White Paper

Deltek Know more. Do more.™

Greater Vision for Better Decisions: Using Analytics to Gain Better Visibility into Business Performance and Risk

Introduction

According to Deltek research[1], firms with very high visibility achieved 63% higher profits than their peers. So what does it mean to have greater visibility into risk and financial performance and what are downside risks associated with a lack of transparency across an organization?

To begin to answer these questions you need to understand the characteristics of firms with high degrees of visibility: their reporting processes, metrics they track and approaches to data-driven decision making. You also need to understand the path they took to get there: moving from a traditional reporting-only approach to adopting analytics to achieve greater vision and clarity.

This white paper addresses the impediments that most firms face in making this transition and provides a blueprint for using analytics to improve transparency and decision making, resulting in timely, informed decisions throughout the organization.

What is Visibility and Why is it Important

Better visibility means better operational and financial performance, growth and profitability. But how can leaders and project managers improve visibility in order to make a difference? Let's start with what we mean by visibility. We define visibility as having a clear and unobstructed view into current conditions and future potential outcomes. These "conditions" include your current operational and financial reality, with "outcomes" representing what your future revenue or profitability may look like based on your forecasts. Since you will never have perfect foresight, what you need is accelerated learning—whereby your data and analyses constantly raise the collective IQ of your organization, leading to faster, smarter decisions.

This requires processes, tools and behaviors that create well-functioning feedback mechanisms that constantly update and communicate your organizations "vitals", so that analysis and preemptive action can be taken at the project or firm level. Visibility is an important concept as it provides a way to gauge how effectively that feedback system is working. Highly visible firms ensure that their feedback mechanisms are operating at peak efficiency by making sure their data and analyses meet three essential criteria: **timeliness**, **quality** and **accessibility.**

Your Company "Vitals"

Pipeline

Backlog/Pipeline Forecast

Cash

AR/DSO/Unbilled

Headcount/Utilization

Project Performance

Financial Statements

Indirect Rates

Timeliness

The timing of decisions can be critical if you are to have any chance of influencing future outcomes. Depending on the size and complexity of your organization, there could be

[1] Source: 6th Annual Deltek Clarity GovCon Industry Study: http://more.deltek.com/2015-govcon-clarity-report

any number of interdependent elements—from pipeline management, bid/no bid decisions, resource allocation and project management—that can impact project profitability and company profits. For example, a gap in information at a given point in time (e.g. access

to metrics/profiles of prior unprofitable projects during a bid process) can have a ripple effect downstream, making it more difficult to remedy in the future.

Quality

The quality of information can be judged along many dimensions, including the breadth of data available as well as the ability to manipulate, compare and model it in order to gain insights. This requires that the data not be walled-off, or reside in silos and not visible across the organization. The proliferation of spreadsheets is a common problem that impacts the quality and accuracy of data as multiple users maintain separate “snapshots” of isolated data sets at various points in time. This incomplete and outdated approach lowers the overall data quality.

[2] Source: Findings over six years in the Annual Deltek Clarity GovCon Industry Study

Accessibility

The final criteria, accessibility, refers to the availability of data and analytic tools up and down the organization, from the project manager on the front lines to the executive suite. To enable informed decisions across the organization, staff as well as executives need to better understand the cause of issues and potential implications of decisions by having access to a single version of the truth.

Characteristics of a High Visibility Firm

Our research[2] consistently demonstrates that firms with high visibility outperformed their peers. So what do these firms do differently? They focus on three essential areas:

1. Defining key metrics,
2. Developing analysis and reporting processes, and
3. Reinforcing desired behaviors.

Defining Key Metrics

For high visibility firms, defining the key metrics to track starts with understanding the decisions that need to be made on a daily, weekly and monthly basis. Working back from this point, you can determine the required metrics that will best enable those decisions. To ensure the analysis is informative and actionable, a formal design process that uses mock-ups and extensive user feedback must be followed when developing dashboards and analytics. This process helps to surface more granular, interdependent variables in the data that can lead to greater insights and better decisions. Without this design process, firms tend to produce more static, backward-looking dashboards providing marginal value.

Analysis and Reporting Processes

Some organization rely solely on traditional reporting processes that provide periodic historic "snapshot" views of operational and financial performance. While there are circumstances for using traditional reporting, leading firms tend to use a mix of reporting and analytics. Determining where to use reporting versus analytics is critical to maximizing the use of the tools you have and streamlining your information delivery process. Traditional reporting may be appropriate for operational lists (employees, projects), heavily formatted output (invoices, financial statements), or transactional reviews (journal entries to be posted, open purchase orders). Conversely, analytics can help you look at trends over time (project revenue and profit over time, utilization), as well as allowing you to ask questions, or discover answers lying within large data sets by drilling down on general ledger entries, timesheets and purchase orders.

Behaviors and Decision Making

To achieve better vision, tools and processes are not enough—driving behaviors makes the difference. You can have all the cutting edge tools and well-defined processes imaginable, but if they are seldom used or followed than they are of no practical value. What's often missing with low visibility firms is a culture that reinforces the right behaviors. They tend to view data and analysis in the context of a reporting activity rather than a decision making process—a more reactive than proactive mindset. Changing this attitude, and related behaviors requires executive leadership. Setting the tone must start at the top. If executives don't buy in and drive the new behaviors, the process will fail.

