5 Keys to a Successful BI Strategy

OVERVIEW

How much should I invest in my business intelligence strategy? How can I quantify the return on investment (ROI) for a solution with so many unknown results? What improvements will this make in my ability to operate my business? Since these are questions with no definitive answers, it is hard (if not impossible) to assign true business value to your business intelligence project. Even though management might all agree that a solution is necessary, the value is often relative.

That being said, it is difficult to decide what level of solution is most appropriate when planning the project(s). With improvements in technology and the development of new offerings, there are a lot of new tools, features, and gadgets to consider. Should I invest in a commercial-off-the-shelf application or an open-source solution? What types of graphs or visualizations are available? What will the dashboards look like? What statistical functions do we need? How do we support Mobile BI? Should I look for an integrated solution within my ERP package? The list of questions seems endless.

While it is easy to focus on the sleek front-end tools and the myriad of analytical questions to be answered, the ultimate success or failure of any solution resides in the foundation and the approach. Lack of planning and preparation can result in impacts to user adoption, cost overruns, security vulnerability, analytical feasibility, and a host of other consequences that can spell D-E-A-T-H for your BI initiative.

After countless Business Intelligence implementations for a range of clients from SMBs to the Fortune 50 across geographies, industries, and complexity, we have identified 5 key ingredients that must be considered paramount to any successful BI Strategy.

1. **Audience Prioritization:** Identifying early adopters, advocates, and executive sponsors is critical to winning political goodwill and ensuring future support.

2. **System Architecture:** Understanding data volume, change frequency, historical significance, user populations, etc. are all important factors that define the right architecture.

3. **Analytical Evolution:** Addressing the evolving analytical needs of your

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organization with just the right amount of data and functionality to glean actionable insight impacts user adoption.

4. **Accessibility:** Providing intuitive interfaces embedded in other tools, portals, or Mobile apps ensures users can take immediate action when and where appropriate.

5. **Project Approach:** Managing a BI project varies greatly from other projects when it comes to expected user involvement, availability of defined business rules, complexity of system dependencies, and the myriad of potential end goals.

The following white paper will help define the foundational elements involved in each of these areas to ensure that your BI Strategy is successful.

AUDIENCE PRIORITIZATION

While it is easy to ignore this task in your BI approach, the potential impacts can be devastating to say the least. Providing too much information to a group that is in the infancy of their analytical process can seem overwhelming. Or, trying to satisfy the insatiable appetite of a highly complex, integrated business function with top-to-bottom details may be an unachievable goal without smaller successes along the way.

Within most organizations, BI projects take on a series of evolutions. Starting with a set of small objectives that broaden and expand until the whole organization is mapped by data elements and business rules in an effort to provide reports, dashboards, and analytical tools for the growing user community. Determining the prioritization of those user populations and the approach to on-boarding them within each project evolution is a delicate process to manage.

Far too often, we've seen customers define project priorities based on data availability only to gain minimal improvement in actionable insight. Or, attempt to integrate far too many disparate sources where the business rules are never clear enough and the result is never accurate enough.

Instead, users should be grouped by business function and work process rather than just department and name. This helps to organize related data sources, business rules, and work flows. Consider impacts of analytical sophistication, data complexities, and executive sponsorship. Each business function should be prioritized by their ability to take meaningful action based on the insights gleaned from the BI solution. With the right audience in place and a clear picture of the process, it will be easier to identify and achieve business functions that can save money, improve customer satisfaction, reduce inefficiencies, and increase

productivity.

SYSTEM ARCHITECTURE

Access to more information is becoming an ever increasing demand in today's business environment. Users want to be able to report on events as they occur with both current state and historically significant details. While talking to your customer and processing their latest order, it may be imperative to understand the customer's account balance, recent transaction history, product inventory levels, shipping transit costs, as well as a myriad of other related data points. This is all quite achievable when it comes to a single customer at a single point in time.

However, when it comes to assessing a sizable customer population at multiple points of interaction, the volume and complexity of data quickly grows exponentially. Analyzing these decision points for business process improvements can be an arduous task if not properly supported by the appropriate toolset and architecture.

While the potential BI architectures (OLAP/MOLAP/ROLAP cubes, data warehouse, in-memory solutions, columnar databases, etc.) are far too numerous to detail, here are some of the main features that should be considered:

- Data Volume: How many transactions occur on a daily/weekly/annual basis? What entities and attributes make up the details of each event?

- Data Retention: Are there government or industry compliance standards that must be addressed? If unmanaged, how quickly will your data volume outgrow your environment?

- Security: Who needs access to the system? Will they be inside or outside of the walls of our network? What type of data sensitivity needs to be considered? Are there compliance standards that must be maintained for personal information?

- System Performance: How much time are users willing to wait for query results? Is there a need for batch pre-processing or data mining prior to user interaction to improve analytical capabilities? How many concurrent users can be supported before the system slows to a crawl? What operational business process may be impacted by batch processes running midday?

- Metadata Management: Does everyone agree on the definition of a customer? Order? Vendor? Supplier? How do you integrate multiple source systems without agreeing on basic business definitions? What is

the source system of record for each of these entities?

