Information Builders

A White Paper

Aligning Your Data and Analytics Strategies

WebFOCUS iWay Software Omni

Information Builders provides the industry's most scalable software solutions for data management and analytics. With one smart platform for integration, data quality, and analytics, we help companies manage their data, generate insights, take action, and deliver impact.

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Table of Contents

1 Introduction

2 A New Outlook: Designing a Strong Data and Analytics Strategy

3 Why Data and Analytics Are Both Important

4 Building a Strategy

5 Evaluating Key Components

5 People

6 Process

6 Technology

7 Change Management

8 Five Ways to Make It Happen

8 Management of Data

8 The Value of Data Assets

8 Stakeholder Involvement

9 Cohesive Strategy Alignment

9 Empowering People to Execute Strategic Initiatives

10 Conclusion

10 Learn More

Introduction

Organizations want to get the most out of their data and analytics investments. Until recently, many managed their data management and analytics initiatives separately, trying to optimize value without a cohesive strategy. As these organizations mature, their environments become more complex, as does the strategy required to support their success. Consequently, separate data management and analytics/business intelligence (BI) plans may actually diminish the value delivered by each.

Those businesses that need to align their data management and analytics/BI initiatives typically use different teams with different approaches. However, for both to be successful, they need to take a collaborative approach and create a strategic plan that integrates data and analytics to ensure cohesion within teams and initiatives, and across solution development. After all, analytics are only as valuable as the data they provide. Maximizing data validity, accuracy, and value requires an effective data strategy. It also requires an understanding of how analytics can be leveraged to drive business performance, support change management, and enable operational insights.

In this paper, we will discuss the importance of building solid data and analytics strategies, and aligning them to ensure the connection between effective data management and business outcomes. We will evaluate the components and resources required, and provide guidelines to help support your organization's success.

A New Outlook:
Designing a Strong Data and Analytics Strategy

What does "strategy" mean, and how does it apply to both data management and analytics delivery? For the purpose of this paper and for strategic development initiatives moving forward, we'll define a strategy as "a set of policies designed to help achieve a vision."

This definition is simple, but critical. There have been cases where people focus on the tactical tasks that together make up strategic goals, but these efforts often end up getting stuck in the weeds. When focusing on smaller tasks, or even planning for broader tasks, people often fail to take the bigger picture into account.

Before planning for an organization-wide initiative or determining how data and analytics will be integrated within a company's ecosystem, a strong strategy must first identify the vision and the overall goals.

Why Data and Analytics Are Both Important

Before we continue, we need to understand why both data management and analytics are important to an organization, what the business value is, and how to sell the need for a collaborative approach to decision-makers. Otherwise, getting people to sponsor projects and work together may pose a challenge.

Let's look at data governance and data quality initiatives, as both can be difficult to quantify. Key performance metrics help organizations manage performance, allowing stakeholders to take action when needed to impact the bottom line. For example, if sales are stalling, they can drill through to underlying data to identify potential root causes and fix the situation. Direct links to this type of quantitative value makes it easier to justify an analytics investment. But if the information presented in those metrics is wrong, or if stakeholders do not understand what they are looking at, only limited value can be realized. This is why data and analytics need to go hand in hand.

A data strategy must encompass more than simply providing information assets to an analytical platform. It must also guarantee the accuracy and validity of that data. The business value that analytics can provide is directly related to the quality of the data feeding the system.

While it is possible for an organization to identify the cause of sagging sales without strong data management, what are the implications and/or risks of making decisions based on flawed data? For some companies, the added risks can cost millions of dollars – losses that can be avoided by creating a strong, cohesive data and analytics strategy.

Building a Strategy

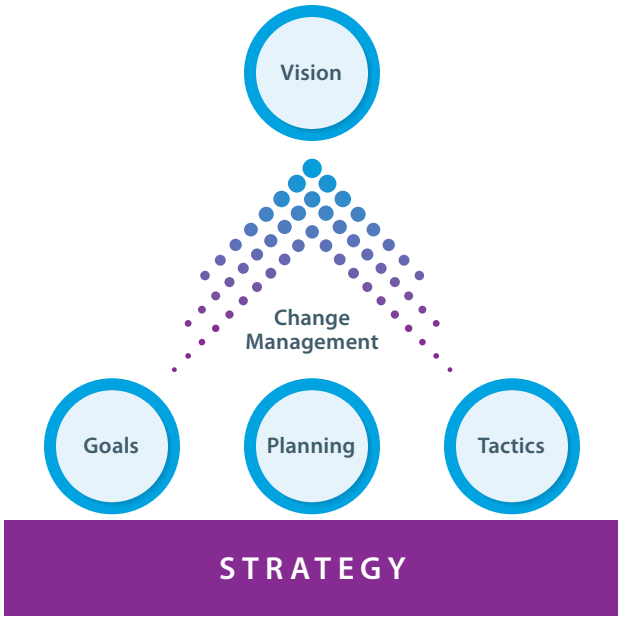
Once the value of a combined strategy is clear, we can evaluate of some of the business and technical benefits of integrating both. It is important to understand the components of each, how they overlap, and to make sure that both strategies are developed cohesively, rather than two separate strategies that are aligned after the fact.

