

Building a Business Intelligence Strategy for your Organization

Executive Summary

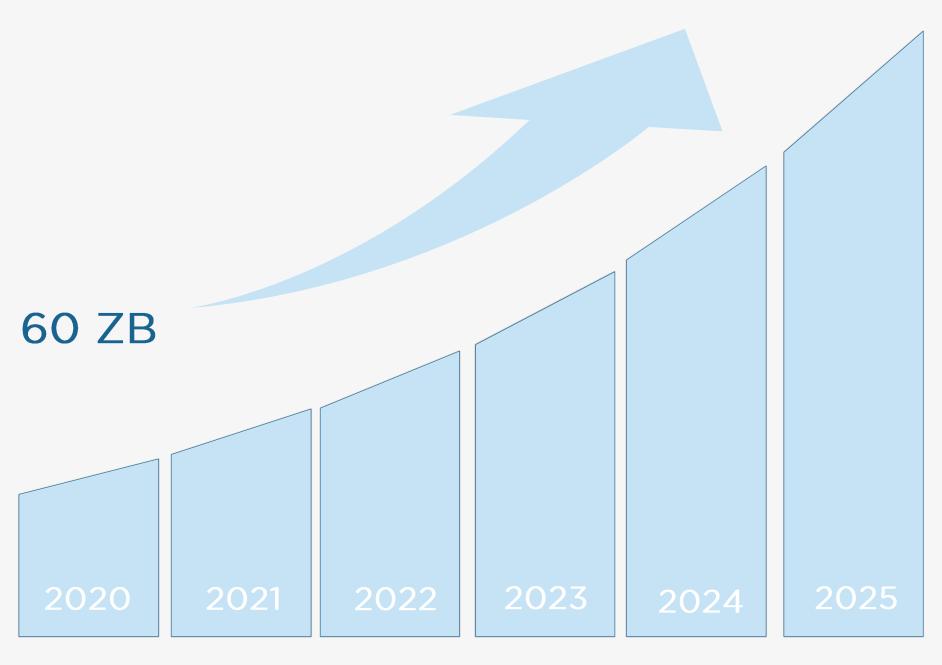
The challenge many small and medium-sized businesses (SMB) face is utilizing the vast amount of data available to drive sound business decisions. Organizations must leverage data to remain competitive. This whitepaper will provide an overview of how to do this effectively with the goal of creating a competitive advantage.

This article will also review the different components of business intelligence and provide organizations with important factors to consider prior to collecting, combining and reporting on data in an informative way.

Data is everywhere - examples include:

- Your latest blog received 500 clicks and had 13 keywords that yielded search results: that's data.
- QuickBooks weekly revenue reports show an increase in sales in Johnson County and a decrease in Madison County: that's data.
- A new client reveals you were referred to him by his sister-in-law's second cousin twice removed: that's data.

180 ZB



Last year, the total amount of data generated in the world was more than 60 zettabytes and is projected to rocket to 180 ZB by 2025*. *According to Statista



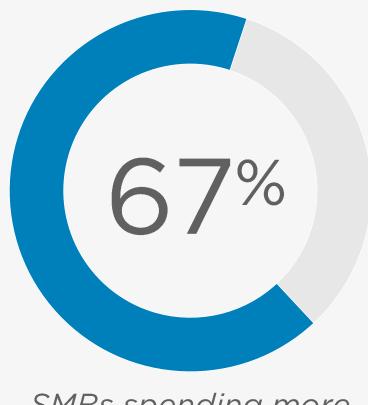
Building a Business Intelligence Strategy for your Organization

The highlights

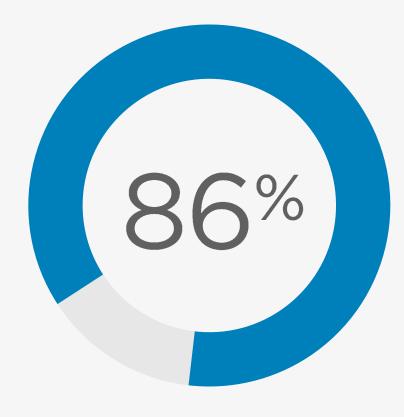
The top initiatives in a solid BI strategy should be establishing a strong data foundation, proper planning and execution to turn data into an asset and creating actionable data visualizations.

