

Enabling Data Discovery:

Is It A Reality Within Organizations?



PRESENTED BY



Table of Contents

3 Executive Summary

4 Research Introduction and Methodology

5 Data Discovery Overview

Types of Solutions Available

The Use of Data Discovery

Current BI Use and Data Discovery Inhibitors

Data Discovery Initiative

Data Discovery Use

11 Recommendations and Considerations for Adoption

12 Case Studies

Novation | Microstrategy

T-Formation | InetSoft

Dell | Tableau

18 About Us

Executive Summary

Data discovery is becoming essential to organizations that feel that their analytics tools are limiting their ability to evaluate business issues and make valuable and strategic decisions. This research report aims to identify what businesses are doing in the realm of data discovery, and where potential gaps exist within the market. A survey was distributed and interviews were conducted to identify market use. 103 respondents completed the survey, with 41.2% of respondents representing businesses with less than \$250 million in yearly revenue, 31.4% with revenue between \$250 million and \$1 billion, and with 27.5% with revenues over \$1 billion. This disparity highlights the importance of data discovery for organizations irrespective of organization size. In addition, just over 53% of respondents perform technical roles, 30% business roles, and the remaining are somewhere in between and also represent 3rd party consultants.

67% of respondents are using BI for customer analysis, and 60% for trends identification. In addition, 59.2% say that there are times when they cannot access the information they need to make informed decisions. Survey respondents stated that roadblocks to current BI were the lack of ease of use, the lack of interactivity, and the inability to find the right data when needed.

This alone is basis enough for the transition towards data discovery and is leading organizations to shift their BI use towards a data discovery approach. 22.9% are already doing data discovery, with 32.3% of respondents in the process of planning for a future initiative. Also, respondents are split evenly between infrastructures that require active changes to achieve data discovery and those that are natively supported. Those that have adopted data discovery capabilities highlight the creation of new reports, the addition of new data sources, and the creation of charts and new calculations as the leading features that can be taken advantage of. These features match the importance placed on flexible analysis, which rates as the most important data discovery feature at 67%.

Based on the survey results organizations looking for data discovery solutions should take the following into account:

- The current BI solution being used and whether it provides the capabilities for transition.
- The type of data discovery required matching the skill sets of future users.
- Realistic time frames for implementation.
- Level of interactivity and exploration – how much is needed.
- Security and privacy to ensure that compliance and other areas are being addressed.

Research Introduction and Methodology

The goal of this research project is to identify the adoption patterns of data discovery solutions within organizations already deploying business intelligence (BI). Identifying whether organizations are able to apply the principles that vendors say they provide means looking at potential gaps or roadblocks that exist to help identify ways of overcoming potential project challenges. The survey developed includes questions related to the ability to glean data in the way that makes most sense to business users without help from outside resources. In order to determine this information, the survey was distributed within BI related channels to gain insights and usage patterns from BI practitioners and business users. Survey questions include the type of strategy required to implement data discovery, whether IT infrastructure changes were required, the level of interactivity achieved, and future goals. Organizations were asked about the infrastructure required and the time to transition to help identify the efforts required to achieve data discovery and to offset that effort with the benefits realized.

In addition, interviews were performed to identify how report sponsors stack up to their promises of data discovery delivery. The use cases complement the survey results by providing real life examples of how companies are using BI to gain better insights and empowering their business users to do so independently. The case studies also provide advice on how businesses can proceed and implement a successful data discovery strategy.

Data Discovery Overview

Now more than ever, organizations face increasingly diverse and competitive challenges. Globalization and ecommerce change the way people conduct business and also the way data is stored, shared, and analyzed. Increasing amounts of data based on transactions, social interactions, supplier, distributor, partner, and other information sources create a plethora of information. To make informed decisions, this data needs to be captured, validated, cleansed, analyzed, and understood. Executives can no longer rely on instinct to navigate such an expansive market place. In addition, pre-canned reports and developed dashboards do not enable the level of flexibility required.

In the past, the use of business intelligence (BI) helped organizations understand whether they were doing things right. Now, with real-time data updates, predictive modeling, and sentiment analysis, companies can utilize BI tools to help manage performance and identify the cause and effect of business happenings. In theory, this BI shift works well, but until more recently, businesses have still been limited by predefined analytics and lack of access to the tools required to get the information needed to make strong business decisions. The advent of self-service business discovery models is changing this by enabling business decision makers the ability to interact with information assets in a flexible and meaningful way.

Enter data discovery. Although defined differently across the BI industry, WiseAnalytics defines data discovery as the ability to give business users the means to draw insights from data independently. For the purposes of this study, the goal of data discovery within organizations should be the use of BI applications to gain business value and enable interaction in the way that best suits the user, without the need for external resources. BI tools should be easy enough to interact with so that business users with varying analytical skill sets can get to the information they need and answer business questions relevant to their success.

