

Your Start to Finish Guide to Implementing Vital Business Intelligence Strategy

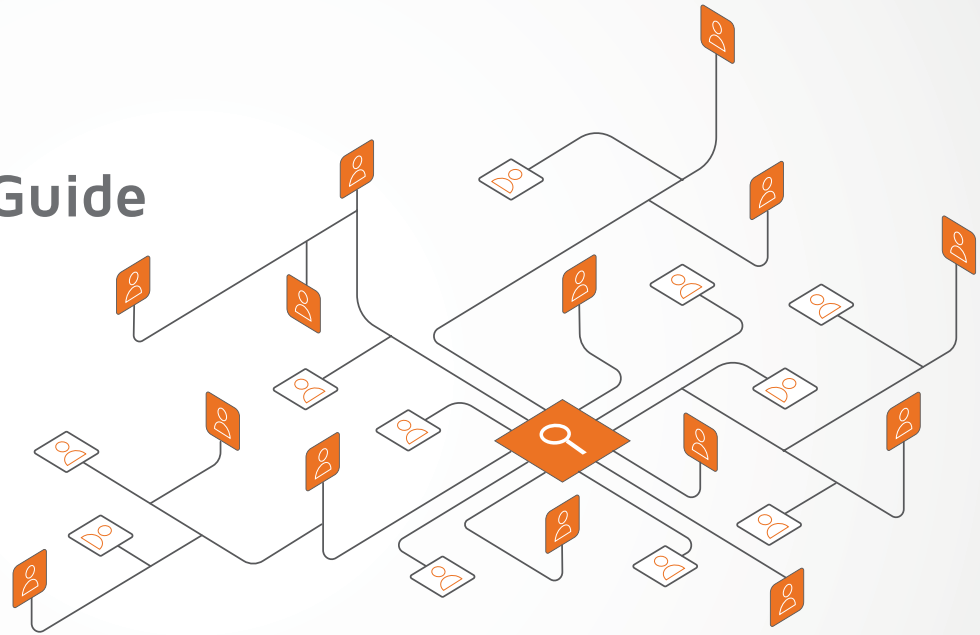


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Intro

Does your data sit on your servers unexplored? Are your current BI tools running at dial-up speeds in a 5G world? Then your business is definitely falling behind. The speed, agility, and functionality of today's business intelligence platforms far surpass those previously achievable. Public and private sector organizations are no longer able to ask if they need to be implementing business intelligence strategies, but how to do it in a way that garners the best results. That is why we put together this guide.

We know that newcomers to the business intelligence world face plenty of challenges getting up to speed as they improve workflows and efficiency with the latest technologies and industry best practices. Bringing together our knowledge of the prevailing market and the expertise of some of our best BI consultants, we have created a guide that takes businesses from the start to finish of implementing a competitive business intelligence strategy.

We hope that reading "Your Start to Finish Guide to Implementing Vital Business Intelligence Strategy" provides you with the insight to overcome initial challenges, select the right software for you, integrate your options, and find talent that works for you.



How to Avoid the Most Common Business Intelligence Mistakes

In the pursuit of greater process efficiency, there is no rigid roadmap for success. As organizations work to improve their workflows and identify overlooked opportunities, they forge their own paths and encounter their own challenges. As they explore the BI implementation process, the way in which organizations handle early challenges has a domino effect. Mistakes made now are inscribed on an organization's analytical capabilities.

Rather than trailblazing the entire process, the most successful BI adopters learn from common mistakes and adopt best practices. We find that the following early challenges disrupt business intelligence practices most down the road.

Lack of Executive Participation

The most conclusive changes come from the top down. When launching a business intelligence strategy for the first time, executives need to understand the advantages but also how they can contribute to the total implementation.

