

Tableau Customers are Driving for Self-Service Business Intelligence

Business Intelligence (BI) solutions aim to provide organizations with timely access to actionable data to aid decision making. Traditional BI solutions have often provided business managers with relatively static views of data, with limited ability for manipulation and analysis. Unfortunately, this frequently leads to the corporate IT organization being inundated with requests for different views of the data. March 2011 Aberdeen research (*Agile BI: Three Steps to Analytic Heaven*) found that many organizations are pursuing a more agile business intelligence solution that allows these new views of the data to be provided rapidly - often by the business users themselves in a self-service fashion. In total, 344 organizations took part in Aberdeen's survey on agile business intelligence, with 49 of those organizations using Tableau Software as their primary BI solution. This Analyst Insight compares the performance of those 49 Tableau customers to customer of other BI solutions.

How Tableau Power Business Performance

Customers of Tableau perform very well - even when compared to the top performing 20% of all survey respondents, the Best-in-Class (Table I).

Table I: Comparative Performance of Tableau Customers

Definition of Maturity Class	Mean Class Performance
Tableau Customers	<ul style="list-style-type: none"> ▪ 50% of BI users access BI in a self-service capacity ▪ 50% of BI users access BI at least once a week ▪ Are able to access information in the time required 83% of the time
Best-in-Class: Top 20% of aggregate performance score	<ul style="list-style-type: none"> ▪ 42% of BI users access BI in a self-service capacity ▪ 47% of BI users access BI at least once a week ▪ Are able to access information in the time required 85% of the time
Industry Average: Middle 50% of aggregate performance score	<ul style="list-style-type: none"> ▪ 30% of BI users access BI in a self-service capacity ▪ 40% of BI users access BI at least once a week ▪ Are able to access information in the time required 76% of the time

Source: Aberdeen Group, March 2011

Aberdeen's research into agile BI found that the most common strategy for pursuing agility is to adopt a self-service BI model. With this approach to BI,

Analyst Insight

Aberdeen's Insights provide the analyst perspective of the research as drawn from an aggregated view of the research surveys, interviews, and data analysis

Definitions

The following definitions are taken from Aberdeen's March 2011 study on agile BI:

- √ Best-in-Class - The top performing 20% of organizations surveyed
- √ Industry Average - Ranked lower than Best-in-Class companies, these companies represent the next 50% of survey respondents based on performance
- √ Laggards - The bottom performing 20% of survey respondents
- √ All Others - Used to collectively refer to the 80% of survey respondents that are either Industry Average or Laggards

business users are very strongly encouraged to proactively analyze and manipulate data directly themselves, whenever necessary. That is, whenever the reports, charts or dashboards provided by corporate IT do not provide the information the user requires, the user should be able to manipulate the data and data presentation directly to find exactly what they need. There are two benefits to this approach. First of all, the business user gets the information they need sooner, allowing more responsive and timely decision making. Secondly, corporate IT is no longer on the hook to conjure up myriad different views and perspectives of the same basic data. Seventy-six percent (76%) of Tableau customers indicated that enabling self-service is their top strategy for creating a BI solution that is more responsive to business needs.

The survey data in Table I shows that Tableau customers are well on their way to achieving this objective. Tableau customers are performing well above the Industry Average segment, and above or on par with the Best-in-Class (top performing 20%) from Aberdeen's agile BI survey. Specifically, half of the BI users at Tableau customers are able to use BI in a self-service capacity, compared to 42% of BI users that are able to do so at Best-in-Class organizations. More users can access BI and get the information that they need with no or limited assistance from IT support. This puts management information at the fingertips of the people that really need it - business managers. This is clearly an acceptable solution - 50% of Tableau users use the BI solution at least once a week. Users are fickle. If they do not find software valuable, they simply won't use it. The relatively high weekly usage shown by Tableau customers indicates that users are comfortable using the solution and find it provides information that helps them to run the business. This increased rate of usage makes it likely that more employees understand the metrics that are most important to the business and are more able to make timely decisions. This in turn leads towards increased risk mitigation and the ability to take advantage of opportunities as they arise. By having instant and constant access to information, employees are more informed and better able to lead the business.

