

REAL-TIME EXECUTIVES: STREAMING DATA INTO THE C-SUITE

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Report Highlights

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Real-time analytics for operational performance review and realignment.

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Tactical dashboards, executive dashboards, and interactive data visualization.

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Real-time executives averaged a 14% improvement in operating cash flow.

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Real-time executives averaged a 6% reduction in operating costs.

This Research Report examines the strategies, technological capabilities, and performance of executives with real-time analytics.

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Executives are responsible not just for their personal performance, but for the performance of every person and process under their purview.

Aberdeen collected data from 224 executives currently using some form of business analytics. Aberdeen defines real-time analytics as the ability to measure, integrate, and analyze data as it is generated by business operations. Real-time analytics users work with streaming data to monitor business events as they happen. The breakdown of executives with and without real-time analytics was as follows:

Real-Time Executives:
88 respondents

All Other Executives:
136 respondents

Large and In Charge

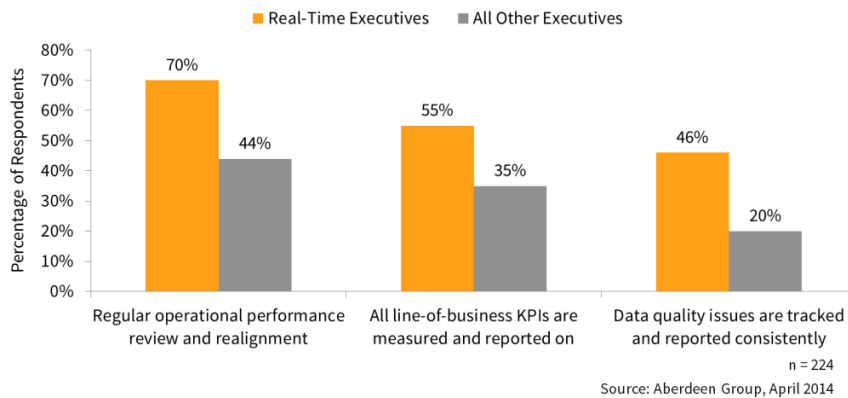
It's good to be the king. But being in charge comes with the burdens of expectations and accountability. Executives are responsible not just for their personal performance, but for the performance of every person and process under their purview. They need visibility into what is happening in the trenches, and a comprehensive understanding of key metrics and their implications for overall performance. Some business leaders address this challenge by instantaneously streaming information from its point of creation into their corner office. Aberdeen Group's 2014 Business analytics survey collected data from 224 executives across a wide range of industries and company sizes. This report focuses on executives that perform real-time analytics on data generated at the line-of-business level.

It All Starts in the Trenches

Aberdeen asked all executives about their knowledge and performance management capabilities at the operational level (Figure 1). Seventy percent (70%) of real-time executives hold regular operational performance reviews and realignments. Those business leaders with real-time analytics can see what's working and what's not in every line of business. Streaming information makes it easier to evaluate where problems are coming from and to evaluate the impact of minor adjustments and major operational realignments. Regular reviews prevent broken operations from perpetuating and causing long-term damage to the organization. Continuous improvement through data-driven realignment removes bad habits and optimizes operational efficiency. [Aberdeen research](#) showed that the majority of executives prefer to take a centralized approach to evaluating operational performance, with a single individual or team in charge of collecting and managing data.

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Figure 1: Leveraging Operational Data



Properly evaluating operations requires analysis of all pertinent data. Real-time executives are 57% more likely than all other executives to measure and report on all line-of-business Key Performance Indicators (KPIs). These business leaders can work with streaming data on any aspect of operational performance. No valuable information slips through the cracks on its way to the C-suite. Busy executives can be alerted of any statistical abnormalities or impactful events. Additionally, [recent Aberdeen research](#) revealed that over two-thirds of executive-sponsored real-time analytical initiatives also include an open exchange of operational data. Executives leveraging streaming data make a concerted effort to develop a comprehensive view of all operations and prevent any line of business from becoming siloed.