The bottom-line basics:

- **Data Strategy** – Activities within and across data management functions are aligned to ensure that all data initiatives are integrated and part of an overall set of goals
- **Analytics Strategy** – Analytics and BI projects and delivery are tied to quantitative business goals
- **Overlapping Principles** – Analytics require high-quality data, and data management initiatives need to consider the value of the information being provided to decision-makers. With additional focus on leveraging analytics for data management to ensure ongoing quality, integration of both the data and analytics strategies is a closed-loop requirement

Evaluating Key Components

There are three key components required for a strong, unified data and analytics strategy. Once the vision is defined, the next step is to evaluate **people**, **process**, and **technology** to understand how each fits together. It is easy to look at technology considerations when evaluating how data will be delivered through analytics, but it becomes more complex when examining the processes that surround that data and the components required for information consumption and decision-making. The integration of technology with people and process takes into account the business rules and process flows needed to glean value from data.



People

People are consumers of data. They also provide insight into where the value exists within that data. They turn information into proactive insight that helps drive business direction. Understanding their roles within the organization, their knowledge, how they will leverage technology, and their level of data-savvy is just the beginning.

First, key stakeholders must be identified. How they fit into each of these categories, and what type of involvement and responsibility they should have – going beyond strategy development to include managing aspects of strategic delivery – must also be outlined. These stakeholders should exist across the organization to ensure that knowledge expands across all data assets being leveraged.

In some cases, data and analytics initiatives start within a single department. This is not a strategic approach. Although projects may be initiated to address a single business challenge, the ability to scale across the organization and manage data holistically enables broader strategic alignment.

When evaluating stakeholders, it is important to consider the following:

- Line-of-business experts who offer insights into how the business is run and how it interrelates with other areas of the company, as well as with third parties such as partners, customers, and suppliers
- Technologists who are business savvy and understand the business value of data
- Those who own the data to ensure that data governance is considered at each phase
- A top-down approach to ensure that support for strategic direction and change management are linked

Process

The interconnection between data, analytics delivery, and daily business processes is essential. How people do their jobs, what business rules exist, and which business activities guide how people interact with technology all play a vital role in a strong data and analytics strategy. Therefore, organizations should understand their business processes, identify any roadblocks that exist, and determine how processes can be optimized and operationalized.

The ability to operationalize analytics requires seamless integration with business processes. Consequently, this demands an understanding of overall goals, the different approaches to analytics outputs, required business processes – and how these all interconnect with different roles across the organization. Key stakeholders must understand the entire process chain within their departments, so they can identify the interconnected processes that require multiple types of data, and understand how that data relates to different processes across the organization.

Although time consuming, this exercise uncovers the key tasks that are essential for strategic success.

Technology

Technology is usually where organizations begin their data and analytics journey. What technology components are required, how technology should be leveraged, and how data does and should interconnect are all critical considerations. It requires looking at different platforms, as well as storage, latency, and analytics requirements. At the same time, flexibility is of the utmost importance, to meet the changing market landscape and shifting data needs within the technical environment. Organizations should consider long-term goals and emerging trends to ensure their current choices support their overall strategic goals, both now and in the future.

Technology and IT considerations are becoming more sophisticated. With the advent of artificial intelligence (AI), natural language processing, Internet of Things (IoT), hybrid cloud infrastructures, etc., there is a level of complexity that outweighs anything we have previously seen.

Adopting technology for technology's sake does not lead to success. For instance, specific pre-conditions (large data volumes or high data complexity) need to be met to derive the most value from AI adoption. Without those conditions, return on investment will remain low.

Additionally, technology requirements for cohesive data and analytics strategies must span both the solutions and the related skill sets needed.

Change Management

Strategies are not truly successful until they are well executed. Early on, decisions must be made regarding how policies will be managed and what changes will need to occur within the organization. This requires buy-in and a commitment to change. In many cases, this can be the most challenging part of any project implementation. Change management as part of broader strategic goals can pose an even greater challenge.