Of course, having access to information is useless if it is not accessible in the time required to make a vital business decision. For example, raw point-of-sales data may indicate that an important retailer will be out of stock in two days time. However, if it takes a week to aggregate that data and make that information available to the manager who can take corrective action, then clearly the information arrives too late to have value. On average, Tableau users are able to get the information they need in the time required 83% of the time. While not performing quite as well as the Best-in-Class (85%) these customers are still performing well above the Industry Average. This is evidence of the agility and flexibility enabled by a powerful self-service BI solution. During normal business operations, unexpected events occur that need a rapid response - either to head-off a problem or to take advantage of an emerging opportunity. Traditional BI solutions can struggle here, as business managers try to get answers to questions that were never anticipated during the initial development of the solution. A self-service

Fast Facts

Many BI user communities have "Power Users" - the individuals that are able to manipulate and explore data in ways that most other users cannot.

Percentage of BI users that are considered "Power Users"

√ 29% at Best-in-Class

√ 20% at All Others

√ 31% at Tableau Customers

approach - where managers are willing and able to explore data to find those answers themselves - can enable a much more rapid response and lead to business advantage.

Tableau's Impact on the IT Organization

The benefits of self-service BI extend well beyond the ability of business managers to access the specific data they need more quickly. The IT group also gains because it is not constantly bombarded with support requests to provide different data, different perspectives on data, or different presentations of data. When users can create dashboards, add columns to reports, and view charts in the way that they wish, IT's support burden is reduced.

It follows then that a strong self-service BI solution should require less day-to-day support from the IT department. Tableau customers excel in this respect (Figure 1).

Fast Facts

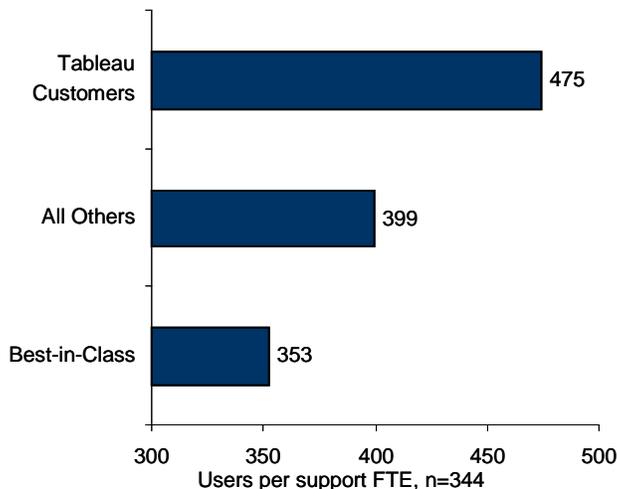
Percentage of BI users who say they need access to information within one hour of business events occurring

√ 53% of the Best-in-Class

√ 25% of All Others

√ 28% of Tableau Customers

Figure 1: Leveraging the IT Support Team



Source: Aberdeen Group, March 2011

On average, Tableau customers have 475 users for every Full Time Equivalent (FTE) in IT providing support and assistance. This is 1.34 times as many as the Best-in-Class. To be fair, the size of the average Tableau deployment is somewhat smaller than at other survey respondents, but low demand for IT support is commendable nonetheless.

BI architects are often concerned - and rightly so - with the scalability of a BI solution. Generally, these concerns focus on scalability of hardware or software. For example, "How many concurrent users can the solution support on a given hardware server?" or "What is the maximum database size that can be supported and yet still provide adequate performance?" BI architects tend to focus less on soft scalability - that is, how many skilled IT staff are required to support any given user population. This is often

overlooked, but very fundamental to the success of any BI deployment. Reducing the need for constant help and assistance from corporate IT in this way allows resources to be devoted to more strategic projects and initiatives instead. Further evidence to substantiate this is found in the ability to deliver BI projects on-time or early. Tableau customers are out-performing Best-in-Class organizations in this regard, with on-time performance of 74% compared to 70% - and just 51% for the Industry Average survey segment.

IT resources can be stretched only so thin. Organizations that are able to adopt a self-service BI strategy can move resources from support to development and implementation. BI projects can be introduced more rapidly for new application areas, or underserved parts of the business. In this way, self-service BI enables BI to be used more widely throughout the organization.