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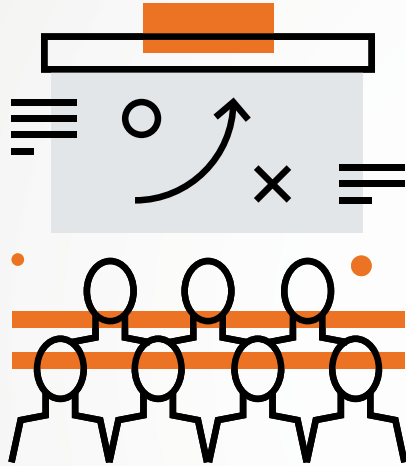
One of the pitfalls of first-time business intelligence strategies is not getting a business champion who is going to make sure that it goes through the entire life cycle.

Joseph Cline - Smart Resources BI Specialist

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There needs to be someone involved who will be an advocate at every step, eliminating obstacles and propelling each lifecycle phase forward.

Failure to Get End-User Buy-In



Some BI strategies fail in the real world in the face of planning that is theoretically sound. The reason? Decision-makers forget to gather end-user input or create widespread comprehension prior to launch, failing to empower users to the fullest. Fortunately, this is a dilemma with a straightforward fix.

At the outset of developing your business intelligence strategy, thorough requirement gathering is essential. Similar to software development, effective BI implementation is guided by an understanding of what the end user wants and needs. Asking the right questions in the planning phase determines that full success:

- What challenges do end users struggle with most?
- What depth of analysis does the organization need?
- How familiar will your users be with BI best-practices?
- What is their average level of technical competency?
- What do users even want out of a BI platform?

Thorough user research prevents many of the issues that plague similar projects. More than just accommodating the end user, strong business intelligence strategies ensure that employees actually know how to use the tool to gather insight and improve workflows. Additionally, getting users enthusiastic and confident about using your BI platform's full functionality requires hands-on tutorials and immersion sessions to clear up questions early on and accelerate overall adoption.

Identify the Most Significant KPIs

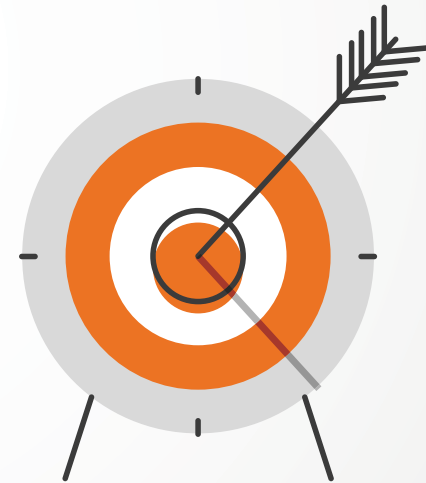
Without accurate measurements, the true value of business intelligence improvements will remain shrouded in mystery. However, the temptation to track everything is just as counterproductive. Reining in KPIs to the essentials helps to control expectations and aligns your BI strategy with the rest of your business objectives.

The process begins with decision makers outlining clear BI goals. Implementing business intelligence strategies as a panacea only elicits lukewarm results. If an organization knows the types of problems they want to solve from the start, they can measure their success far more accurately.

Take the Coca Cola Company, for example. The beverage giant struggled to create consistency with the flavors of their Minute Maid and Simply Orange brands.¹ Acidity, sweetness, stock, and other attributes of each citrus fruit had the potential to produce 600 unique flavors. As they developed a specific business intelligence strategy for this division, they knew that improved OJ consistency year-round would be the most important measure of success. Any platforms or strategies they implemented would need to have the analytical power

to evaluate the combination of flavor profiles, diverse factors ranging from weather conditions to regional preferences, and how their supply chain practices can achieve greater consistency.

In all probability, Coca Cola's BI planning stages outlined the importance of consistency and satisfaction measures as they evaluated the success of their business intelligence practices. Organizations that model their methods on a desired end business objective will uncover findings later in the process.



Data Remains Disconnected

Business intelligence is only as strong as the sum of its parts. A rookie mistake many organizations make as they build their first business intelligence strategy is to leave their comprehensive databases scattered and disconnected. They either imagine that data divided between departments has no relevancy or they simply are unaware of the full scope of their internal data.



During the initial phases of BI strategizing, it is important for your team to audit all existing databases. That extends to data separated by individuals and departments. By eliminating data silos, you present your organization with the opportunity to extend the reach of your insights and reach your target objectives faster.