The difference with high performance firms is that they actively reinforce a culture and mindset that is akin to the practice of preventative medicine. In this type of culture, the emphasis is on better "diagnosis" and preemptive action, rather than simply applying expensive "remedies" later on. Analytics is simply an enabler for these firms.

"A report is your rear-view mirror—analytics is for where you are going, and where you think you should go."

Tony Sica,
Berger Group

Impediments to Visibility

Charting your path to higher levels of visibility, performance and profitability requires you to look closely at the barriers that are getting in the way. Below are some the most common issues that are preventing firms from putting in place the building blocks that will lead to higher levels of visibility.

1. **Lack of business-focused analytics design process** – rather than creating a static dashboard based on what your reporting system provides, what's required is a formal design process involving IT and business users that begins with identifying the decisions that the business needs to make, and working back to what analytics are needed to inform those decisions.
2. **Lack of trustworthy and reliable Information** – outdated, incomplete or inaccurate data can destroy trust with users, forcing them to develop workarounds—often using spreadsheets—that simply create more silos of data.
3. **Disconnected data sources** – when data such as pipeline and backlog forecast reside in different places (including the aforementioned spreadsheets), meaningful diagnostic analysis becomes

much more difficult due to the lack of integration.

4. **Analysis embedded in presentations** – useful financial and operational analysis can often be embedded in PowerPoint, thus making it difficult to reuse and build upon in other related scenarios. This requires constant re-creation that can be time consuming and error prone.

Leading firms have overcome these challenges by consolidating and aggregating data sources and delivering user friendly analytics for more interactive what-if, data discovery and forecasting capabilities. These are necessary preconditions for smarter, faster decisions, but until a formal analytics design process is implemented, you will likely face challenges as the analysis may not meet the needs of specific users—forcing them back to their spreadsheets or other workarounds.

Using Analytics to Gain Visibility

Analytics means better insights to answer the question: why did this happen? When a project suddenly turns unprofitable due to a spike in non-billable time, you need to be discern the root cause and respond in time to minimize the financial impact. To do this, you need an integrated global view that allows you to access, view and manipulate live data across multiple dimensions to quickly understand what has happened and drill down to understand why it happened.

Beyond insight, you also need the foresight to anticipate what is likely to happen, giving you a chance to take proactive action to mitigate or eliminate the issue entirely. For this, you need future focused analysis that interrogates data using what-if, trend analysis and forecasting to model potential future outcomes to better understand what may happen.

To move beyond traditional reporting-only, “rear-view” approach, your analytics solution needs to include the following core capabilities:

- Rich visual representations of critical performance indicators.
- Guided analysis to explore data from any angle.
- Easy personal dashboard creation to focus on what’s relevant.
- Ready access from mobile devices for timely intervention
- What-if and scenario planning capabilities to model a range of possible outcomes
- Trend analysis to provide a historical perspective on your current situation and future risks and opportunities

Conclusion

The reality is that under the best of circumstances, leaders are often required to make decisions with limited information and under conditions of uncertainty. In order to have a clearer picture of your current operational and financial situation you must better comprehend the complexities in your organization and sense when conditions are changing. The problem is that change is accelerating, making more traditional, static reporting less effective. It’s now about how quickly you can learn and adapt. This requires accelerated learning fueled by data and analytics that give you the ability to make timely and prudent course corrections along the way—keeping you on a path to profitability and growth.

Case Story: Analytics in Action

An international engineering and construction firm uses analytics to address to key pain points familiar to most professional services firms: resource allocation and project profitability.

They use analytics for strategic resource management to optimize current staffing and utilization and anticipate future workforce needs. By integrating financial, HR and pipeline/backlog data they are able to get a global view of how their resources are currently being utilized and how changes in the future could impact revenue and profitability. They also take proactive approach to project profitability by analyzing historic project data to identify the right clients that ultimately lead to profitable relationships. Using this approach, they developed an “early detection” process using ideal client profiles to flag risky projects early in the bid process to avoid filling the pipeline with potentially unprofitable business.

Optimizing Resource Allocation

To analyze and optimize their resource allocation, the company created analytics that track staff availability and turnover using data such as: region, time of year, project lifecycle, gender and age. One of the key metrics they track is “negative target billing rate,” that calculates the lost revenue for every unfilled billable position. They track this close in order to quantify the opportunity cost of open positions, and identify potential gaps in recruiting. For more forward looking analysis, they conduct a gap analysis of existing staff skills and competencies across geographies compared to the requirements revealed in backlog reports as well as bid and proposal processes. This informs staff planning and recruiting plans going forward, helping to eliminate future staffing shortages. Understanding that people are their most important asset, they use analytics to optimize resource allocation to address current profitability and effectively plan for the future—putting the right resource at the right place, at the right time.

Ensuring Project Profitability

When analyzing unprofitable projects, the company discovered that in many instances the root cause could be traced back to the original bid process, when pricing, scope, staffing and risk mitigation decisions were made. To address this issue they began researching their existing clients and projects and developed both qualitative and quantitative metrics to identify the characteristics of the ideal client. This tracked multiple variables including average project profitability and client payment history. The company discovered during this process that a relatively small number of clients were actually contributing to profits. Further drill down on the unprofitable relationships revealed a pattern of client- and project-type risk characteristics, including client payment history as a key attribute. As a result of this deeper analysis, they are moving to a more “client-based” model rather project-based; analyzing historic company-level and project type data to inform bid/no-bid decisions, pricing and risk mitigation strategies. They can now start to solve the project profitability challenge by going to the original source of the problem.