



MANAGING AN ANALYTICS PROGRAM:

the three key factors for success

*Analytics programs bring a different level of execution and delivery complexity involving many unknowns and constant changes. In this article, **Barbara Thorne-Thomsen, Cassandra Howard** and **Shahed Haq** discuss the three key challenges for developing an analytics project, plus three key success factors for making them work.*

Many companies recognize that they have opportunities to use data and analytics to enhance productivity, improve decision-making capabilities and gain a competitive advantage. However, managing and executing an analytics program can be challenging. It requires setting a strategy; drawing a detailed roadmap for investing in assets such as technology, tools and data sets; and tackling the intrinsic challenges of securing commitment from stakeholders, improving processes and changing organizational behavior.

CHALLENGES

Unknown and uncertain requirements

Analytics programs often begin with a specific idea or a potential opportunity in mind. However, unlike conventional IT programs, where requirements are clearly defined, refined and validated early in the design phase, analytics programs are characterized by unknown or uncertain requirements. The end users involved are often unclear of what data is available, how to analyze it or the details of how they want to achieve their vision. As the team begins to analyze and uncover more information, new ideas surface leading to changes in the requirements. This can present a major challenge in the management of the project's scope, schedule and budget.

Data identification and integrity

Analytics programs use data as the foundation; therefore, the quality of the data defines the quality of the solution and the decisions made from that solution. It is critical to identify and cleanse the data as well as keep that data from degrading in the future. Both are challenging to achieve considering the vast amount of data available and the additional time, effort and difficulty in keeping it clean and issue-free.

End-user adoption. An analytics program is only as successful as the people who use it.

User resistance is seen in various forms—most of which arise from not fully understanding the capability of analytics. For example, users may not want to take the time to maintain high data quality because they do not directly see the impact. Users may also reject the idea of analytics in fear of losing their decision-making authority to an automated solution. Still others may refuse to participate because they do not fully understand how to use and apply analytics. Left unchecked, all of these forms of resistance will lead to poor overall end-user adoption.

KEY SUCCESS FACTORS

The fast-paced, ever-evolving nature of analytics initiatives requires program management methodologies that can react to constant change, while keeping the team focused and working together as one. Success hinges on the following factors:

1. Adopting an iterative approach to planning and scope management
2. Obtaining a clean and robust data set
3. Painting the “big picture”

Key Challenges	Success Factors
<ul style="list-style-type: none"> › Unknown and uncertain requirements 	<ul style="list-style-type: none"> › Use iterative project planning › Establish flexible yet effective scope management processes
<ul style="list-style-type: none"> › Data identification and integrity 	<ul style="list-style-type: none"> › Focus on only the required data set › Incorporate sufficient time for data quality issues › Establish long-term governance processes to uphold data quality
<ul style="list-style-type: none"> › End-user adoption 	<ul style="list-style-type: none"> › Help users understand their individual roles within the larger context of the project › Emphasize the importance of active participation › Address any issues or concerns › Create an easy-to-use and easy-to-understand solution

Table 1: Key Challenges and Success Factors of Analytics Programs.

Iterative Planning and Scope Management

Due to the changing and ongoing discovery of requirements and scope, the planning approach for analytical programs usually consists of quick, iterative and tight implementation cycles that are planned one to two cycles out.

Low-level, long-term planning is not in the program’s best interest as substantial reestimation and re-planning will most likely occur. The lack of a detailed, long-term plan, however, does not mean that there is no long-term vision. There is an objective that needs to be met and the program manager must ensure that regardless of change and evolution, the program should still be working toward that objective.

The key to achieving this is to continually prioritize and group the known scope items and always focus on the most critical and important items first. As implementation cycles are being executed, any new scope items are added in with the remaining items. These are then reprioritized and regrouped based on any new findings and lessons learned. This iterative process continues until the long-term objective is achieved.

It is important to note that there is a fine line between effectively managing scope and blindly executing scope. The project manager needs to ensure each item aligns with the long-term vision while also adhering to the budget and high-level timeline.

Obtaining Clean and Robust Data

Because data is the crux of an analytics project, the value and outcomes of the solution built will only be as good as the data it is fed. The pursuit of high-quality data can quickly become overwhelming, expensive and time-consuming. To prevent this, the overall scope of data must be managed by identifying and using only the subset that directly and immediately addresses the question or problem at hand.

The next step is to assess the quality of the data and rectify any issues. Firms must plan sufficient time and effort for this activity as many issues tend to surface after the analysis phase begins.

Since addressing data quality issues is a long-term strategic activity, maintenance processes are critical. The solution must either create the proper data governance and architecture or enhance any existing frameworks.

Painting the Big Picture

Consistent and active end-user involvement increases the chance of successful project delivery and adoption. To achieve this, the program must help end users understand the big picture in terms of business objectives and their role within it. Providing this insight will also help address some of the mysteries associated with analytics. It is critical to emphasize the importance of the end user's active participation in everything from the design sessions to the cleansing and maintenance of the data. This again needs to be done in the perspective of the bigger picture, because end users are often not directly or immediately impacted.

The process includes addressing any fears or concerns that end users may have around analytics. This can be done through tool demonstrations, proofs of concept and/or Q&A sessions. These activities should focus on how users will interact with the solution and explain how analytics can help support their decisions and actions. Since one of the most common concerns is having decision-making authority automated, it is important to stress that end users will still be the decision owners and that the analytics solution is a tool that enables their decision-making process. Lastly, the program team needs to ensure that the solution is easy to use and understand by incorporating appealing visualizations and embedding behavioral science.

CONCLUSION

Executing an analytics program is a complex and resource-intensive endeavor. Analytics programs have unique characteristics, and therefore require a different approach than large, conventional IT programs. Implementing an iterative IT approach, focusing on identifying and cleansing the right data and painting the big picture for end users and the team are all essential to a successful analytics program. Considering these unique characteristics and planning to overcome the challenges will increase the chances of producing a more reliable, accurate and timely solution that will deliver value to a business.

Resources

1. D. Marchand and J. Peppard, "Why IT Fumbles Analytics", Harvard Business Review, Jan-Feb 2013
<https://hbr.org/2013/01/why-it-fumbles-analytics>
2. Stijn Viaene and Annabel Van den Bunder, "The Secrets to Managing Business Analytics Projects"; MIT Sloan Management Review, Fall 2011
3. "Making data analytics work: Three key challenges", McKinsey & Company, March 2013

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