Not All BI Tools Are Scalable

Even an otherwise judiciously implemented BI strategy can fail if decision makers forget to support scalability. Operations expand, users fluctuate, and the need for analytical horsepower varies year over year. Unless a business intelligence strategy and the associated platforms have some level of elasticity, organizations will need to redo the entire research and implementation process.

Scalability of any software and analytical tools is especially important. Not all platforms allow for the easy addition or subtraction of user access, databases, or servers. Though a greater number of BI tools are able to expand or contract with your business, we still cannot emphasize enough how important it is to include scalability in your initial selection.

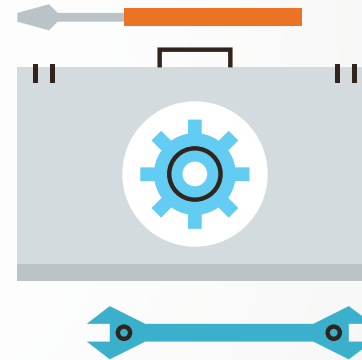
What the Top BI Tools Offer You

When it comes to choosing a BI tool, careful consideration must be given. Even deciding to “try out” a free tool presuming there’s no harm without commitment still costs time and efficiency if the tool turns out to be an ill-conceived fit. At the outset of the decision-making process, clear answers to several questions will help guide an organization in choosing the appropriate BI tool:

- What are the hardships of the business that need to be alleviated?
- What processes can be automated?
- What do you need the tool to do?
- How much data do you need to process?
- Is the tool user intuitive? Is it cost-effective?

Many self-service tools, typically housed in the cloud, have become popular in recent years. They have a short implementation time, low upfront investment, and no additional hardware costs. However, they

do have their drawbacks in lessened security, greater costs as your user base expands, and a low degree of customization. On the other hand, enterprise-level / on-premise full stack products offer robust customization, greater security, and excellent customer support as a tradeoff for longer implementation times and higher upfront costs.



Whichever specific BI tool is chosen and implemented, good data governance is key so that employees can trust the BI findings and results. Here are some of the most popular BI tools, with brief strengths and weaknesses: ^{2,3,4}

PRODUCT	STRENGTHS	WEAKNESSES
Yellowfin	<ul style="list-style-type: none"> • Rapid Deployment • Customer Support Included in Cost • Collaborative User Environment • Geographic Location Intelligence Functionality 	<ul style="list-style-type: none"> • No Financial Planning or Profit Analysis Functionality
Oracle BI Enterprise Edition	<ul style="list-style-type: none"> • Interactive Dashboards • MS Office Plugin • Includes Hyperion Financial Reporting & Web Analysis • Compatible with All Data Measurements 	<ul style="list-style-type: none"> • Complex Installation, Configuration, and Maintenance • IT Expertise Required
Sisense	<ul style="list-style-type: none"> • User-Friendly • Wide Range of Data Visualizations • Over 50x Faster Than Some Competitors 	<ul style="list-style-type: none"> • Dashboards Only Web Compatible
Pentaho BI	<ul style="list-style-type: none"> • Open-Source • No Coding Required • 24/7 Customer Support • Exceptional Large Data Set Analysis 	<ul style="list-style-type: none"> • Time-Consuming Updates
IBM Cognos	<ul style="list-style-type: none"> • Full Stack BI Tool • Scalable • Fast and Accurate • FrameWork Manager is a Best-in-Class Meta-data Storehouse 	<ul style="list-style-type: none"> • Confusing Error Messages • Limited Offline Access