- Using BI to gain a competitive edge is so important that in 2019, around 67% of SMB's were spending more than \$10,000 a year on analytics.
- Despite this annual investment, only 86% of those businesses felt as if they were getting the most out of their data.
- With the 2020 pandemic encouraging many small businesses to generate a foothold online, the amount of data available to collect is increasing. No matter how much your organization spends on tracking information, you will need a proper plan in place to turn that data into an asset for your business.

How can your organization use business intelligence strategy to create a competitive edge in your industry?



SMBs spending more than \$10K annually in 2019



SMBs who felt they were getting the most out of those dollars



Three Keys to Implementing a Business Intelligence Strategy









Each of these components plays an important role to building sustainable and robust business intelligence capabilities for your organization.



Data Management

According to Oracle, Data Management is the practice of collecting, keeping and using data securely, efficiently and cost-effectively.

As mentioned before, data is everywhere. A structured way to collect data is essential to a strong business intelligence foundation. But it's not the only important facet of data management.

Good data management practices also include data storage and accessibility plans as well as privacy and security provisions.

Data Modeling and Analysis

Data modeling and analysis consists of bringing multiple data sets together, exploring the relationship between them and how they impact your business.

Models can be built to answer a business question about a specific point in time, or, on an ad hoc basis. Or they can be built in a way allowing you to measure results on an ongoing basis, eliminating the need to start fresh at each new time interval.

PRACTICAL APPLICATION

To investigate the correlation between the number of clicks on your recent product launch blog post and the number of inquiries your sales department received on the corresponding product you'll need to bring together the data sets associated with your blog and your sales department's activity reports. You can choose to join these data sets with each new launch for an ad hoc analysis. Or you can build a model in a way that the data is automatically refreshed with each passing week.

Data Visualization

Data Visualization is the process of efficiently communicating large data sets by way of charts, graphs and other visual formats. Data, by its very nature, needs to be interpreted. Just as words on a page are meaningless if you do not understand the language, unprocessed data often makes little sense to the untrained eye.

Strong data visualization provides the creator with the ability to convey complex concepts while easing the processing burden of the audience.

Visualization tools read and interpret raw data and return for us an easier-to-understand representation of it.



Data Management and Data Modeling go hand-in-hand and establishing good practices is essential for a sustainable business intelligence strategy.



Evaluate Data Sources

In today's business environment, data can be collected from a large variety of sources. It's important to qualify each source and ensure the data is trustworthy.

If you can't trust the source, then you shouldn't trust the insights drawn from that data source.

Organize Your Data

Once you've identified the data to be used in your BI solution, you'll need to determine where and how you will store your data.

Special consideration should be given for security protocols and data governance standards need to be established. Remember, you'll most likely be working with structured and unstructured data so you'll want a plan taking this into account.

Determining the right technology to support your data management efforts is key.

Integrate Your Data

Oftentimes, software integration is one of the largest data challenges your organization will face when implementing a BI strategy.

Each separate application has its own set of data with attributes/characteristics that may or may not align well with others.

Integration is often a complex process which requires thoroughly vetting all data available from each source. Then, your organization will need to establish rules for how data can and cannot be joined and interpreted.

"If you want to scale your business, you can't do it blind. You must be able to identify efficiencies to get the biggest bang for your buck."

Gina Chisholm, VP of Marketing and Technology, Kelly Mitchell



Automated reporting allows analysts, executives and team members to spend more time understanding results and identifying opportunities. Here are some important considerations when creating business intelligence visualizations.



Be Selective and Plan Ahead

Deciding ahead of time which questions are most important to the intended audience helps to create clean visualizations. While attempting to display all the data you've collected is admirable, it usually causes more harm than good. Anything that helps the end user get the information they need faster is a positive.

A good plan can be the difference between an effective report and wasted time.

PRACTICAL APPLICATION

Your CEO may not need to know who referred your newest clients, but it is important they be aware of the percentage of new clients gained through a referral.

Keep it Simple

Creating data visualizations can be an overwhelming endeavor. You'll most likely be working with large amounts of data, and the ways you can showcase the results can seem near limitless. The key to success is figuring out how to display the most relevant information in the most helpful way. Ease of understanding is everything.



An overload of information can clutter graphs and make the bigger picture harder to see. Keep visuals clean of unnecessary data and emphasize what's important using color and text.

Actionable or Informative

Actionable information is nearly always the end goal of visualizations. One of the most important questions a report designer should ask themselves throughout the building process is "so what?" If the information displayed cannot be used to make decisions, then it should not be included in the report.

