

THE USER'S GUIDE TO EMBEDDED ANALYTICS

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Report Highlights

p2

Embedded analytics users are 69% more likely to be satisfied with the accessibility of data.

p3

63% of leading embedded analytics users saw an improvement in process cycle times.

p4

Leaders are 61% more likely to have an open exchange of information across functional areas.

p5

73% of Leaders have strong or pervasive analytical activity within the marketing function.

The ubiquity of business intelligence (BI) and analytics in today's organizations has left users with more options than ever in terms of features and functionality, but also in terms of deployment. While some companies prefer to have stand-alone analytical capabilities, others are looking to integrate or embed analytics in other deployed and culturally adopted software tools. This report explores how leading companies are exploiting an embedded approach to foster more pervasive analytical activity and deliver business results.

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Nowadays, more companies realize that the best approach to analytics might be to integrate or embed capabilities in other deployed and culturally adopted applications.

Definitions

Aberdeen defines **Embedded BI** as a scenario in which analytical capabilities (i.e., visualization, data mgmt.) are built into or embedded within other business software.

Drawing on findings from Aberdeen's 2015 Business Analytics survey, this report focuses on **78 organizations** using analytics embedded within other enterprise tools and platforms such as:

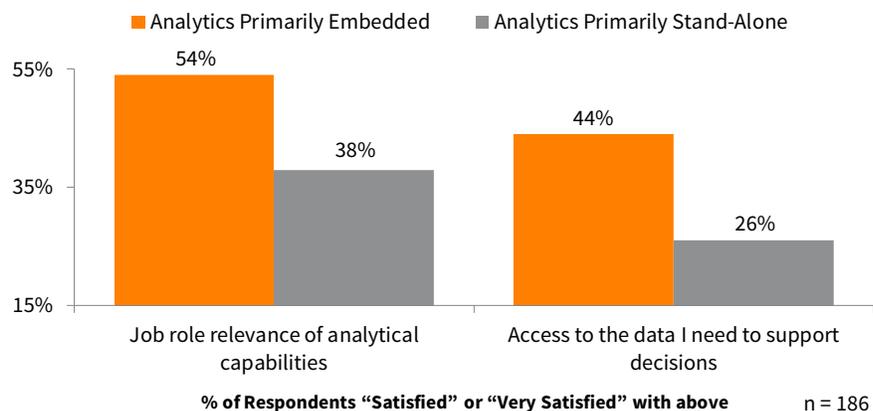
- ERP
- CRM
- Marketing Automation
- Financial Management

Keeping it Close to Home

Imagine that you're the type of person that wakes up every day, goes to work, powers up your laptop and opens up some form of enterprise application that is an integral part of your work day. Perhaps you're a sales director that relies on a CRM tool to manage pipeline, examine customer spend history, and track regional sales to date, among many other things. You might also be one of those people that have a myriad of questions about your business. What have been our historical sales by rep, by region? Which existing accounts might be best suited for a new product we're rolling out?

Most people recognize that the answers to these questions can be attained with an effective system for business analytics, but many still think of analytics as a separate application, owned by IT and operated by the technically sophisticated. Nowadays, more companies realize that the best approach to analytics might be to integrate or embed capabilities in existing and culturally adopted applications, like in the scenario above. Aberdeen's research demonstrates that user satisfaction is a big reason for this shift in mindset (Figure 1).

Figure 1: User Satisfaction with Embedded Analytics



Source: Aberdeen Group, September 2015

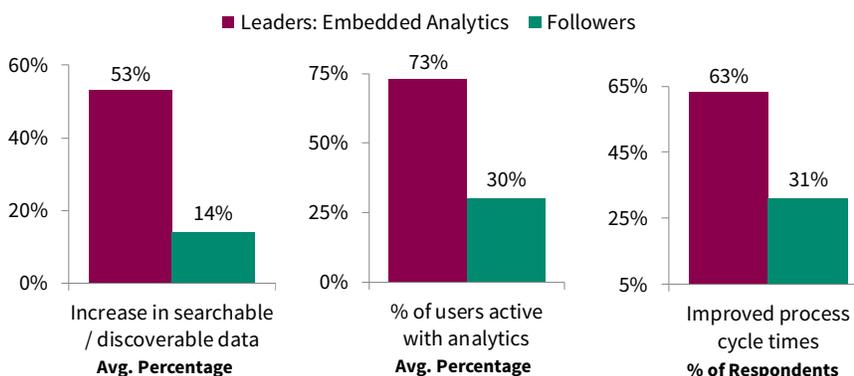
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Rather than forcing these users to stand in an IT queue waiting for the answer to their question, or requiring access and familiarity with a stand-alone application, these users are delivering analytical capabilities close to home. Among other things, this embedded approach has the effect of ensuring that the capabilities are relevant to the needs of a particular business user but also enabling them to access the data they need at the point of analysis.