PRODUCT	STRENGTHS	WEAKNESSES
MicroStrategy	<ul style="list-style-type: none"> • SQL Optimization • Mobile Friendly 	<ul style="list-style-type: none"> • Poor Out-of-the-Box Visualizations
SAP Business Objects	<ul style="list-style-type: none"> • Easily Accessible Consolidated Data • Intuitive Interface • Easy Deployment 	<ul style="list-style-type: none"> • Steep Learning Curve • Certain Functions Require IT Expertise
Microsoft Power BI	<ul style="list-style-type: none"> • User-Friendly • Customizable • Mobile & SaaS Versions • Basic Version Is Free • Quick Insights Feature Offers Machine Learning • Large User Community 	<ul style="list-style-type: none"> • Incompatibility with Non-Microsoft Data
Tableau	<ul style="list-style-type: none"> • Easy to Use • Large Partner Network • Largest Collection of Charts & Visualizations 	<ul style="list-style-type: none"> • No In-Person Training • No Mobile Version
Zoho Reports	<ul style="list-style-type: none"> • Easy to Learn • Inexpensive 	<ul style="list-style-type: none"> • No Windows Version • No Free Trial

Moreover, your business intelligence tool needs to be future-oriented.

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You should start with a tool that is able to grow and evolve within the problem you are using it to resolve.

Joseph Cline - Smart Resources BI Specialist

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Regardless of your current size, the right business intelligence tool will grow alongside you or get you to your next destination.



When a Hybrid Business Intelligence Solution is the Right Choice

As outlined above, there is no one-size-fit-all business intelligence solution. Every business benefits from a different combination of analytical power, user-friendliness, and scalability. When no single tool satisfies comprehensive analytical needs (from both a departmental and holistic standpoint), organizations do themselves a disservice by rigidly conforming to one platform or tool. Instead, an entire world of capabilities are available through hybrid business intelligence solutions, which satisfy multiple business objectives with more finesse and potency.

Finding Cost-Effective Solutions

Not everyone on your team needs to have access to the Maserati of business intelligence tools. And though a select few data analysts and data scientists need to be capable of evaluating data, running predictive models, and creating visualizations at an enterprise-level, some analytical power is desirable at most levels.

Since the PaaS model has conquered much of the cloud space,

adopting a more hybrid model for business intelligence tools might be a way to manage costs. If only a fraction of your organization needs access to a tool with the power of IBM Cognos, you can adopt that at the organizational level and provide a more perfunctory tool for day-to-day analysis.



Completing the Analytical Picture

In some cases, the specialty asset of a particular BI platform makes incorporating it into your infrastructure worth it. Nonetheless, certain shortcomings of that very tool might confine the full scope of your analytical power.



For example, an organization might value having the mobile accessibility and collaboration of Yellowfin. Yet choosing that platform limits their ability to conduct financial planning or profit analysis with platforms like Quickbooks Intuit, SAP, and Citrix. The accounting team and department heads in instances like this might be better served with access to Oracle Hyperion. Creating a hybrid solution in this way serves several departments at once without shortchanging any of their BI needs.

Balancing Centralized Data with Distributed Needs

Though having access to data via one centralized platform is beneficial to comprehensive decision making, there are advantages to distributed tools. If an organization is using an enterprise-level tool which only a few data analysts can access, opportunities might slip by as unauthorized internal users wait for their inquiry to reach its place within the queue. Having a variety of tools presents an opportunity for organizations to have a nimble response without negating the payoff created by centralizing data.

The Availability of BI Talent

Even with the recent advances in BI platforms, there is still a need for technical professionals with business intelligence strategy expertise. Though the extent to which an outright talent gap exists is exaggerated.

The Truth Behind BI Supply and Demand

In truth, there are greater segments of the workforce that handle different aspect of business intelligence strategy as larger organizations democratize the analysis process. However, there is a shortage of BI professionals who have conducted full lifecycle strategies on the front end and back end. It's that shortcoming in the workforce that impedes the full potential of organizations attempting to revamp their analytical power.

Many of these BI experts are professionals with years of experience who are closer to retirement than starting their career. Many of these full lifecycle BI specialists grew out of the Tech Bubble of the early 2000s. They were the professionals who remained after the dust

settled from the Bubble bursting and built extensive careers in data science.

Nowadays, there are 100 data science programs⁵ in universities and higher education, but senior level talent will remain scarce until those graduates have time to obtain hands-on analytical experience.

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The question many organizations are asking themselves is where they will get the talent to fill the void in the interim.

Joseph Cline - Smart Resources BI Specialist

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Ultimately, it's their answer that will dictate whether or not their BI strategies continue to thrive.