In general, two distinct aspects to data discovery exist. On the one hand, vendors are shifting their product offerings to enable broader interaction and use that is not dependent on IT. On the other hand, business users are interacting with BI in a way that increasingly demands these changes to solutions being provided. This research study addresses both aspects by providing an overview of the types of options available within the market place, but also focuses on how data discovery is being applied within organizations through a series of case studies. The survey provides insight into how companies are utilizing data discovery and whether the solutions they are using are helping them become more successful on a broader performance level.

In the past, the use of business intelligence (BI) helped organizations understand whether they were doing things right. Now, with real-time data updates, predictive modeling, and sentiment analysis, companies can utilize BI tools to help manage performance and identify the cause and effect of business happenings.

Data Discovery Overview (CONTINUED)

Types of Solutions Available

Industry trends and enhancements to database and other technologies provide BI environments with faster processing speeds, greater data storage, easier integration capabilities, and more interactive delivery methods. Consequently, organizations are now able to apply a form of BI that integrates these capabilities within their offices or on the road, without being limited by technology roadblocks. For business users this means there is ample opportunity to access large amounts of potentially valuable data. The question however, becomes how to do so. And this is what vendors are addressing when discussing data discovery. The ability to provide business and technical users of BI added flexibility by letting them move beyond pre-defined analytics towards interactive question and answer type design is why data discovery is taking off. What vendors actually provide may be a little bit different.

In terms of what actually exists within the market place the diversity of offerings makes it difficult to place all vendors claiming that they provide data discovery into one box. Some solution providers provide data discovery tools for super users and analysts who are familiar with statistical modeling, while others have the goal of enabling business users to interact with their solutions independently of IT. This is why respondents' roles vary and include both business and IT-related job junctions. The overall goal of this research is to identify how organizations are applying data discovery, and whether gaps exist between vendor provision and end user expectation and use.

The Use of Data Discovery

Organizations are starting to adopt data discovery applications to increase the value of their business intelligence use. Although there were only 103 respondents, almost 70% of respondents fall on either spectrum of organization size with 41.2% of respondents being from companies with revenues of under \$250 million and 27.5% of businesses having over \$2 billion in revenue. Because of this, it becomes obvious that data discovery is required irrespective of company size. The ability to interact with data independently and interactively in a timely fashion expands across organizations size and addresses the need for BI applications that are accessible, both in terms of ease of use and overall data access. 60% of respondents fall into the traditional "SMB" category with revenues of under \$1 billion.

Business focused users represent fewer than 30% of respondents. 16.8% of respondents are business analysts (BAs), which can be considered a role that works to bridge the gap between business and IT. In many cases, BAs are most familiar with the business processes and data access points. Just over 53% of respondents represent more technically focused roles, specifically developers, IT managers, and statisticians. Additional respondents who marked other were consultants working on data discovery for 3rd party customers.

When evaluating data discovery, looking at job description and the role a person plays is very important. The whole goal of data discovery is to make data easy to access and to interact with. The issue with different types of users is that the definition of data discovery will differ. Business users need more obvious data access points that guide the experience. Whereas, those who are IT savvy should have more freedom to interact with data directly as well as be able to manipulate it in a way that enhances overall business visibility.

Figure 1: Overall Organization Yearly Revenue

What is the total revenue for your organization?

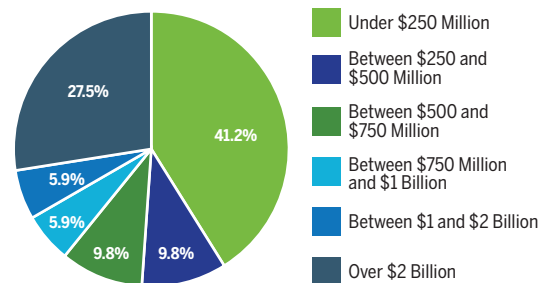
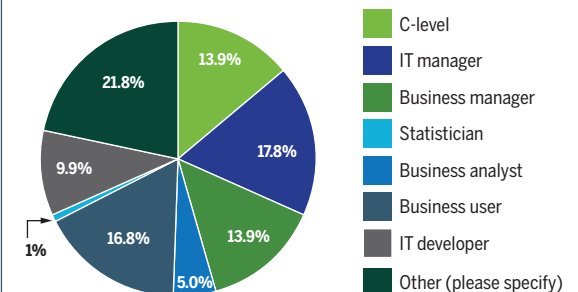


Figure 2: Job Function

What is your role within the organization?



