Analytics Strategy Best Practices



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Executive Summary

Data and analytics continues to be a top investment priority for CEOs and CIOs alike. Companies are overwhelmed by ever-increasing volumes of data accelerated by mobile devices and social media. IT organizations are under siege to deliver meaningful analytics and enable business users with self-service tools and access to trusted data.

In the Gartner Group 2016 CIO Agenda Survey, analytics and business intelligence (BI) again was ranked #1 for a fifth consecutive year (see sidebar). Gartner's 2016 CEO Survey found executives retained growth as their top business priority and

ranked IT in the top five. More than two-thirds of technology-related priorities had an Internet and digital aspect to them; data and analytics will be key to these initiatives, which will support digital transformation and growth.

Top Five Business Priorities	Ranking
Growth	1
Customer	2
Workforce	3
Corporate	4
IT	5

Top Five Business Priorities	Ranking	
Business intelligence and analytics	1	
Cloud	2	
Mobile	3	
Digitalization and digital marketing	4	
Infrastructure and data center	5	
Enterprise resource planning	6	
Security	7	
Industry-specific applications	8	
Customer relationship management	9	
Networking, voice, and data communications	10	

Sources: Gartner 2016 CIO Agenda Survey; Gartner 2016 CEO Survey: Year of Digital Tenacity.

Organizations can ensure that their data assets, technologies, and people are maximizing these resources for improved business performance through a strategic, programmatic approach to analytics that includes five key areas. A rock-solid analytics strategy covers the five critical areas shown in Figure 1.

SAP can help you understand these key elements, so you can define and deliver an analytics road map with milestones to help ensure a strategic enterprise analytics program that will boost productivity, accelerate key business processes, and power better, more relevant decisions across your organization through an analytics strategy assessment and workshop.

Figure 1: Building Blocks of a Rock-Solid Analytics Strategy – Analytics Strategy Framework from SAP



- Background and purpose
- Current state and history
- Objectives and scope



Business Needs

- Summary of needs
- Envisioned to-be state
- Priorities and alignment



Business Benefit

- Value proposition of analytics
- Expected benefits – future-state key performance indicator
- · Business case



Technology

- Information categories
- Architecture and standards
- Applications and tools



Organization

- Governance structure
- Program management
- Road map and milestones
- Measurement
- Education and training
- Support

What Is an Analytics Strategy?

There is confusion over what an analytics strategy actually is. When organizations were asked about their BI and analytics strategy, the results were as follows:*

- 27% have a clearly defined analytics strategy
- 57% don't have a strategy at all
- 17% don't know if they have a strategy or not

Here are some indicators that your analytics strategy isn't fully formed:

- Your strategy consists of an architecture slide.
- IT is asking the business what reports they need.
- Step one of the strategy is building a data warehouse.
- There are no metrics defined to measure progress.

An analytics strategy empowers your workforce, giving it the right information at the right time and enabling it to make actionable decisions. Your analytics strategy should not only address the information needs of your entire organization – it must also align IT and the business. A formal, documented strategy is critical to pull together all data and analytics assets and efforts across any company.

Major barriers to building a successful strategy include a lack of alignment between IT and the business and the tendency to jump to technology decisions or architecture diagrams without considering what business problems the organization is trying to solve. See this blog for more information:

"BI Strategy: Creating a Happy Marriage Between Business and IT"

*IDC, 2012 Vertical IT & Communications Survey, June 2012, N=4177.



Data and analytics continues to be the top investment priority for CIOs. An effective analytics approach can benefit your IT and line-of-business teams alike.

Analytics Strategy Overview

Data and analytics is no longer an initiative just for IT. It's become a strategic initiative for the entire organization, both IT and the business. Over the years, analytics has evolved into different shapes and sizes based on business needs, expectations, and budgets. However, not all analytics programs are successful.

