Or they feel their department is too well represented in the new model and they fear they’ll be unable to manage the added responsibilities with available resources.

Fearful Individual Contributors, also known as the “specialized subject matter experts” perform one or more tasks extremely well, to the point of exclusivity. Fearful Individual Contributors seldom venture out of their defined comfort zone and are very reluctant to take on additional responsibilities. They maintain a low profile, but their plaintive cries of “What does this really mean?” can sometimes be heard from their cubicle roosts.

The Data Omnivores

The Data Omnivores are very territorial and imagine themselves to be fulfilling their data needs self-sufficiently. Data Omnivores, proud of their data acquisition abilities, feel that their contributions are critical to the wellbeing of the enterprise and are therefore outside the purview of any enterprise data management program. Program goals that promote ease of access to data are welcome, but constraints and controls are not for them. Data Omnivores are happiest when left to their own methods, but will defend their territory against perceived threats.

The Conservatives

The Conservatives support the overall goals of the program at a macro level, but wield sufficient authority to suffocate a fledgling program. There are two varieties within this Faction: Cost Conscious Conservatives and Risk Averse Conservatives, both occupying various management levels.

Cost Conscious Conservatives have nominal control or approval authority over expenditures, typically related to staffing or technology infrastructure. Their close adherence to established spending guidelines and budget forecasts can cause serious delays in establishing the program. They are not purposely obstructive, but rather they are a product of the environment, empowered to say “no” but seldom empowered to say “yes” without approval. Cost Conscious Conservatives often identify and

capitalize on efficiencies gained through automation and operational improvements early in the process, which can also stall program momentum.

The Risk Averse enter the fray late in the initial phases of the program, promoting the program's goals but assuming responsibility for safeguards sufficient to ensure that overall business continuity is never jeopardized. The Risk Averse thrive on Microsoft Project, test suites, and deployment schedules. Their recommendations can bleed every spare cycle from a project plan.

The Conservatives play a meaningful role in the organization but they can kill a program if they're not sufficiently throttled.

The Skeptics

The Skeptics liken themselves to the voice of experience, and believe theirs is the pragmatic perspective. Years of experience witnessing the failure of other large programs at this firm or another have colored their viewpoint. Skeptics are often brash, freely vocalizing their opinion in the right company. They are often senior individual contributors who have made significant contributions to the enterprise. But unlike the Fearful, they are confident in their abilities to adapt to change, and if they are vested in the effort, they can significantly aid the program.

These factions, along with others such as the Vested and the Indifferent, impact what the program ultimately delivers. The Mandate must consider and attempt to mitigate, within reason, the impact of the Factions. And if the program is to survive the potential tempest unleashed by Market Forces, planning, collaboration, and coordination are critical.

Market Forces

A host of Market Forces can impact a multi-year data management program. The optimal scenario for a three to five year program would be, debatably, for Market Forces to remain reasonably static state for the program's duration. Even with an up and down economic environment, basic conditions can remain consistent, making for a budget forecast that proves to be more accurate. The variables that hold real meaning fall under "change versus no change." Let's consider how Market Forces have the potential to impact the course of the data management program.

Resource Availability

Market forces can significantly impact the effective management of key resources. Throughout the program timeline, needs for specific expertise and skill sets will vary. Transitory needs are best addressed by external consultants or resources shared by other areas of the enterprise. More permanent needs derive from on-going program functions. Critical to the success of any large effort is the ability to cost-effectively acquire and retain key resources as needed.

In the late 90s many Old Economy corporations suffered through a major brain drain as the Googles, Amazons, and other startups lured away their "best and brightest." Fueled by venture capital and promising potential riches, these companies were able to offer new challenges, relaxed work environments, flexible hours, and stock options. The brain trusts migrated in droves, becoming the modern equivalent of the "Miner 49er," taking with them a rich store of institutional knowledge and experience. Projects limped along, hobbled by the losses, while senior management determined how to move forward.

The response was expensive but effective. Salaries increased, bonuses increased, shares were awarded. The ranks of directors and vice presidents swelled as management moved to recognize the impact of their remaining key contributors. Staid, buttoned-down formality gave way to a permanent business casual, while work schedules became more flexible and the need for a work/life balance was acknowledged. This seismic shift left aspects of the landscape permanently changed and created a seller's market that lasted for years.