Data Discovery Overview (CONTINUED)

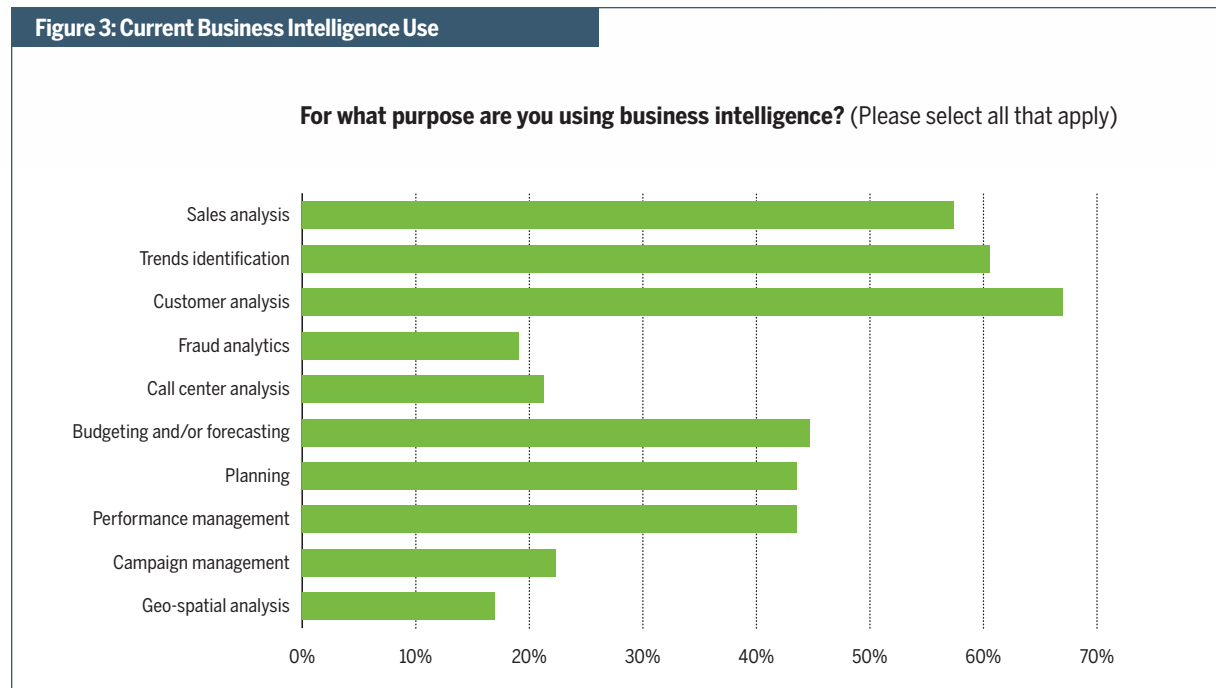
Current BI Use and Data Discovery Inhibitors

Respondents were asked to identify the types of BI applications used within the organization. This includes all business intelligence use and not just applications within a data discovery initiative. Obviously, it would be nice if businesses were able to apply data discovery across the organization, but the reality is that this is not always possible. In addition, data discovery is a newer option for organizations looking to optimize their BI use. But these applications might not be applied across the organization, but used within individual department or company roles.

The idea of BI expansion of use to include data discovery actually also touches on the way in which organizations are using BI and what they are using it for. Trends including more flexible deployment methods and broader access to external data sources, such as social media related data, and big data, slowly leads to the demand for interactive, easy to use, solutions that provide direct access to data independently. Companies require the toolsets to empower employees and not limit the way they interact with technology. Although BI use is mature within many organizations, defined ROI and TCO are still limited.

Organizations require the ability to gain better insights into customers and sales. Survey respondents rate customer analysis, trends identification, and sales analysis as the top uses of BI. These are all areas that require the consolidation of multiple data sources. And the only way to truly get value out of the metrics associated with sales activities or customer experience is to be able to explore a variety of data points independently – making data discovery an essential use of BI. Trends identification is no different. Predictive analytics should not be limited to pre-defined analytics. The use of data discovery can enable organizations to get more value out of their predictive models. Additionally, areas such as fraud detection, planning and forecasting, and campaign management can all benefit from data discovery adoption.

Figure 3: Current Business Intelligence Use

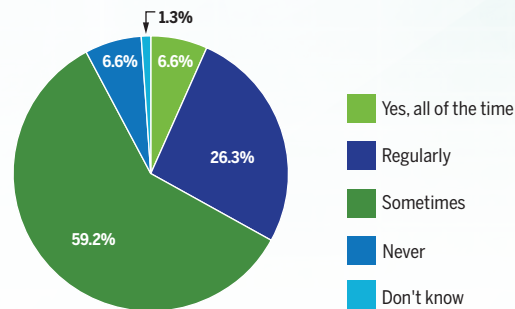


This is highlighted by the fact that only 8% of respondents feel that they always have access to the information they need to make informed decisions. Just over 82% of respondents admit to being unable to access information. Whether sometimes or regularly, the results are clear. Traditional BI can inhibit access to data because of the way it is developed. Pre-defined metrics, limited access to data, and varying degrees of consolidation means that end users may not be able to get the information they require to make strategic decisions. This is true for both lack of data availability and solution ease of use.

Data Discovery Overview (CONTINUED)

Figure 4: Data Access and Lack of Accessibility

Are there times that you feel you are unable to get the insights you require?