If you have an analytics program in place, how effective is it in supporting your organizational success? There are a number of reasons why programs are not effective:

- Poor communication between IT and the business
- Failure of IT to ask the right questions or to think about the real needs of the business
- Absence of executive support
- Throwing technology at business problems
- · Political and cultural issues
- Poor communication and training

See this blog for more details:

"Experience Business Intelligence Nirvana with an Effective BI Strategy"

Organizations face many challenges in managing their data and their business needs. Some of these challenges include:

- Tool complexity End-user adoption is crucial to the success of any analytics initiative, but too many different tools with steep learning curves and complex data models beyond the understanding of the business can hinder adoption.
- User accessibility A lack of self-serve models combined with difficulty in using existing systems can inhibit reports being used by the wider community.
- Information fragmentation When information is locked away in application silos and heterogeneous sources, integrating that information often requires expert knowledge. This leads to a disconnect between analytics and operational applications.
- Flexibility to respond to change Business needs change rapidly, so, since technology cannot keep up with the speed of thought, data models quickly get out of sync with business models.



A good strategy includes aligning business partners, formalizing business needs, and delivering a comprehensive, strategic analytics solution that identifies a shared set of goals and delivers planned results.



An effective analytics strategy can help reduce or remove these challenges and can provide significant benefit to both IT and the business:

- Increase user satisfaction Users avoid the frustration and time wasted accessing information across multiple systems, enabling better business analytics, insight, and collaboration.
 Self-service analytics is deployed across the organization.
- Control for predictable and consistent analytics solutions – With a single point of administration, project estimating is easier and more accurate. Users and administrators know which tools to use for which job.
- Save money Save wasteful duplication of costs for every aspect of your analytics projects, also known as "leveraging," "reusing," or "consolidating/rationalizing" (for example, licensing, maintenance, training, administration and support, and development costs).

Read this **blog** about how BI and analytic tools standardization can improve your TCO.

When starting the process of building or improving your analytics strategy, here are some universal best practices that should be considered:

- Find an executive business sponsor —
 The executive sponsor understands the value of
 data and analytics and champions and promotes
 analytics across the organization.
- Create a business intelligence or business analytics competency center (CC) or center of excellence (COE) – The competency center or COE ensures that the right people and program-management best practices are in place (see more in the following section on business intelligence competency centers [BICCs] and business analytics competency centers [BACCs]).
- Gain alignment between IT and business Identify goals and expectations across the organization, and ensure they're closely aligned with the strategy and strategic initiatives.
- Define architecture and standards –
 Develop and maintain standards regarding methodologies, definitions, processes, tools, and technologies required to implement BI and analytics.
- Develop a road map and measure your progress – Develop metrics that will measure both initial initiative implementation as well as your ongoing BI and analytics success.



Organizations can ensure that their data assets, technologies, and people are maximizing these resources for improved business performance through a strategic, programmatic approach to analytics.

You can find more information on these best practices in this blog:

"Business Intelligence Best Practices"

The analyst firm IDC has published a white paper on the value of and key elements in a multipronged, collaborative business analytics approach. You can find this white paper here:

» Implementing an Analytics Strategy to Accelerate Insight

The role of an executive business sponsor cannot be overstated. According to research by the Massachusetts Institute of Technology, between 70% and 80% of corporate BI projects fail to meet expectations. The primary reason for failure is (see Figure 2):

- Lack of sponsorship or engagement outside of IT
- Lack of vision or strategy

The executive business sponsor should:

- Own the overall corporate analytics initiative
- Define the goals and measures of the initiative
- Incorporate the initiative into mission and vision statements
- Ensure data and analytics are considered as part of every corporate strategic initiative
- Put the right business and IT teams and resources behind the initiative
- Evangelize the initiative and its value across the organization

Lack of sponsorship and engagement outside IT Lack of vision and strategy Addressing data-quality issues Agreeing on definitions and business vocabulary Organizational culture and political issues Lack of governance of business intelligence (BI) and information Creating awareness and ensuring business adoption Identifying the right metrics Inadequate scoping Organizations tend to throw technology at BI problems. You Overreliance on tools and technology could have the right tool, but it Inability to change, based on insight from BI could be doomed to failure because of political and cultural issues, an Lack of BI-related IT skills absence of executive support, and Lack of data-analysis skills poor communication and training. Timeliness and latency of data delivery 2 8