Fast Facts

Frequency of being able to access management information in the time required for decision-making

✓ Best-in-Class - 85%

✓ All Others - 76%

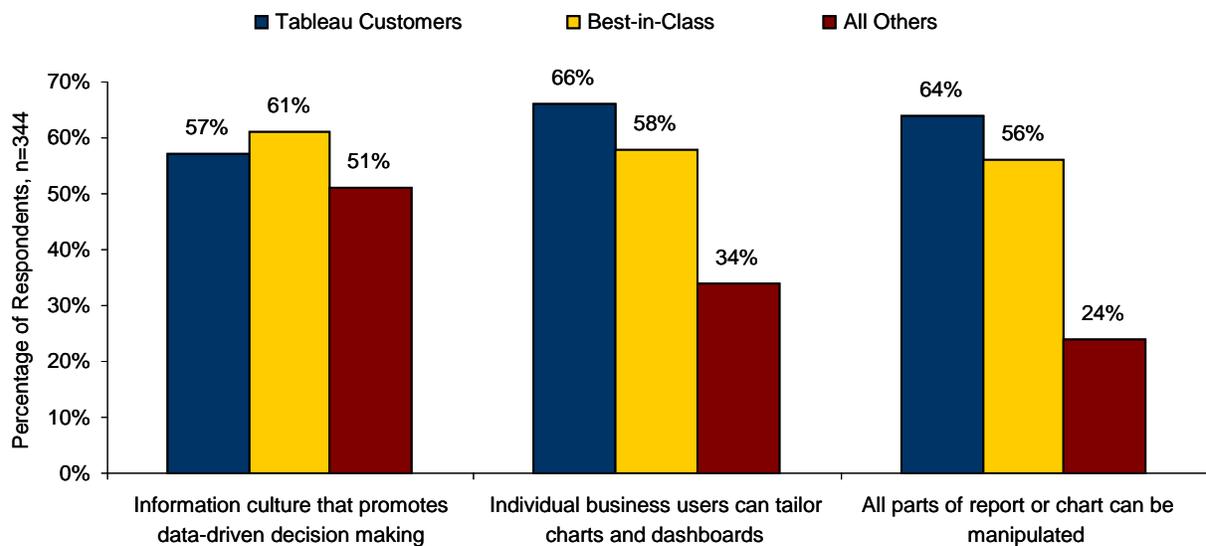
✓ Tableau Customers - 83%

The Capabilities that Drive High Performance

By implementing a number of key capabilities and technologies, businesses are able to tackle the pressures they face, execute strategies, and achieve better performance. There are several capabilities that help customers of Tableau Software achieve such success with their BI deployment. In many cases, Tableau customers perform close to, or better than, the Best-in-Class. These capabilities all tie back to one concept - self-service analytics.

First of all, 57% of Tableau customers possess an organization culture that promotes data-driven decision making (Figure 2).

Figure 2: Capabilities that Help Drive Self-Service BI



Source: Aberdeen Group, March 2011

This style of corporate culture promotes BI usage throughout the company. Corporate DNA drives employees to always seek out and analyze

performance data whenever making decisions. This predisposition to study data is an essential - but easily overlooked - requirement for self-service analytics to succeed. If decisions are based on instinct or corporate politics, then the need to access data through analytics is greatly reduced. However, an innate spark of curiosity leads to an avaricious desire for data.

As noted earlier, Tableau customers are able to actually deliver data to users in the time required to make decisions 83% of the time. There is clearly a strong demand for data amongst Tableau users - a demand that is successfully met most of the time.

A rich supply of data is a good starting point. But, without the right technical capabilities the hunger for data may go un-satiated. Tableau customers excel in two respects here. Firstly, Tableau users are more likely than users at Best-in-Class corporations to be able to tailor the presentation of business intelligence themselves (66% vs. 58%). Every person processes data differently. What is easily understandable to one, may look foreign to another. By being able to view charts and dashboards in the way that is most useful to them, Tableau customers can consume data more easily.

Likewise, different roles within an organization will need access to different subsets of corporate data. For example, the account manager for Acme Corp. and the director of a customer service center are both consumers of customer service data. However, the head of the service center is likely to be more interested in aggregate performance metrics - how many calls did we take today, what was our first time resolution rate - and so on. Naturally, this individual will also be interested in how these performance metrics vary over time. The account manager for Acme Corp. cares for none of this. They care about customer service data to be sure - but only in as much as it affects the specific customer they are responsible for. As such, they are interested in the details of individual service calls raised by the staff of Acme Corp. - principally, how many calls did they make, are their issues resolved yet and are they unhappy.

To be truly useful then, business intelligence needs to be customized to fit the needs of the individuals using it. That configuration can be undertaken by the individuals concerned or by corporate IT. Giving data hungry staff the responsibility makes sense. These staff know what data they want to see and how they want to see it. Further, their natural curiosity is likely to lead them to make the necessary modifications, as long as they are capable of doing so. Alternatively, putting that responsibility with the IT organization is less likely to be successful. As noted earlier, most IT departments are already overloaded. In addition, they have no inherent understanding of what each specific user or role needs from a BI solution. Empowering users to tailor their own BI environment can increase engagement with the solution and increase BI usage rates.