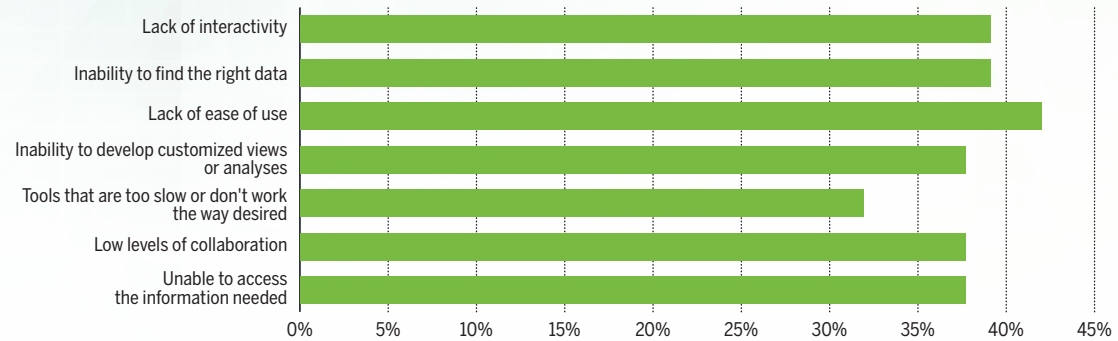
All of the aspects of BI roadblocks are based on these factors. Lack of ease of use, interactivity, ability to access data, and collaborative tools that do not exist are the main stumbling blocks to successful BI use. What all of these limitations have in common are the inability for users to access the information they require in an easy to use and interactive way. Consequently, overall BI value cannot be realized because decision makers are limited by the success of their tools.

Data Discovery Initiative

This lack has led many organizations to look for other ways to gain business insights. Shifts in technology and application development have led to the concept of data discovery. Data discovery promises to provide the value that traditional BI has not always been able to achieve. 22.9% of respondents have actually adopted a data discovery strategy, with 32.3% of respondents planning

Figure 5: BI Roadblocks

If so, what are the roadblocks keeping you from gaining broader value from your analytics use? (Please select up to 3 options)

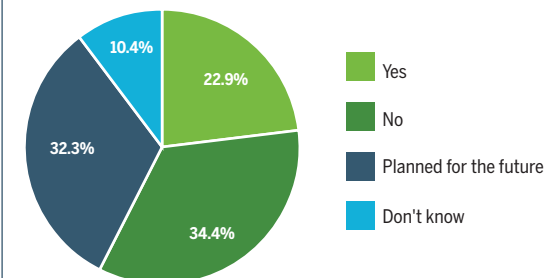


one for the future. Therefore more organizations than not are looking at data discovery as the next wave of business intelligence use.

Over 36% of organizations making this transition took over 1 year to do so. This may relate to the fact (as shown in figure 7 below) that most data discovery initiatives require a different way of deploying BI. For instance, data discovery may require real-time data access and the ability to query large data sets in sub-second response time. Most traditional BI infrastructures are unable to provide that flexibility, leading to an expansion and change in platform use and support. Only 13.6% of solutions took less than 1 month to deploy, with the majority at just under 60% taking between 1 month and 1 year to implement. The reality is that most organizations do require extra time to expand a BI program to include a data discovery strategy.

Figure 6: The Development of a Data Discovery Strategy

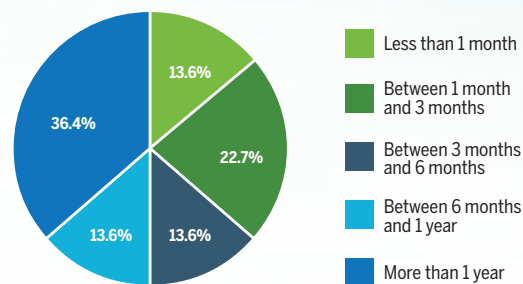
Did your organization develop a data discovery strategy to empower business users?



Data Discovery Overview (CONTINUED)

Figure 7: Data Discovery Expansion

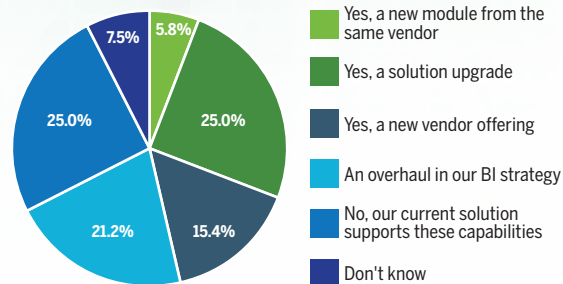
If so, how long did this transition take?



As shown above, most organizations do require some changes. Others, however, develop their BI platforms to be able to support these features. As data discovery solutions become more mature within the market, there will be a shift within traditional BI solutions as they will begin to incorporate more data discovery capabilities natively within general offerings.

Figure 8: Data Discovery Infrastructure

Does this strategy require a change in infrastructure?



Data Discovery Use

Levels of satisfaction range from high to neutral with data discovery self-sufficiency. Despite potentially longer implementation times, data discovery promises to broaden access to information assets.