How Organizations Can Stay Competitive

Demand for data scientists will remain high for the foreseeable future. Deloitte predicts that deep analytical skills will be needed for 181,000 workers by 2018,⁵ as their unique skill set allows them to sift through disparate data and process it into meaningful results. Each business will need to pursue their own methods to access a portion of this coveted workforce, but here are some strategies to consider:

Training Existing Talent: Often, getting your business intelligence strategy up-to-speed requires giving the right internal personnel the resources to grow. If you already have a more junior level analyst or a member of the team who has dabbled with different plug-and-play BI platforms, the next step may be to provide them with opportunities to expand their technical aptitudes. Paying for TDWI's Certified Business Intelligence Professional (CBIP) credentials or other programs help to boost more structured analytical thinking. Even a shorter training bootcamp can help to close the gap and formalize BI strategies.

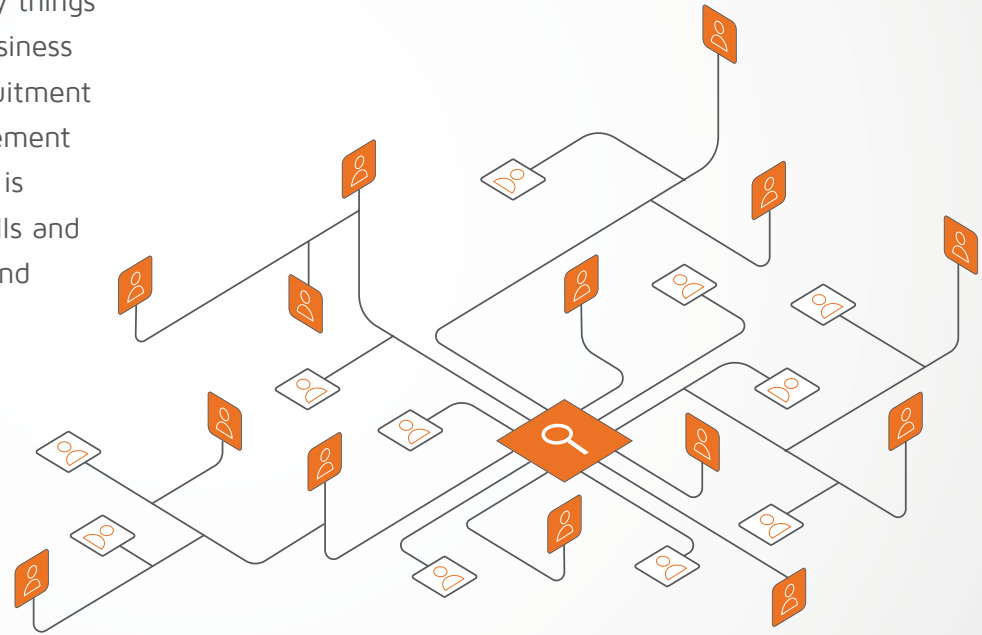
Hiring BI Consultants: Finding advanced business intelligence specialists in this market can be a difficult prospect, but the payoff is often worth the search. Whether you are looking for a permanent employee or a consultant to guide an analytical project, the first step is to know competitive compensation. In the Richmond area, Business Intelligence Specialists have a median salary of \$110,170.⁶ The figures are in line with the national average, making the prospect of attracting that talent one that often requires the aid of seasoned staffing and recruiting professionals.

CONTACT SMART RESOURCES

today at info@smartva.net or [804.249.2424](tel:804.249.2424) to find business intelligence experts who can deliver your organization from start to finish without missing a beat.

About Smart Resources

Smart Resources is a Richmond-based IT staffing and consulting firm committed to connecting businesses with technical professionals who can make extraordinary things happen. Since 2007, this small, women-owned business has perfected a personalized, people-focused recruitment strategy to do more than just fill seats. Every placement that Smart makes using their extensive talent pool is designed to be the perfect balance of technical skills and personality fit for companies in need of effective and efficient IT systems, infrastructure, and operations.



Sources

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