Figure 2: Business Intelligence Projects Fail to Meet Expectations

Source: MIT Sloan Management Review 2010

Another essential part of a complete BI and analytics strategy framework is a BICC/BACC or a BI COE or analytics COE. The competency center or COE incorporates governance, program management, a strategy road map and milestones, education and training, and support. It comprises a cross-functional team with specific tasks, roles, responsibilities, and processes for supporting and promoting the effective use of BI across organizations (Gartner 2001). BACCs are largely engaged in the organization and implementation areas of a data and analytics strategy.

As data continues to explode, BACCs are key for organizations to deliver value on their data.

Read this blog for more information on how BACCs help address data and analytics demand:

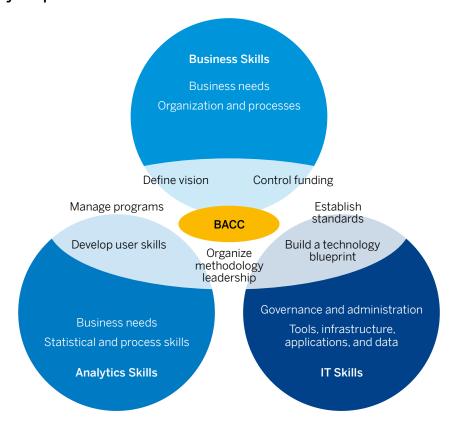
"Bl Competency Centers Help 'Big Data' Deliver Big Value"

This blog details different organizational models for a BACC, visibility and funding, and how to get started or evolve your existing BACC:

"BI Strategy: BICC, a Key Element to Your BI Program"

One of the components of a successful BACC is ensuring the members have the right mix of business, analytics, and IT skills (see Figure 3).

Figure 3: Business Analytics Competency Center (BACC) Skills Requirements – Business plus Analytics plus IT





Business skills are needed to help business managers set and balance priorities by analyzing the consequences of choices and creating business cases. They also provide an understanding of the organization's strategic business objectives and the role that action-oriented information plays in achieving the corporate objectives.

IT skills ensure that the competency center or COE understands the infrastructure implications of business and analytics requirements. Those skills are also critical in understanding diverse analytics tools and technologies as well as the differences in design and access characteristics of diverse data sources.

Analytics skills help with researching business problems and creating models that help analyze these business problems as well as working with the IT department to develop insight into how to identify data for a specific analysis or application.

There are three important elements of an effective business analytics competency center:

- Development of an effective analytics strategy
- · Alignment with the IT development COE
- Creation or maintenance of a competency center

Developing an effective analytics strategy requires identifying key stakeholders, identifying corporate strategy as it aligns with business needs, and identifying business and business-unit priorities.

Aligning with the IT development COE includes identification of analytics strategic programs and analytical and technical skills. It also includes the identification of overlapping business priorities as well as architectural scope and data scope.

The BI or analytics competency center or COE is responsible for overseeing the development of a BI governance structure as well as the implementation of the BI competency center.



An analytics strategy empowers your workforce, giving it the right information at the right time and enabling it to make actionable decisions. Together, these three areas work together to ensure successful execution of the enterprisewide BI strategy.

Figure 4 shows how everything works together to ensure successful execution of the enterprisewide BI and analytics strategy.

Center of Excellence

Figure 4: Key Elements of an Effective Business Analytics Competency Center

Development of an Effective Analytics Strategy

- Identified key stakeholders
- Identified corporate strategy as it aligns with business needs
- Identified business and business-unit priorities
- Confirmed architecture
- Identified data sources
- Aligned with business analytics competency center (BACC) priorities
- Confirmed internal capability
- Identified impacted business processes

Alignment with an IT Center of Excellence

- Corporate IT alignment with the BACC
- Identification of analytics strategy and program, and analytical and technical skills
- Identification of overlapping business priorities
- Identification of architectural scope, overlap, and so on
- Identification of data scope, overlap, legacy systems, and so on
- Confirmation of deployment capability
- Deployment of analytics tool set by project type