In addition, 26.7% of respondents interact with their data discovery environments daily, with another 26.7% of respondents interacting with their data discovery functionality multiple times during any given week. Both business and technical users rely on data to make the right decisions and to plan initiatives. This high level of interactivity and involvement, coupled with overall satisfaction levels, show how beneficial data discovery initiatives can be to organizations that choose to take the time to invest in these types of BI initiatives.

Figure 9: Data Discovery Satisfaction and Level of Interaction

Are you satisfied with the level of self-sufficiency that exists in relation to the way you interact with your BI solution?

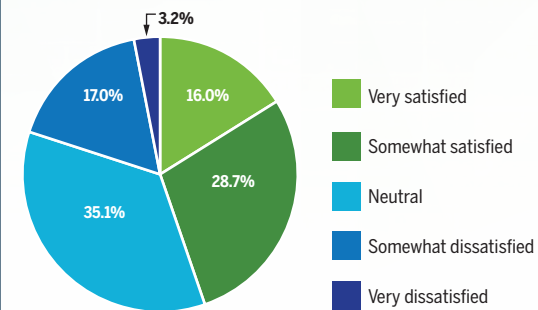
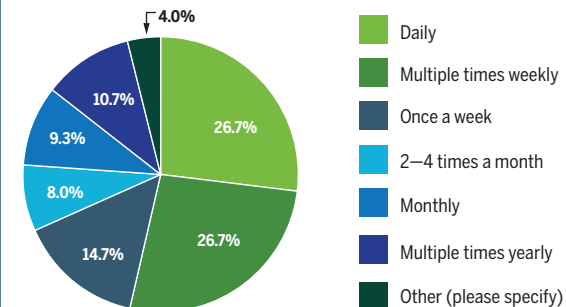


Figure 10: Level of Interactivity With Data Discovery Applications

How often do you find yourself tweaking or taking advantage of data discovery functionality?



Data Discovery Overview (CONTINUED)

The following figure looks at various types of data discovery use. Part of the value associated with data discovery is the ability to design individualized user experiences. As shown, most users are able to create their own reports and charts, with calculations being the third highest on the list. Even with these high levels of interaction, they are offset by the fact that many gaps still exist. These include accessing data discovery capabilities, linking disparate data sources, and accessing relevant data independently. Obviously, gaps in performance still exist. The question for organizations to evaluate is whether these gaps are because of the solution itself or the way it is deployed, for instance, limitations in design.

Based on this, organizations rate data discovery capabilities based on importance of both individual and organization use. The ability to create new reports and develop analytics that are flexible rate as the most important, each with over 60% of respondents stating that these are the most important areas within a data discovery initiative. Overall, more than developing specific BI components, end users want to access the information they need while being able to be flexible in the way they interact with that data. ■

Figure 11: Independent BI Use

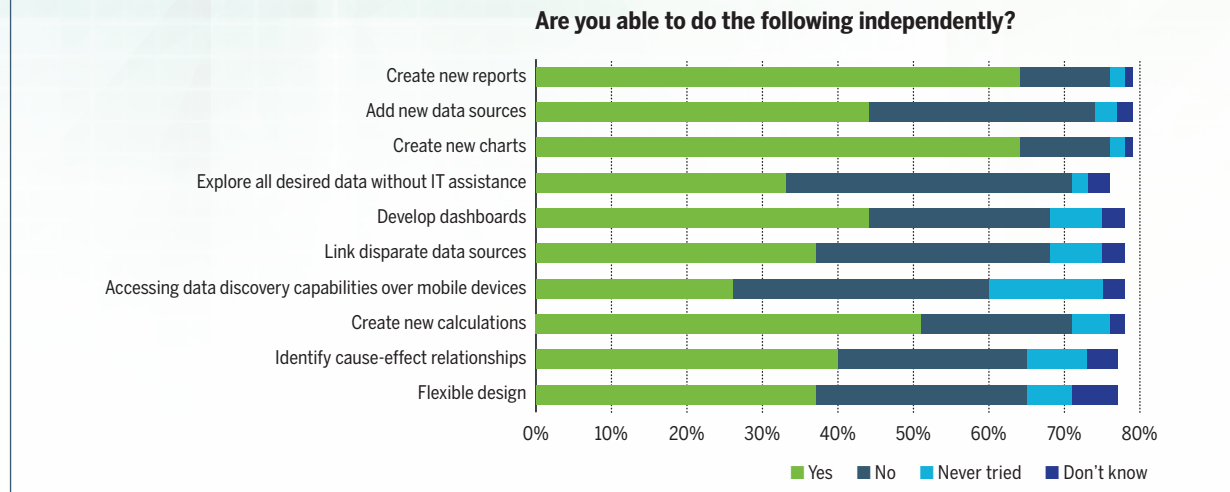
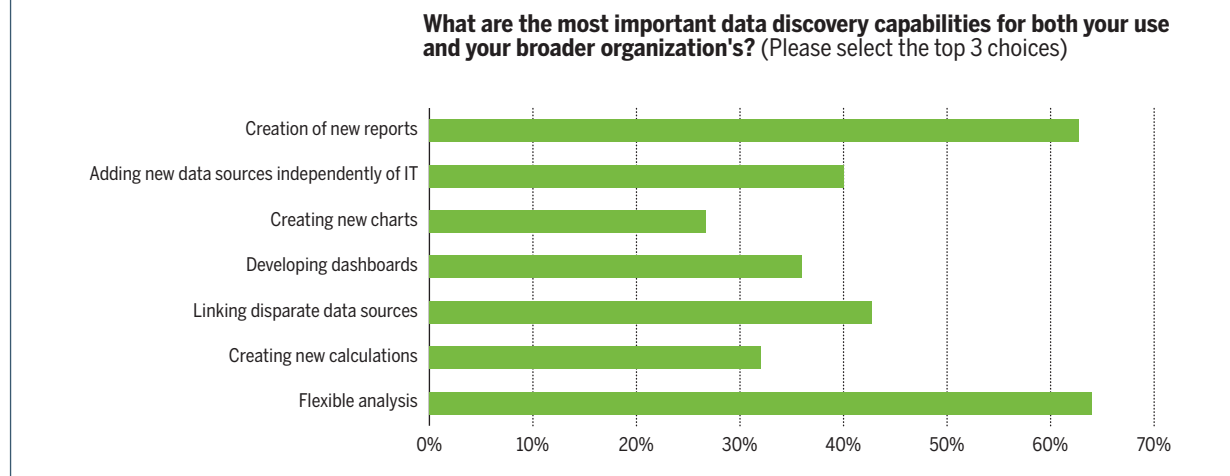