- **User Interface:** Will users gain insight from dashboards? Are users on the go where Mobile BI is a reasonable consideration? How sophisticated is the user population to make use of statistical models?

- **System Dependencies:** When are source systems updated? Where does data clean up occur? How do you handle bad data? Do you need a SOA to manage real-time integration?

ANALYTICAL EVOLUTION

As with most things, the more you become comfortable with something, the more that you rely upon it pushing for more volume and/or great complexity. We see the same thing when it comes to the BI evolution within most organizations. From operational reports to exception reports to dashboards, organizations evolve in their thirst for knowledge and insight.

At first there is the need to satisfy the masses with basic, routine operational reporting. Perhaps, a system was recently replaced and the available reports only cover a fraction of what was previously available.

As soon as this fundamental need is satisfied, a level of complexity is often desired where by individuals want the ability to limit the focus of the analysis to either the best or worst performers. This usually starts with something simple along the lines of show me the sales report, but only include the bottom 5 territories for the week.

Quickly, this type of report evolves into a manager asking a subordinate a question that cannot easily be answered. Some level of research is needed to understand why the Southwest District is trailing the rest of the country when their geographic size and potential customer base dwarfs the company leading Midwest District.

Ultimately, this leads to the logical progression of wouldn't it be great if I could just turn on my phone/iPad to see a color coded, graphical display of where I need to focus my time and energy.

From operational reporting to exception reporting to ad-hoc analysis to dashboards/Mobile, most organizations see a user community that evolves their thinking as they understand the data that is now available to them. While this trend is good and shows a logical progression of thought process, it can sometime be too slow to evolve or too short-sighted to gain efficiencies along the way. During the planning stages of your BI Strategy, you should anticipate this

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evolution to make sure to account for data availability, product licenses, technical training, and resource availability to be timely in your responsiveness.

ACCESSIBILITY

Recently, there has been a dramatic shift to increase accessibility in many organizations. We're not just talking about companies that see a value in buying more licenses to their reporting platform to allow more users to access the system. We're talking a conscience effort to expand upon the availability of information to address the needs of atypical work schedules, traveling executives, limitations in system interfaces, or even corporate partners.

As business evolves beyond the command-and-control hierarchies of the past, the expectation of all employees to make sound business decisions is becoming more apparent. With these expectations comes the necessity to support all individuals with the appropriate systems and information to carry-out such duties. Where a manager's report and an executive summary might have sufficed as enough dissemination of information previously, more advanced corporate cultures will require information and analytical tool access for the masses. Each and every person in the corporate hierarchy is expected to understand the corporate strategy and make sound business decisions that support the objectives and initiatives aligned with this strategy.

With all of these added complexities of system accessibility, comes a challenge to manage security, control license costs, and provide support for a myriad of platforms that will be used to interface with the BI solution.

PROJECT APPROACH

In typical IT projects, there is often the initial inclusion of business users to assist with business case development, feature prioritizations, and tool selection. As the process continues, business users tends to fall off due to competing work priorities only to come together again for user acceptance testing at the tail end of the project schedule. The ultimate impact to this trend results in systems that often maintain high technical proficiencies but lack business process adherence. As the leading cause of IT project failure, it is paramount that business users and IT resources work together to produce BI solutions aligned to the business work flow.

Within the world of BI and the complex nature of the data (inputs needed for data modeling, metadata definitions, entity relationships, etc.), technical performance is often a tradeoff of business value. Data volume getting in your way? What better way to cut down on 80% of the data volume than to reduce the historical

retention period from 5 years down to 1? This lack of user involvement throughout the process can be detrimental to the end result.

While it is not always an easy process to manage, the inclusion of business users, the coaxing of information from them, and the understanding of the business rules is paramount to a successful BI Strategy. Rather than overwhelm them with tables, fields, and technical gibberish, we recommend an approach that works backwards in its delivery. Start with users defining the end goal – the analysis that they want to be able to support when the solution is complete. What do you want to see as the output? What can that tell you? What decisions can you make? Working through short iterative cycles from a visual storyboard helps manage scope, understand the complexities of the business process, and map out entity relationships.

It is inevitable that late arriving business rules will be uncovered. Your approach to project management and the success of your BI Strategy may hinge on your ability to manage these 11th hour discoveries. What level of inaccuracy is acceptable if the business rule is ignored? How much of a delay may be caused by including this step of the process? As the business evolves, so too does the BI solution to maintain consistency with definitions, processes, and decision criteria.

CONCLUSION

Whether an organization is looking to implement an enterprise-wide business intelligence solution or simply support their day-to-day activities in an ever increasing world of complexities, a successful BI Strategy is becoming more of a requirement than a nice-to-have.

As such, your BI Strategy should address the needs of audience prioritization, system architecture, analytical evolution, and accessibility with a clearly defined project approach. Having a vision for the enterprise wide goal and prioritizing the iterations along the way to build upon small wins is paramount to gaining executive sponsorship, end user involvement, and ultimately addressing the analytical needs of the organization.

ABOUT STRATEGIS

Founded in 2006, Strategis Consulting is a boutique technology consulting firm specializing in building strategic information solutions. Our range of services include advanced analytics, business process management, data warehousing, portals, reporting, workflows, mobile apps, integration, custom solutions, and training.

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