A Top-Notch Approach to Embedded Analytics

Understanding a sampling of the attainable benefits to embedded analytics, it starts to become clear that there is a right way and a wrong way to take this approach. An effective strategy for embedded analytics is one that enables access to a broader array of data, empowers users to become more active in analytical activity, and supports improvement in business processes. Leaders in embedded analytics (see sidebar) were therefore defined by their ability to perform in these three areas (Figure 2).

Figure 2: Embedded Leaders Defined



n = 78, Source: Aberdeen Group, September 2015

We all have more data, and it's far from a secret. However, holding on to data does little for a company's ability to perform

Definition of "Leaders"

Embedded analytics performance was measured against three key metrics:

- Average percentage increase in the amount of **searchable / discoverable** business data
- Average percentage of users that are **actively engaged** in analytical activity on a weekly basis or more often
- Percentage of respondents that reported an "improvement" or "substantial improvement" in the **cycle time** of their key business processes

Respondents were scored against the above metrics and fell into one of two categories based on performance:

- **Leaders** - top 40% of respondents
- **Followers** - remaining 60% of respondents

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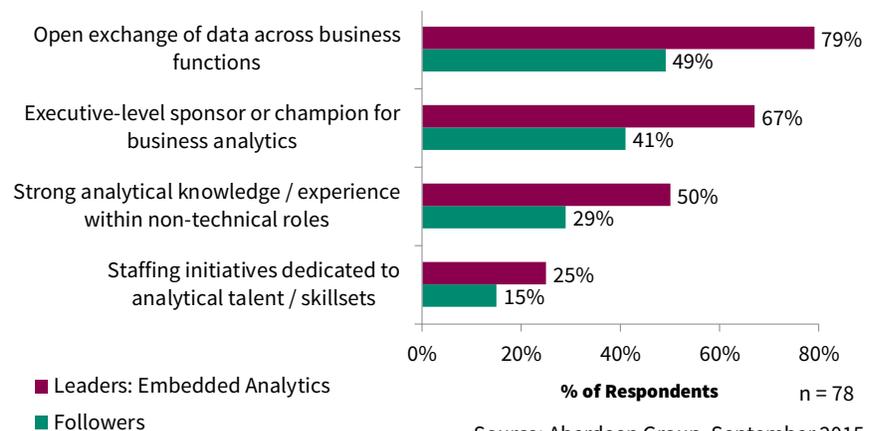
- [Related Research, "Winning with Embedded Analytics: The Two Paths to Glory"](#)
- [Related Research "The Evolution of Embedded BI: Servicing Data-Driven Success"](#)

better as a data-driven organization. Leaders in embedded analytics are able to make more of that data searchable and discoverable for more line-of-business decision makers. With more relevant data now accessible, more users get involved in the analytical process and start to become more engaged. With more business leaders active and engaged in analytics, more opportunities for improvement can be identified and exploited, leading to substantial process improvements.

Positioning for Analytical Success

Fortunately for those looking to employ an embedded approach or improve an existing strategy, there is a method to the madness and several commonalities that Leading organizations share. Starting with their organizational maturity, Leaders are more likely to expand access to data cross-functionally, allowing marketers to access financial data, or supply chain managers to access product data, etc. Top companies also look to the top when proving the value of embedded analytics. The research shows that Leaders are significantly more likely to have an executive-level sponsor or champion when it comes to the implementation of analytics (Figure 3).

Figure 3: Organizational Maturity Drives Execution

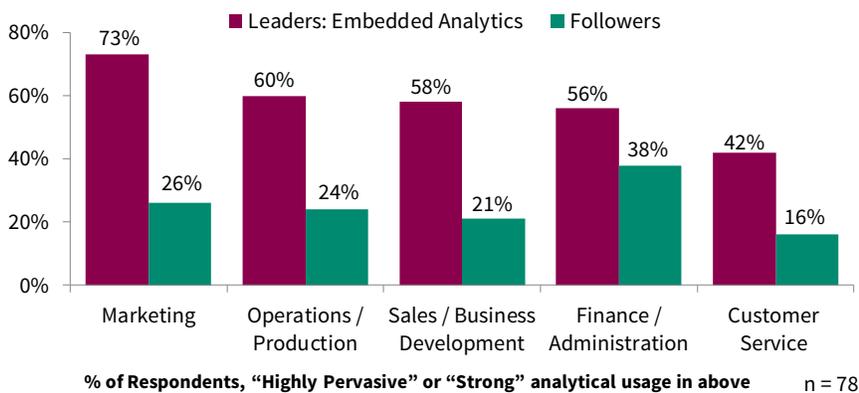


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Part of the reason Leaders enjoy a higher degree of adoption and engagement in analytics is their commitment to nurturing analytical skills among non-technical users. First, they focus on the business leaders currently in-house and developing programs to train and develop data-driven skills among existing employees. Secondly, Leaders are more likely to build analytical requirements into their hiring procedures, ensuring the new employees walk in the door with a more developed level of analytical talent.