Figure 12: Data Discovery Levels of Interactivity



Recommendations and Considerations for Adoption

Organizations looking at data discovery adoption should take the following into consideration:

- Current BI infrastructure – understanding what exists internally will help guide the transition towards data discovery. Not all BI platforms and IT infrastructures are created equally. Flexibility in data access and quick query time requirements might mean revamping the current platform, looking for a new solution, or adding on an existing solution provider module to take BI to the next level.
- Type of data discovery – business audiences and IT staff will require different levels of data access and interactivity. Matching skill sets with delivery are essential to any successful implementation.
- Realistic time frames – take heed from survey respondents by realizing that a strong data discovery initiative does not take place over night. Depending on the level of roll out and overall goals, expansions may take several months.
- Scalability and room for growth – organizations need to take into account the ability of vendors to support their data discovery growth. Increases in business size, complexity, and deployment maturity requires vendor support that includes a semantic layer and the automatic propagation of changes throughout the system. Therefore, businesses need to take into account their future requirements as well as their current data discovery needs.
- Level of interactivity – ensure that the types of interactions desired are possible with the solution being selected. Simply expanding use with an existing solution provider does not always provide the best results. On the other hand, many vendors have placed great resources into their data discovery platforms, so it is important to become educated about the current solution's capabilities within data discovery and roadmap items.
- Security and privacy – with any expansion in access, there is always a concern over maintaining a secure environment. Access to certain data should be limited and controlled by IT. Otherwise, end users should have the flexibility to develop analytics independently.
- IT dependency and involvement – irrespective of the promises of self-service and high levels of interactivity, tasks required by IT to develop and maintain solutions are still required. It becomes important for a business user to identify how easy it is to interact directly with data once it is available and what will continue to remain within the control of IT.

CASE STUDIES | Novation | MicroStrategy

Company Overview

Novation is a leading health care supply chain expertise and contracting company within the United States and represents more than 65,000 members of various national health care alliances. Novation was founded in 1998 and provides alliance members with sourcing services, in addition to information and data services that includes the management of competitive contracts with more than 600 suppliers. Novation's Strategic Information department manages the development and creation of products and tools to assist the BI needs of internal customers. This includes the support of contracting needs, such as bidding out a contract, lifecycle and supplier management, identifying potential cost savings opportunities, managing corporate performance and general financial monitoring.

Business Challenges

Although Novation had a mature BI environment, their BI platform was decentralized with two separate business owners and multiple platforms that were used to manage various types of data and business initiatives. In 2007, they decided to enhance their strategic management of data by centralizing their product management to become more efficient. Historically, access to contract data was at an invoice level, without the ability to get the added details required to address business decisions more strategically. In addition, disparate BI solutions led to more difficulty in the management of overall products. Based on the fact that two out of their three primary customers were using MicroStrategy successfully, Novation decided to forego a formalized software selection and select MicroStrategy as their solution to implement a centralized BI platform and interface for customers.

Novation's initial BI implementation involved organizing, standardizing, and cleansing hospital specific purchase order (PO) and invoice data to be able to take advantage of the invoicing detail that was previously unavailable. This includes invoice level detail from a variety of hospitals stored in a detailed data warehouse. As increasing data volumes were stored, the use of MS Access and MS Excel were less valuable due to performance and storage issues.