Analytics Governance

• Confirmed executive steering committee

Structure Development

- Secured buy-in and involvement from all impacted stakeholders
- Identified and agreed on priorities
- Defined and agreed on accountability
- Defined and agreed on roles and responsibilities
- Defined and agreed on guidance, standards, and templates
- Identified analytics tool sets
- Defined tool-set capability by project type

Business Analytics Competency Center Implementation

Operationalize

- Defined business priorities
- Defined reporting needs
- Defined key performance indicators and supporting metrics
- · Defined architecture
- · Defined data needs
- Defined solutions and methodologies
- · Confirmed capabilities
- Confirmed project priorities
- Confirmed project management process
- Confirmed project rollout process
- Confirmed guidance, standards, and templates

Getting Started

The first step to developing a solid analytics strategy is determining whether or not you already have one and how complete it is. In addition to knowing what an analytics strategy isn't (for more information, see the previous section "Analytics Strategy Overview"), there are several questions you should be able to answer if you have a formal strategy in place. Here are just a few:

- What is our vision for information accessibility and usage?
- What should the high-level road map of analytics initiatives look like?
- What metrics should we use to manage analytics implementation and fulfillment of business goals?
- What kind of governance model do we need to support analytics initiatives?

It's important to remember that developing an analytics strategy is not a one-time occurrence. It is a dynamic, ongoing process that continues to evolve as business needs change, technologies change, and your analytics maturity evolves.

You can find more questions that are answered by a complete BI and analytics strategy program in this blog:

"Business Intelligence Best Practices – Part 1"

Another consideration when evaluating your current analytics strategy or creating a new one is where your organization falls in the Bl and analytics maturity model. This will give you a sense of how well your company is executing whatever strategy might be in place and how closely you align with current best practices (see **Figure 5** for more information).



The role of an executive business sponsor cannot be overstated.

Once you have a good understanding of your existing BI and analytics strategy and where you fall within the BI and analytics maturity model, it's time to assess your organization's business challenges and determine which of them are the highest priority.

Our analytics strategy self-assessment (business discovery) tool can help you identify or validate challenges across key lines of business (LoBs) and helps you prioritize which ones would have the most impact on the organization if resolved.

To gain a complete overview of the organization, we recommend that multiple business LoBs be involved in filling out the self-assessment.

When the self-assessment is complete, you will receive a customized set of recommendations for improvement. This will provide guidelines for immediate action; you can take the assessment again later to measure your overall improvement.

You can find the analytics strategy self-assessment tool **here**.

Figure 5: Business Intelligence and Analytics Maturity Model – Levels of Performance Along the Best-Practice Framework

Level 4 Level 3 Level 2 Level 1 KPIs and analytics KPIs and analytics used to manage KPIs and analytics are identified and Information and analytics Requirements the full value chain are identified but used effectively (business and key performance driven from a not well used indicators [KPIs], ad hoc, limited executive measurement) group Enterprise-wide Business governance Business-driven governance with with business Governance analytics competency leadership (business participation, IT-driven analytics governance center developing self-service, business analytics governance evolving competency center) Uniform, followed. Exist and are and audited Standards and processes **Evolving effort** not uniform (design and process, service-Do not exist or to formalize level agreement, reuse, data are not uniform ownership and standards) Robust and flexible analytics Consolidating Some shared architecture and upgrading **Application architecture** analytics Analytics "silos" (multiple and disparate systems, applications for each business spreadsheets, delivery)

How SAP Can Help

SAP has developed a four-step approach to developing a solid analytics strategy foundation. We start by helping you understand your current business challenges and the impact of addressing those challenges. We also help you understand the extent of your current BI and analytics strategy program capabilities, both formal definition and execution, as well as the value of addressing current gaps. From these two assessments, we perform a gap analysis to identify your highest-priority areas. The gaps in these areas are then addressed in an analytics strategy foundation recommendation.