Perhaps the most compelling and defining characteristic of a leader however is their ability to achieve a deeper and more meaningful usage of analytics in more areas of the company. Whether in marketing, sales finance, or operations, Leaders are more likely to report a “strong” or “highly pervasive” presence of analytical activity (Figure 4).

Figure 4: Analytics Woven into the Organization



Source: Aberdeen Group, September 2015

It’s no coincidence that the job functions listed above are also the ones most likely to have established enterprise applications associated with them. With CRM serving sales and customer-facing roles, ERP serving operational employees in a production environment as well as financial planning and budgeting, and

Fast Facts

Leaders in embedded analytics achieved:

- **2.0x greater** year over year improvement in organic revenue growth
- **60% greater** year over year increase in operating profit

Compared with Followers

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- [Related Research, "Interactive Dashboards: When the First Answer Just Doesn't Cut It"](#)
- [Related Research "BI Power Users: The Cream of the Analytical Crop"](#)

marketing automation tools becoming more prevalent every day, it's easy to see how an embedded approach to analytics is delivering value to companies. Leaders are able to go beyond simply making the capabilities available within these tools. These top companies exploit their ability to move and share data, as well as the growing analytical skill sets within their organization to make analytics more pervasive in multiple areas of the business.

Key Takeaways

To a large extent, the nature of a given organization will determine whether or not an embedded analytical strategy is appropriate. For example, companies with strong technical expertise in pockets throughout the organization, a contingent of data scientists, or an established BI center of excellence might be better suited for a stand-alone analytical solution. On the other hand, companies and departments with a broad and deep deployment of one particular tool (e.g. ERP, CRM, Marketing Automation) might consider "piggy backing" on these currently deployed and culturally adopted solutions with an embedded approach. The following key takeaways highlight the most important overarching research findings related to embedded analytics:

- **An embedded approach helps build user satisfaction.** When it comes to analytical activity, users have a variety of needs. They need access to the right information, tools that are relevant to their job role or functional area, and they need information delivered in-time to make an intelligent decision. With analytical activities built into the applications that they interact with on a daily basis already, embedded users are in a position to exploit analytical capabilities and make better data-driven decisions. The research shows, nearly across the board,

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that companies using embedded analytics are more satisfied with these key areas of their decision environment.

→ **Leaders cultivate analytical adoption, engagement.**

If success with analytics were as simple as checking a box and lighting up capabilities within an ERP or CRM, then more companies would be doing it. As with most enterprise applications, there is a right way and a wrong way to go about embedded analytics. Leaders start by breaking down unnecessary barriers to data exchange across functional areas. These analytical initiatives are typically championed by an executive-level leader within the organization to ensure the right political support for the project. Leaders also make efforts to build analytical skills within non-technical roles, as well as shape their talent acquisition initiatives around analytical skill sets. These critical capabilities help Leaders build a higher degree of analytical usage as well as cultural adoption.

→ **Pervasive analytical activity drives performance.**

Perhaps the most glaring discrepancy between Leaders and Followers in their use of embedded analytics is the ability to spread these capabilities across the organization in a meaningful way. It's one thing to throw reporting and dashboard capabilities into a financial tool in the hopes that users will get value from them. It's quite another thing to create an environment of business curiosity and analytical activity. At Leader organizations, marketing, sales, or finance leaders are more likely to get their hands dirty with the data, to ask questions relevant to their business, and get actionable insight in a timely fashion. Leaders are more likely to have strong or highly pervasive use of analytics in a variety of business

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functions across the organization, ultimately leading to better decisions, and enhanced business performance.

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

Related Research

[Introducing the Analytical Mind Map: The BI Personality Test](#), June 2014

[Analytical Detectives: Solving Data Mysteries](#), June 2014

[Analytical Gunslingers: The Quick and the Dead](#), June 2014

[Winning with Embedded Analytics: The Two Paths to Glory](#), August 2015

[The Evolution of Embedded BI: Servicing Data-Driven Success](#), May 2015

[BI Power Users: The Cream of the Analytical Crop](#), April 2015

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