Data Discovery Solution

In addition to a centralized BI platform, 2010 marked the year that Novation wanted to take their BI use to the next level. Their transition to MicroStrategy's data discovery engine, Visual Insight, was based on the fact that their end users were already data savvy. This included three types of users – executives, subject/portfolio managers, and super users. In order to maximize the use of their platform, the Strategic Information group wanted to deliver different types of offerings to maximize the use of the platform through dashboards, summary analysis, increased mobility, and the use of MicroStrategy's data discovery tool Visual Insight. The goal of these changes was to provide users with more direct business access to the data while maintaining defined boundaries letting users access and dive into data with a more robust visual interface.

In order to roll out the solution, the Strategic Information group asked questions related to what business users would want to see and then developed a set of dashboards around those capabilities. Now the end user group is mature and knows what information can be accessed and what can and cannot be done. Users were already used to having direct access with sales data and contract level data so super users had always required this level of data access to perform this level of analytics.

CASE STUDIES | Novation | MicroStrategy (CONTINUED)

Benefits and Challenges

Rollout was seen as critical to the success of their data discovery initiative, so a lot of planning went in to ensure that adoption would occur. Novation developed a marketing campaign, enlisted the help of MicroStrategy consultants, and developed 5 use cases with video to show people how to use the solution. In addition, they perform continuous training to make sure that business users are getting the most out of their solutions. This has helped with end user adoption leading Visual Insight to be the 2nd most used solution within the organization.

All IT implementations encounter roadblocks, and Novation was no different. Delays required some rework, but the general challenges that occurred were dealt with seamlessly due to the involvement of MicroStrategy consultants to help them work through the implementation and help Novation develop an optimized BI infrastructure to take into account the data storage and processing needs.

Lessons Learned

Overall, Novation has implemented their data discovery platform successfully by using a centralized BI platform. In addition, they put a lot of effort into developing marketing targeted to the users of the solution, taking advantage of solution provider consulting, and making sure they maintained close contact and communication with their end user community. Their development of practical use cases along with rollout gave end users of different technical levels the ability to see how expanding their use of BI would directly relate to their success and productivity. And finally, due to the data volumes and various levels of detail their data provided, Novation made sure to take into account delivery needs and focused on developing a platform that would enable their business users to access information independently. ■



CASE STUDIES



Company Overview

Founded in 1987, T-Formation is a privately owned and operated one-stop shop for apparel production. T-Formation is ranked as the 3rd largest volume printer in the United States. Its facilities manage customer orders throughout the production lifecycle to include custom design, development, production, and shipping. T-Formation works with organizations of all sizes and types, from Fortune 500 through non-profits, universities and smaller businesses.

Business Challenges

T-Formation uses a single database to manage their data, including everything from data entry and sales through production, order management, and shipping. Their in-house order system solution provided limited reporting functionality. Even though end users were able to export data to manipulate within spreadsheets, business visibility remained limited. This traditional form of reporting did not allow decision makers to get to information easily. Although the system handled all sales, general ledger, artwork management, production schedule, statistics, shipping, receiving, and invoicing, linking this data in a way to identify opportunities was not easy. Consequently, the organization knew there were areas they were unable to successfully analyze and wanted to implement a tool that would allow business to see – at a glance – whether they were making a profit and how they could manage their contracts more efficiently.

Data Discovery Solution

In order to gain broader business visibility, T-Formation downloaded a trial version of InetSoft in early 2012. After the initial 60 days of use, they decided to implement InetSoft based on its high level of interactivity and quick time to value. After 4 months of use they have 10 dashboards that are used throughout the organization. InetSoft helped T-Formation by connecting the desired data, and the first dashboard was up and running within the week. With 10 concurrent end user licenses, business users are able to interact with dashboards to the level of detail they require and get access to the information they need without having to export and manipulate data.

T-Formation has used InetSoft dashboards to monitor overall sales performance, incoming sales, view production schedules, analyze customer order histories in varying levels of details, and also pulls any data on the fly. Dashboards are built with drill in functionality so that users can look at overall performance with the ability to drill through to individual customers – to be able to look at whether a customer is profitable, or look at a single order to answer questions related to pricing, such as based on the price that we sold this offer for, how profitable is it. Currently, one person is in charge of building up a set of dashboards to deliver to users across the organization.

Benefits and Challenges

T-Formation has seen many benefits in their short time using InetSoft. Within a very short time, T-Formation has used their dashboards to increase efficiencies and profit within their organization. They have changed some of their pricing models based on their analyses after finding out that depending on product pricing and order size, not all order were profitable for the company. In addition, to identify which customers are profitable, T-Formation was able to break down the process to identify efficiencies within the lifecycle, which enabled them to optimize their pricing models to increase profits as well as make complementary changes to overall manufacturing schedules. Also, to increase efficiencies even further, discrepancy logs were created to track anomalies in production or within business processes to ensure higher productivity.

In addition to impacting their bottom line based on their dashboard use, their quick time to delivery and high levels of interactivity, helped give decision makers the ability to interact with information independently on a high level as well as by drilling in to individual orders or customers to understand the cause and effect of potential issues.