With the financial crisis of 2008, momentum dramatically shifted, creating an environment favoring companies still free to hire. Overnight, mainstays of Wall Street, banking, and the financial services industry ceased to exist or were subsumed in a wave of contractions that left fewer players on the field. The market was flooded with the castoff remnants of these dying companies, causing unemployment to rise quarter by quarter, with competition for the few remaining jobs becoming fierce. The applicant-position ratio became a challenge for hiring managers and HR departments as they struggled to wade through the college graduates and displaced middle managers desperately vying for any role that put them back in the work force. Expectations were successfully managed downward. This buyers market allowed corporations to graze freely, picking and choosing at their leisure.

These up markets and down markets both demonstrate the potential impact of market forces on long-term programs. As opportunities increased, programs were forced to eliminate single points of failure, focus on employee satisfaction, and build in

more skill set redundancy. These measures reduced turnover but couldn't stop it, which forced companies to increase their focus on contingency planning. Conversely, as opportunities decreased, projects moved forward with less concern about turnover and with a hardened focus on deliverables and deadlines—approaches effective for getting the job done but hard on employees, setting the stage for an exodus as market conditions improve.

Fluid Priorities

Data management program Mandates are often conceived in direct response to specific external events, and those events are reflected in the program scope. But Market Forces have no regard for the Mandate, and they can create both new opportunities and unforeseen threats in the course of a multi-year program. While capitalizing on opportunities is discretionary, responding to threats is, generally, not. Threats vary by nature and can take many forms, impacting goals of the data management program in different ways.

Y2K is a good example of a threat producing a nondiscretionary response. It had a global impact across data, systems and industries, and gave rise to a cottage industry of data-centric consulting services. Industry response to the Y2K threat indirectly supported and contributed to important principles in current data management practices. The Y2K threat was a significant market force, but it was also entirely predictable, with a specific locus, a fixed deadline, and a tangible return on investment. An example of a less predictable threat was Congress's quick response to major accounting scandals involving Enron, Adelphia, Tyco International, and other companies, in and around 2001. Within months, Congress crafted and passed the Sarbanes-Oxley Act, forcing companies to scramble to understand the new law and determine how compliance would redirect their efforts. The data-centric nature of the new auditing and financial disclosure regulations put the data management programs firmly at the center of the compliance efforts.

Today, we are seeing a wave of regulations sweeping the globe in response to the 2008 financial crisis. Much of the focus is on tracking and measuring systemic risk, and the key to this effort is data. New data standards are being developed and existing standards are being enhanced, all in an attempt to better monitor and regulate complex reference and transactional data across a global financial network. In Europe and the United States, separate standards are evolving that are likely to be divergent. Requirements to implement multiple semantic standards and homogenize the corresponding data will fall directly on the data owner—the covered financial institutions. And within these institutions, those already responsible for the data management program will be charged with satisfying the new requirements.

A Matter of Survival

Controlling data within an enterprise is paramount to that firm's ability to address the unexpected and effectively execute strategy, or to hold and grow a competitive position in the marketplace. The firm that relegates their data management program to an afterthought threatens to starve their operations of a critical resource that limits their ability to deliver both the desired and the necessary. Implementing an enterprise data management program does take a serious commitment of resources, time and money. Ultimately, the success of most programs hinges on clarity of vision, an ambitious but grounded plan, and committed personnel with both the skills to execute the plan and a vested interest in the outcome. Possibly most important to success is strong, long-term support of senior management. Every program needs a champion, someone who can evangelize the message and remind those with waning enthusiasm why, as the years pass and costs rise, the programs goals remain critical to the enterprise. It is a worthwhile endeavor but risky, with no guarantees of success. But these programs do need to succeed, so the attempt will be made. The real question for most firms is not "should we or shouldn't we?" but "how long can we delay?" It will become a matter of survival—change or die.

About the author: Greg Leath is a senior member of Cutter Associates' Data Management practice and has extensive experience delivering premiere technology solutions across multiple industries. Prior to joining Cutter Associates, he effectively developed, deployed and supported strategic business processes and applications across multiple divisions of a major mutual fund company.