Measuring and delivering all that data is pointless if it is of poor quality. Decision makers need to know that the information streaming into view is accurate and complete. While real-time executives are 130% more likely than all other executives to adequately address data quality issues, this is still an area they should work to improve in. Aberdeen's report, [It All Begins with Data Quality: Building the Foundation for Business Intelligence](#), shows that data quality tools drive significant improvements in

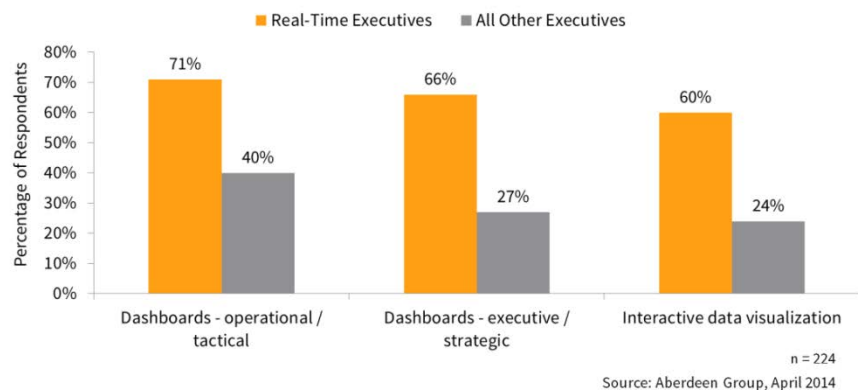
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data accuracy and completeness, and also reduce the amount of time users spend looking for data by 33%.

Visualizing Real-Time Data

Once real-time executives have established channels to keep data streaming from the trenches into the C-suite, how do they engage that data? Real-time executives employ several data visualization tools at significantly higher rates than their less urgency-sensitive peers. Seventy-one percent (71%) of real-time executives have operational or tactical dashboards, compared to 40% of all other executives. The tactical dashboard provides a user friendly interface to stream operational data into the C-suite. With real-time analytics, executives can be sure that the information on these dashboards is current and truly represents the situation on the ground. Aberdeen's report, [Best-in-Class Reporting and Dashboards: The Workhorse of Analytics](#), revealed that top performers strategize around using dashboards to collaborate on data pulled from every line of business. Real-time executives can monitor a variety of metrics from disparate sources.

Figure 2: Data Engagement Tools



Nearly two-thirds of real-time executives have dashboards designed for executive or strategic use, compared to just 27% of

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all other executives. Strategic dashboards help leaders maintain a big picture perspective even while they are mired in real-time data. Real-time executives can customize these dashboards to align the real-time metrics they monitor with corporate strategy and goals. This way, decision makers can compare real-time performance alongside forecasted performance to evaluate existing business plans. They can also compare real-time data to historical data to determine if findings are an aberration or indicative of a trend.

Sixty percent (60%) of real-time executives have interactive data visualization tools. Interactive visuals enable executives to investigate beyond the top layer of real-time data. Business leaders can manipulate charts and dashboards in a self-service capacity to create the most helpful view of streaming information. They can also drill-down into visuals to explore new data sources and find pertinent information within large volumes of live data. Aberdeen's report, [Real-Time Data Visualization: \\$%&# It! Do it Live!](#), revealed that real-time visualizers obtained valuable information within the decision window 22% more often than organizations without real-time visualization (see sidebar). Interactive tools help executives find the live view they need.

Why Real-Time? ROI. That's why.

Where do executives see the benefits of working with streaming data? What is the return on investment (ROI) of real-time analytics? Real-time executives achieved marked year-over-year improvements across several financial metrics (Figure 3). To be clear, having real-time analytics is not the only reason these executives are achieving stronger performance. There are too many variables impacting profits, cash flow, and costs to attribute success to a single technology investment. However, the correlation is clear: the executives that reported superior

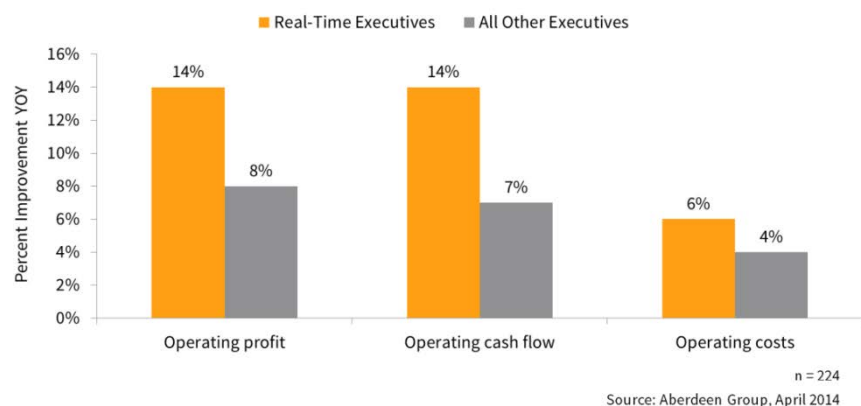
Sixty-four percent (64%) of organizations with interactive data visualization improved their speed of decision making in the past year.