If you're interested in having an SAP facilitator conduct an analytics strategy assessment and workshop in your organization, go to the BI solutions site on sap.com and submit a request:

» Analytics Strategy Workshop

You can also contact your account executive directly to request a workshop or for more information on SAP® BusinessObjects™ business intelligence (BI) solutions or SAP Analytics solutions.

Visit this blog for more details about the methodology we teach in the facilitated workshops:

» "Business Intelligence Best Practices 1"

Our strategic advisory services for analytics are designed to provide an agile and adaptive analytics strategy treated as a living artifact that will be continuously refined to meet enterprise objectives. The service addresses three key areas:

- Vision and business value for discovering the business drivers behind your organization's need for an analytics strategy
- Technology alignment focusing on recommendations for improving and growing the end-toend solution architecture
- Transformation road map describing how you can execute the people, process, and technology recommendations as a set of projects and milestones

Learn more and access the <u>SAP services for</u> data and analytics site, which covers the full portfolio of analytics services from SAP: BI; predictive analytics; enterprise performance management; governance, risk, and compliance; and analytics services for industries.



An analytics strategy is a dynamic, ongoing process that continues to evolve as business needs change, technologies change, and your analytics maturity evolves.



STRATEGIC ADVISORY SERVICES FOR ANALYTICS

The three key objectives the strategic advisory services address are business needs, delivery approach, and value.

Business Needs

Business needs include the following:

- Tying business strategy to actionable analytics initiatives to contribute to company objectives
- Avoiding the risk of a build-and-burn solution given the lack of insights on the mid- to longterm direction
- Defining a metrics framework to gauge the current state of the business and relate it to the enterprise objective
- A rock-solid, end-to-end architecture to protect your investments

Delivery Approach

The delivery approach consists of:

- Two- to three-day on-site workshop conducted by analytics advisors
- Tailored breakout sessions on the adoption of analytics and what to do from organizational, technical, and solution perspectives
- Capability-driven discussions based on business priorities
- Feasibility and ranking to pick "big hits" and "quick wins"

Value

The value delivered includes:

- Getting initial guidance about the benefits, obstacles, and setup for a successful analytics success map to meet your business demands
- Focused advisory to determine your position and your way forward in analytics
- Increased confidence in the value of your analytics investments to the right solutions



SAP has developed a four-step approach to developing a solid BI and analytics strategy foundation.

More Information

SAP has several resources available to anyone interested in learning more about analytics strategy and analytics competency centers or COEs.

ANALYTICS SOLUTIONS

Visit the **analytics solutions page** on sap.com to:

- Review the entire SAP BusinessObjects BI suite and product solution capabilities
- Learn what our customers are saying about using our solutions
- Understand how SAP Digital Business Services offerings can help you transform your business
- Stay current on our analytics innovations with #askSAP Community Webcasts

VALUE MANAGEMENT

The SAP Value Management program team has created several data and analytics surveys that will let you see how your strategy compares to your peers and gain insights into improving your strategy and action plan.

View the <u>BI Best Practices Survey</u>. View <u>technology innovations surveys</u>.

BUSINESS INTELLIGENCE BLOG AND NEWSLETTER

In addition to ones already mentioned, here are some additional key resources available to help you develop and enhance your data and analytics strategy:

"Driving Value from Your BI Program – Define, Track, and Measure Success" – Blog on how to drive value from your BI program and how to define, measure, and track success.

VIDEO CHANNELS

Our YouTube channels for BI strategy and BI competency centers offer a wide range of short videos to help show the value and impact of a BI strategy and how BI competency centers fit within that strategy.

- » Playlist: BI Strategy
- » Playlist: BI Competency Centers

The "How Smart is BI Without a Strategy?" series on VoiceAmerica presents an in-depth look at how a BI strategy sets your road map for success and enables better decision making across the organization.



Keep up-to-date with the latest data and analytics thought leadership through these channels:

- » Analytics Newsroom
- >> Digitalist by SAP
- » SAP HANA® blog
- >> Business Analytics and Digital Business

LEARN MORE

Contact your SAP account executive for more information on developing and refining your BI and analytics strategy, or visit us at www.sap.com/products/analytics.html.

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