CASE STUDIES



Although a very successful implementation, challenges currently exist based on the learning curve required to expand use. With the goal of expanding to include what-if scenarios, dashboard development requires in-depth knowledge that takes time to acquire without mentoring/consulting hours from InetSoft. Consequently, it may take time to expand into additional use cases and expand dashboard use in the immediate future.

Lessons Learned

One of the key lessons that T-Formation learned was that better visibility and high levels of interactivity can help them run their business better. Aside from selecting a solution that provided ease of use independent of IT and quick time to delivery, InetSoft dashboards enabled users to change the way the business was run to ensure an increase in overall profits. In order to do this effectively, corporate culture has to be open to change. T-Formation is a great example of an organization that took advantage of their BI use to change the way the organization is being run. Not only did they use the information to change pricing and improve profits, but they also made changes to production schedules to improve efficiencies. ■



CASE STUDIES



Company Overview

Dell was founded in 1984 and focuses on delivering solutions that enable human potential, support better decision-making, and overcoming obstacles by providing hardware and software solutions, to businesses and consumers by supporting their access to broader technology. In the last year, the new CIO created a BI (Business Intelligence) group with the goal being to work with business partners and lay down a full BI strategy across Dell including an assessment of where Dell is, where they want to go, with recommendations for toolset analysis, implementations, and capability gaps extending to 3, 5, and 20 years.

Business Challenges

Dell was already working with business partners who had developed a BICC (Business Intelligence Competency Center). The office of the CIO used that framework and expanded it to identify the state of BI use and what was currently being done with organizational data and whether Dell was getting the most out of that data. When evaluating their current capabilities based on their multi-tool use, they found some gaps that were especially apparent when evaluating their data visualization use. Through their evaluation, Dell realized that they were not providing their users with access to multiple data sources in a way that enabled aided insight and ad-hoc self-guided discovery.

Data Discovery Solution

Based on the success of Tableau Desktop by some of Dell's business partners in the area of joining multiple data sets, data profiling, and prototyping, Dell decided to expand and implement the solution with the goal of becoming more proactive in the area of trend identification and enabling self-service BI. Overall adoption of their data visualization use followed a two-pronged approach. The first being at a grassroots level by getting informal leaders within the organization using the product which lead to driving general standards for IT surrounding visualization capabilities. The second approach was from the top-down by seeking executive sponsors who were interested in seeing the benefits and value of visualization and BI in general.

Some of Dell's goals included identifying a vendor that fit their needs right now based on ease of use, quick time to delivery, and the ability to work with multiple products being that Dell is a multi-tool environment. Initial dashboard interest and use started within the go to market space/service solutions that Dell sells and quickly expanded into the services finance, services dispatch, marketing, and customer experience areas.

Benefits and Challenges

One of the key benefits to Dell was Tableau's knowledgeable staff and account team willing to create a partnership that works within Dell's environment. Another key benefit is the ability to access training and detailed Q&A's directly on the Website to provide business users with high levels of interactivity and individualized training, which also helped lead to quick adoption. In addition, Dell took advantage of data profiling and prototyping to identify the BI requirements because many departments knew their needs but didn't know what data was available or how it worked together. Therefore, rapid prototyping environments and data labs are used to help facilitate and join multiple data sets for visual exploration, analysis, definition and maturation of BI requirements.

CASE STUDIES



(CONTINUED)

As with all organizations, challenges exist in the gaps that need to be defined. As the solution grows and because Dell is such a large organization, the infrastructure required and internal approach to expand the solution over time is not known yet. In addition, multiple divisions and departments can be speaking to multiple vendors at any given time so it becomes challenging to make sure that everyone understands capabilities and toolsets that Dell has and how they can be utilized.

Lessons Learned

Part of Dell's success with Tableau was the ability to hook into multiple data sets with ease and the ability to integrate those data sets together to look for general trends. In addition, Dell was sensitive to look for quick wins and to realize that those quick wins are ongoing as the implementation expands and BI growth continues. Therefore, their success with Tableau Desktop has led to an expansion to Tableau Server which will increase their data discovery and visualization footprint within the organization. ■



About WiseAnalytics

WiseAnalytics is a boutique analyst firm that conducts research and provides advisory services to organizations. Founded in October 2007, WiseAnalytics is a privately run organization that focuses on three areas:

1. Consulting, advisory services, and targeted research for small and mid-sized organizations looking to implement business intelligence solutions, including data warehousing, dashboards, and analytics.
2. Market research to identify industry trends, adoption of technologies and solutions, and the fit of vendor products within the business intelligence market.
3. Analyst services and marketing support to solution providers within the business intelligence and data visualization space.

WiseAnalytics' goal is to drive research initiatives at the grassroots level. This means initiating projects based on the needs and business pains faced by small and mid-sized organizations that are looking at business intelligence and dashboard solutions to help:

- Identify and solve their business issues,
- Increase internal process efficiencies,
- Reduce costs,
- Gain better visibility into customers, products, suppliers, etc.,
- Increase competitive advantage, and
- Enhance business performance and increase profits.