Discerning between nice-to-know information and actionable insight is an important step in analysis. Knowing how to tell the difference between the two leads to more powerful reporting.

PRACTICAL APPLICATION

The analyst/creator should ask themselves, "What action should/could our organization take if we find that a high percentage of new clients come from referrals?"



Taking your visualizations to the next level.



Allow for Customization

Visualizations can be highly customizable allowing each report to be tailored to a specific audience. Understanding your target audience is instrumental to the longevity of a project.

- What information does your audience need to access?
- What action could your audience take as a result of the reporting you provide?
- Which visualization will convey the data in the most easily digestible format?

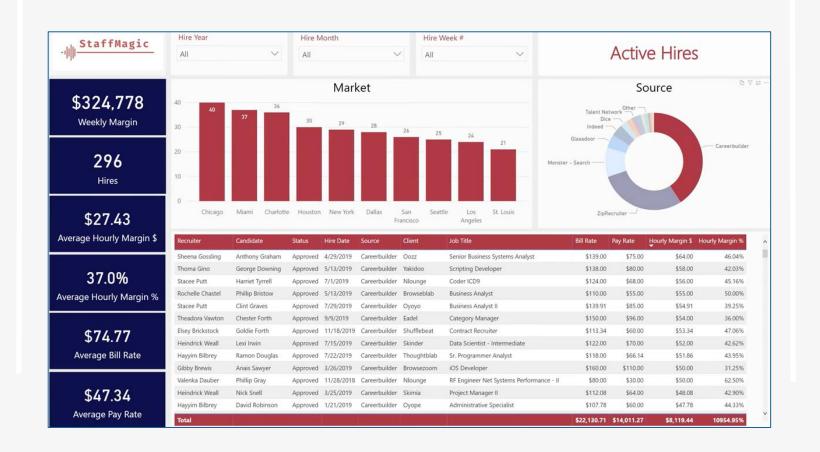
Asking these questions ahead of time, allows you to design your report with purpose.

Build with Sustainability in Mind

Regular charts and graphs can get the job done in a pinch, but nothing says sustainability like adding automation to the process.

When new data is received on a daily, weekly or monthly cadence, your visualizations can be refreshed to reflect this new information.

To accomplish this, visualizations should be created with this in mind.



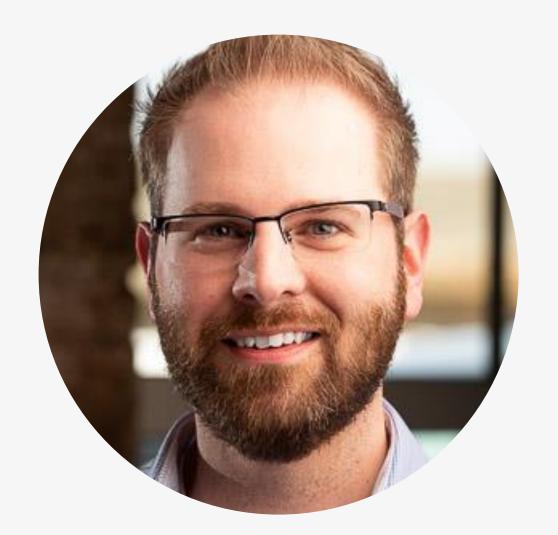
PRACTICAL APPLICATION

While your CEO may not need to know how many clients were referred by a sisterin-law's second cousin, your CMO may find the breakout between clients referred by family members vs. clients referred by professional network to be very actionable in driving targeted content creation.

Assume you have a dataset containing a list of new clients and the way they learned about your organization. When a new client is referred to your organization by a family member, the BI tool will process the information and your visualization will automatically update to reflect these results.



"Businesses today have more at their fingertips than ever before. It can be overwhelming, timeconsuming, and expensive to sort through what matters. Implementing strategies around BI can help you identify what data you have, distill what is important to you, and provide what you need at the time you need it. It drives organizational efficiency by eliminating manually curating actionable data and allowing you to focus on activities that will impact your business."



Mike Garvey, BI Consulting Leader GadellNet Consulting Services



Still have questions?

View our <u>Business Intelligence Showcase Video</u> where our consultant walks you through building a dashboard using Microsoft's Power BI.

Or, set up a 30-minute consulting meeting with our Business Intelligence experts by emailing sales@gadellnet.com