As an extension of this tailoring, Tableau customers are more than 2.5 times as likely as all other companies to be able to manipulate all parts of reports and charts. This gives users complete control. They become more involved in the analytics process and can explore data freely to discover new insights

Fast Facts

Total elapsed time required to build an entirely new dashboard

- √ Best-in-Class - 3.7 days
- √ All Others - 31 days
- √ Tableau Customers - 7.7 days

that simply cannot be uncovered with less flexible approaches. Removing the rigidity of reports opens up the end user's ability to take advantage of the available data without constantly requesting assistance from corporate IT. People are free to analyze data from many angles, enabling more enlightened and robust decisions to be made.

Case Study — Irish Life

Founded in 1939, Irish Life serves its customers with life insurance, pension and investment products. From a BI perspective, the company is in transition, moving to adopt Tableau as its primary business intelligence tool. Tableau will replace an existing end-user query tool that has allowed managers to access basic data. However, use of this tool has ultimately been limited by a simplistic user interface. Once the transition is complete, the expectation is that Tableau will be used for reporting and analytics throughout the business.

Since March 2011, a number of power users have had Tableau Desktop available to develop prototype analytic applications. These users have been able to meet their own local reporting needs much quicker and easier than with their previous office productivity tools. Starting in July, and with a Tableau Server license in place, Irish Life will start to take its full inventory of existing BI assets and migrate them to use the Tableau presentation layer. They aim to complete this project in six to nine months and will expand usage to approximately 300 concurrent users throughout the business. Sales performance and customer service analysis will be among the first applications to be migrated.

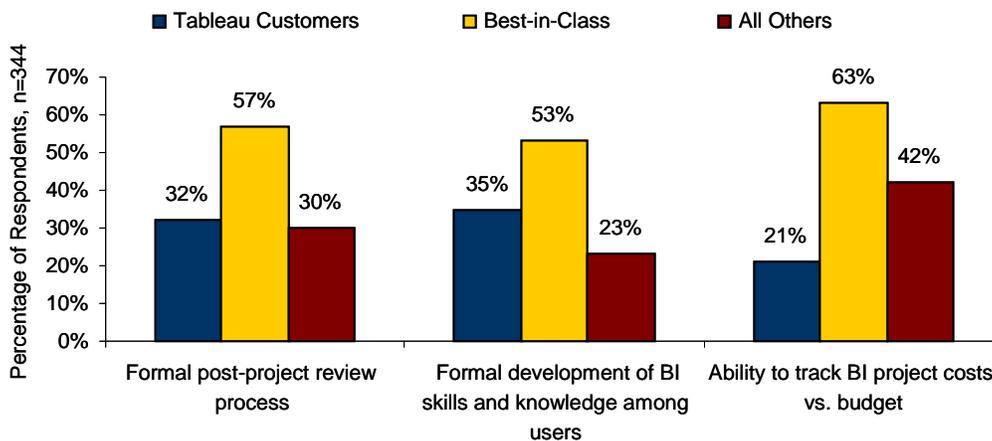
The corporate strategy is to move strongly towards self-service BI for both consumers and BI developers - as far as possible. The corporate IT group will largely focus on providing a robust foundation of clean data in an enterprise data warehouse. As Paul Egan, Senior Business Intelligence Competency Centre Manager at Irish Life explains, "We want business users to be more self-sufficient with the presentation layer because they generally have a better idea of what they actually want." In the past, the IT group has sometimes completed multiple iterations on a project. The aim is to get to a point where IT does a single iteration to source and aggregate the correct data, and then business users can just tailor the presentation of the data as they see fit. In this way, scarce IT skills can be devoted to improving the quality and integrity of the data. This solid core of data will provide a single version of the truth that Tableau power users can then use to develop additional reports and dashboards

Paul Egan continues, "Our organization has a large number of actuaries and accountants who do a huge amount of data analysis with local desktop tools. They are quite capable of building systems themselves, and they want to do that. We believe it's better for them to build applications against authenticated data sources with a toolset which allows what they produce to be production strength, widely published, and have a look and feel similar to that which an IT professional could produce."