If an organization's data and analytics strategy is aligned with its overall goals, then all activities and tasks should be aligned across the organization. In most cases, data strategies have a smaller focus that might not be tied more broadly across the organization. This is where change management can be difficult. Analytics strategies may focus on specific goals, but to be effective, must align with the wider organizational vision to ensure adoption.

The first step is ensuring buy-in. Even with total organization alignment, shifting towards a data-driven outlook won't be easy. Organizations need to constantly think about how data can be used to enable better business decisions, then make sure the right analytics are being developed and delivered. Only then can information be leveraged to drive opportunities, direction, and decision-making.

Because people are generally task-oriented, it can sometimes be difficult to align tasks to broader initiatives. As an organization becomes more data-driven, the way people interact with and consume data must change. The way data management is addressed must become more holistic. As a data and analytics strategy is developed, organizations need to identify the change management infrastructure that will support the strategic vision.

Five Ways to Make It Happen

Data and analytics strategies are complex, with many complicated moving parts and many different stakeholders involved. These five considerations can help your organization develop and deliver a cohesive data and analytics strategy, providing a subset of requirements that serve as a starting point for aligning both data and analytics with broader organizational strategic direction.

Management of Data

Data management has many components. As part of their strategy, organizations need to evaluate how to acquire and store data, manage diverse data sources, and transform it into useful information. The strategy should also address data quality and where data should reside. These different yet interrelated moving parts make overall data management fairly complicated. All of these components need to be aligned to analytical outputs and broader corporate strategic goals.

Organizations must look beyond data components to the value that data can provide. In addition to ensuring data quality and delivering better service to customers, partners, and suppliers, a successful data strategy that is more broadly aligned with organizational initiatives can lead to quantitative business value. Therefore, companies should ensure strong data management processes that take into account change over time and alignment to broader strategic outlooks.

The Value of Data Assets

Understanding data assets means tying the management of data directly to business value. This is especially important for the success of an analytics strategy. Too many organizations focus on the development of outputs – dashboards, self-service access points, infrastructure, and architecture – but don't tie the value of internal and external data to how people consume and leverage information. These need to be tightly aligned in a way that can be understood across uses and processes.

Stakeholder Involvement

Varying skill sets, how different departments interact, and what is crucial for product or service delivery cannot be overlooked. Organizations need to identify key stakeholders and their areas of expertise, not only in relation to data and analytics, but also within the organization in general.

A wealth of knowledge exists beyond technical staff and those using technology. Understanding the data landscape, the processes involved in translating data into action, and how people across the organization define the data value chain becomes an essential part of any data and analytics strategy. Whether the goal is overall governance, growth, or cost reduction, understanding the views across the organization can help companies move beyond departmental deployments towards an enterprise-wide approach to analytics adoption.

Cohesive Strategy Alignment

Data and analytics strategies are often misaligned, even when developed as part of one another. An organization must determine where the data required for insights and the supporting technologies – the cloud, IoT, blockchain – fit within their overall vision. It must also define goals and measure performance against them to align the analytics strategy with business objectives. Additionally, there needs to be a formalized initiative to ensure a focus not just on technology, but on business value, particularly within the data strategy.

To succeed, make sure the overall strategy is broader than any one initiative. Many times, organizations will focus on individual projects, then realize they have overlooked key data requirements when they try to scale. An aligned data and analytics strategy will take into account the current environment, but must also reflect potential growth beyond what currently exists.

Empowering People to Execute Strategic Initiatives

Your ability to deliver on your strategy depends on how well you enable your people. Stakeholders must have the power to make necessary changes, creating and refining standard best practices that support data management and analytics throughout the business.

It's not just about development and deployment; it's about how information flows throughout the organization and how it can be used to enhance the customer experience. This will all require some level of change – whether minor or significant. Once the strategy is defined, it's your people that you'll rely on to execute it.

The challenge here lies in the fact that people do not like change. It can also be difficult to shift processes and give technologists, business users, project sponsors, and other key stakeholders more autonomy to make things happen.

While each organization is different, companies can learn from each other, developing ways to change to achieve their strategic goals. This will take time – possibly as much time as integrating data or creating a solid data management infrastructure.

Conclusion

The most successful data and analytics strategies are those that are tightly aligned. Understanding the important role that data plays in analytics – and vice versa – is the key to creating a truly cohesive plan. Analytics without quality data can create significant risk, while quality data is useless without a means of delivering it to decision-makers in a relevant and intuitive way. Organizations that take a collaborative and cooperative approach to ensure full alignment during planning and execution of their data and analytics strategies will achieve the greatest value and the highest returns.

Learn More

Visit our **website** for more information on how aligning your data and analytics strategies can lead to your ultimate path to success.

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