Aberdeen defines the **decision window** as the period of time when information is valuable for a choice at hand.

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improvements were the ones with the ability to engage real-time data and react to business events as they happen. All the instant insights and faster reactions enabled by streaming operational data contribute to these desirable results. Real-time executives averaged a 14% improvement in operating profit at their respective organizations. Aberdeen's report, [*Real-Time Analytics: Executive and Line of Business Perspectives*](#), describes how real-time analytics improve other metrics that drive stronger profits, such as customer response times and average employee productivity.

Figure 3: Improvement Metrics



Real-time executives also averaged a 14% improvement in operating cash flow, double the improvement achieved by all other executives. Real-time data alerts executives to adverse events as they happen. For example, a Chief Supply Chain Officer (CSCO) could be notified of a delayed shipment of essential parts within seconds of the supplier's truck getting a flat tire. With the early notice, the CSCO is able to redirect key resources from elsewhere (or likely delegate the task) and keep the final delivery on time. This ability to immediately identify and address problems maximizes output.

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Finally, real-time executives achieved a 6% reduction in operating costs. Analyzing line of business data in real-time quickly reveals any consistent inefficiencies or unacceptable flaws. Executives can eliminate these operational problems before they create swelling costs. Leaders deal with adverse events immediately, rather than allowing them to snowball into expensive setbacks. Executives can also compare cost and production data for specific products or processes side by side in real time to identify any business units whose productivity is lacking.

Key Takeaways

Executives may enjoy the view from the top, but the best ones always keep an eye on the bottom. Real-time analytics enable experienced business leaders to convert the cacophony of operational data into clear insights. Executives seeking to heighten their visibility into the line of business and use streaming data to drive superior performance should consider the following:

➔ **Gather operational data from every line of business.**

Seventy percent (70%) of real-time executives use streaming data to perform regular operational reviews and realignments. Continuous improvement through data-driven realignment removes bad habits and optimizes operational efficiency. Real-time executives make a point to measure a comprehensive set of operational KPIs. Business leaders using streaming information also ensure that they are only working with quality data that truly reflects the situation on the ground.

➔ **Engage data visually and find insight among the noise of operational data.** Real-time executives are

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significantly more likely to utilize both tactical and strategic dashboards. Tactical data keeps business leaders apprised of the situation on the ground and strategic dashboards help them analyze that data in the context of corporate goals. Sixty percent (60%) of real-time executives have interactive data visualization tools that enable executives to investigate beyond the top layer of real-time data.

- ➔ **Recognize the ROI of working in real time.** While there is by no means a direct causal relationship, real-time analytics correlates with desirable financial performance. On average, real-time executives reported a 14% improvement in operating cash flow and a 6% reduction in operating costs. The ability to immediately identify and address problems maximizes output. Executives can also react quickly enough to prevent a small hiccup from causing swelling costs.

For more information on this or other research topics, please visit www.aberdeen.com.

Related Research

[*Best-in-Class Reporting and Dashboards: The Workhorse of Analytics*](#); May 2014

[*Interactive Data Visualization: Strategies and Key Technologies*](#); March 2014

[*Real-Time Analytics: Executive and Line of Business*](#); February 2014

[*The Real-Time SME: Streaming Analytics for the Little Guy*](#); January 2014

[*The Executive's Guide to Effective Analytics*](#); December 2013

[*Real-Time Data Visualization: \\$%&# It! Do it Live!*](#); October 2013

[*It All Begins with Data Quality: Building the Foundation for Business Intelligence*](#); June 2013

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About Aberdeen Group

Aberdeen Group conducts research focused on helping business leaders across sixteen different B2B technology disciplines improve their performance.

Our process is simple – we conduct thousands of surveys every year to identify top performing organizations and uncover what makes them different. We share these insights back with the market in the form of in-depth research reports and content assets to help our readers build business plans capable of driving better results with the right set of tools to help them get there.

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