How Tableau Customers Can Improve Performance

There are demonstrable capabilities that have enabled Tableau's customers to realize value from their investments. However, there are a few process and organizational capabilities that these customers could implement in order to get even more out of the software (Figure 3).

Figure 3: Potential Capabilities for Performance Improvement



Source: Aberdeen Group, March 2011

For example, only 32% of Tableau customers have implemented a formal post-project review process. This is far below the level of adoption by Best-in-Class organizations. While not all BI projects are identical, each project contains opportunities for learning. With a formal post-project review process in place, organizations can glean key insights from each project that can inform and potentially improve each subsequent project. Without this, the BI project plan is likely to evolve in a haphazard manner and lead to inconsistent delivery of analytic applications. Tableau customers already have strong performance in on-time project delivery, but incorporating a robust feedback cycle could lead to additional improvements.

Even though Tableau customers are enabling their employees to use the software in a self-service capacity without the help of IT, this does not mean that every user is necessarily getting the most out of the tool. As with all business processes, training is needed in order to ensure employees are performing to the best of their abilities. Only 35% of Tableau customers have a formal process for the development of BI skills and knowledge among users. Providing concise lessons in data interpretation, analytics, and the specific capabilities of the BI tool itself may accelerate adoption by a broader base of business users. In addition, hands-on training with the BI tool and the real data used by the business can increase the value and reinforce key learnings. Fully developed skills enable users to overcome initial hesitation, quickly gain access to data, and realize value from the solution.

Lastly, only 21% of Tableau customers have the ability to track BI project costs versus budget. This is perhaps less important in small-scale implementations, or in the early days of adopting a new solution. But, it is both a blessing and a curse that powerful self-service business intelligence solutions can be adopted in a viral fashion. Without keeping a close eye on actual costs compared to budget there is a danger that costs can escalate beyond expectations. By tracking costs against budget, 63% of the Best-in-Class organizations are able to keep costs closer to budget, and help to get spiraling out of control projects back on track.

Key Takeaways and Recommendations

Done right, self-service BI can greatly enhance the decision making culture within a business. This leads to faster, more informed decision making and maximizes the ability to take advantage of opportunities. Aberdeen's research into the performance of Tableau Software's customers has highlighted the following factors:

- Tableau's customers have demonstrated excellent performance in many of the measures related to agile business intelligence and a more flexible approach to BI delivered by a self-service philosophy. Business managers are frequently able to get access to the information they need in the timeframe they need it (83% of the time). In addition, half of all BI users are able to get the information they need without further assistance from the IT organization.
- While the self-service approach reaps benefits for business managers, Tableau customers have also shown how the value of this approach ripples through to the IT group too. The scalability achieved in terms of the number of BI users supported by each FTE in IT far exceeds that of other survey respondents. One consequence of this is that Tableau users also achieve excellent performance in on-time project delivery because the IT group is able to shift the balance of IT resources away from day-to-day support and towards delivery of new BI projects.
- Several capabilities are necessary to enable a self-service approach to analytics, and Tableau customers are strong in many of them. Critically, they are likely to have a corporate culture that supports data-driven decision making. Without this fundamental mindset, attempts to deliver self-service BI are very likely to flounder. Once the corporate culture has been set correctly, other capabilities build on this foundation to execute the self-service vision. In this respect, the majority of Tableau users are able to tailor the presentation of BI to suit their own particular needs. Coupled with this, they are also able to explore data freely to find the answers to new business questions or gather new insights.
- There are areas that Tableau customers should be mindful of to ensure that their BI deployments continue to bear fruit. These are related to project management and the soft skills required for

success with analytics. Tableau customers are notably weak in their ability to track project costs to budget, and to consolidate the learning from successive BI projects. Strength in both of these two competencies grows in importance as the scale and extent of the BI implementation grows. Fortunately, both areas can be addressed by modifying the project management process. Formalizing the development of analytics skills is easy to remedy too - and also tends to be more important as projects scale up. Within any enterprise, there are likely to be individuals who are data-driven and eager to learn and grow their skills in analytics. Beyond these early adopters will be a pool of people who are more hesitant, particularly if significant change is involved. Appropriate education and encouragement can ensure these people are not left behind and the BI rollout doesn't stall.

By combining all of these capabilities, Tableau Software customers can put their organizations on the track towards more responsive decision making and improved organization performance.

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Related Research	
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<i>Business Answers at Your Fingertips: The Real-Time Value of BI</i> ; March 2011	<i>Performance Management - What the Mid-Market can Learn from Large Enterprises</i> ; November 2010
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