

2017 STATE OF EMBEDDED ANALYTICS REPORT

The Fifth Annual Review of Embedded
Analytics Trends and Tactics



TABLE OF CONTENTS

Foreword by Chris Butler, Senior Product Strategist.....	1
Introduction.....	3
About the State of Embedded Analytics	3
Enhancing the Value of Applications with Embedded Analytics.....	4
What Is Embedded Analytics?	6
A Framework for Embedded Capabilities: The Analytics Maturity Model.....	7
Part 1: Embedded Analytics is Pervasive	9
Part 2: The Value of Embedded Analytics.....	13
Part 3: Pricing Embedded Analytics	20
Part 4: Implementing Embedded Analytics	24
Part 5: The Future of Embedded Analytics	30
Predictions.....	34
About Logi Analytics	35
Appendix	36

FOREWORD

THE FUTURE OF APPLICATION CAPABILITIES IS EMBEDDED

*By Chris Butler, Senior Product Strategist and The Product Guy's
"Best Product Person" of 2016*

Blindly building yet another dashboard is an act of cowardice. In today's application-driven world, dashboards alone don't rise to the challenge of solving people's real problems.

As you will read in Logi's latest **State of Embedded Analytics Report**, the bad news is dashboards are still the top item on most organizations' roadmaps. The good news is many organizations are thinking about how they expand the use of embedded analytics to provide better solutions.

End users don't ask for dashboards because they really use them. They ask for them because they need a safety blanket that gives them the (incorrect) belief that they will know everything about their business. The noise of a dashboard can be comforting, but it can cause issues when it's not truly needed (ask doctors about iatrogenic effects). With a dashboard, there is no assurance that the right contextual information is there to make a decision when necessary.

I have worked for large (Microsoft, Waze, KAYAK) and small organizations where access to the right data is key. The benefit of data, when analyzed, is better decision-making. What always resonates best is when information is presented in context and can be turned into action towards some purpose or goal. Without that last step, the analysis may as well not exist at all.

Recently, the product world has been focused on understanding what problems people have and how to solve them. As we find in the “**Jobs To Be Done**” theory, anywhere there is a solution that is cobbled together, you can find an opportunity.

Exporting a CSV to another system is a “cobbled together” solution. It is a hassle. The people using your application don’t want that. They want to be able to do analysis and make decisions in the same place.

Embedded analytics allows companies to easily integrate analytics information to address the full needs of their end users.

When considering embedded analytics for your application, ask yourself this: How does your customer differentiate the valuable information to make decisions and ignore the noise? How do they turn that information into action towards their end goals?

The competitive moat isn’t broadened simply because you offer more detailed analysis. Rather, you increase distance from your competitors when you give someone an understanding of *how* to achieve an outcome.

Looking into the future, we know that machine learning will become a high priority for many companies. To be able to leverage it, you must understand the drudgery of a person’s job. First, you need to have the right information alongside the action as it takes place. And second, you need to understand the hidden relationship between information and the next step.

I hope you find this report as exciting as I did in understanding how organizations view embedded analytics. What you’ll learn is valuable information for making a case to your internal stakeholders and where to look for innovation.

Don’t build yet another dashboard. Instead, help people solve their problems with the right information.

“What always resonates best is when information is presented in context and can be turned into action towards some purpose or goal.”

 TWEET THIS

A blurred background image showing a person's silhouette looking at a tablet. The tablet screen displays a dashboard with various charts and data points, including a bar chart and a line graph.

INTRODUCTION

About the State of Embedded Analytics

Every year since 2013, Logi Analytics has set out to independently discover the current state of embedded analytics. We survey hundreds of product managers, software engineers, and members of application teams and turn a critical eye to the future of analytics.

The fifth annual **State of Embedded Analytics Report** provides insights for executives, application owners, product managers, software engineers, and technology leaders on why and how organizations are embedding analytics capabilities into their applications. We delve into the strategic vision, the business case, and the implementation approaches for embedding analytics.

This year, we surveyed 500 people, including members of product management, product development, software engineering, IT, and executives from both commercial independent software vendors (ISVs) and Software as a Service (SaaS) providers, as well as non-commercial IT-managed applications used by internal staff and partners.

The majority (60 percent) of respondents were from North America, and 37 percent were from the United Kingdom. Five percent are customers of Logi Analytics.

The 2017 report explores this year's findings and provides context around the strategic vision, business case, and implementation approaches for embedding analytics. Please note that the data presented in this report is rounded to the nearest whole number.

For more information, please contact us at info@logianalytics.com.

Enhancing the Value of Applications With Embedded Analytics

Challenges:

The world of application teams is quickly shifting. Today, anyone working on an application—whether it's an IT department working on an internal application that won't be sold, or an ISV developing a commercial application they intend to release to the market—is tasked with optimizing that application for end users.

The most common application challenges include:

- **Growing Adoption.** For an application to be successful, it needs users. In an enterprise setting, when users rely on an IT-provided application, it means IT is contributing to a data-centric culture. For companies selling software, higher adoption means higher revenue and a larger total addressable market.
- **Engaging End Users:** Getting users to adopt an application is just one step. If the application only collects data and exports it elsewhere, it's a dumb pipe with no real value. Including more capabilities in the application—for example, letting users analyze data then and there, kick off workflows, or share findings with colleagues—means users spend more time in the application and place more value on it. One tool lets them accomplish everything they need to do.
- **Increasing ROI:** Every application team must prove their application is driving value and deserving of ongoing investment. For ISVs, commercial applications have clear metrics: sales and revenue. But even for those working on non-commercial applications, these tools must provide benefits such as increasing efficiency, ultimately leading to a more profitable company.

Solution:

Several years ago, one way to achieve these goals was to embed visualizations within the application. Users got information in the context of where they worked, and application teams saw adoption and engagement go up.

But in this survey, we found that 93 percent of survey respondents are already embedding some form of analytics in their applications. If everyone's doing it, then no one stands out.

93% of
respondents are
currently embedding
analytics in their
applications.

What now? It's time to go beyond dashboards and reports. Companies that improve the maturity of their embedded analytics (in ways we'll outline later in this report) see benefits across a range of metrics, according to survey respondents:

- **Adoption Beats That of Standalone Analytics**

60%

of end users leverage embedded analytics on a regular basis. Compare that to only 21% user adoption of standalone self-service analytics

- **Engagement Skyrockets**

84%

of respondents say time spent in application increased after embedding analytics

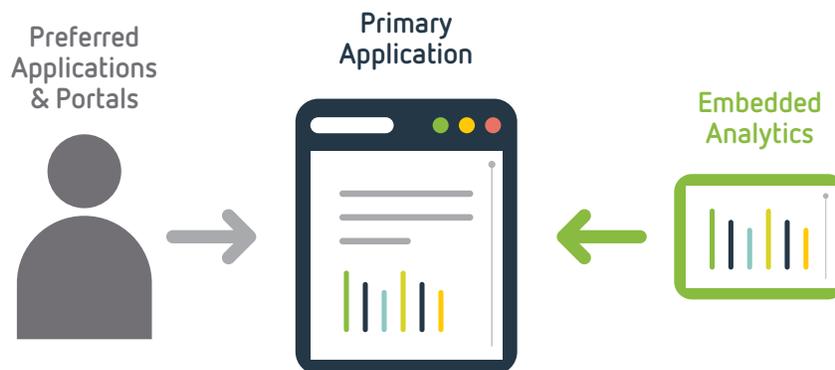
- **Revenue Rises**

98%

of commercial software respondents said embedded analytics contributed to revenue growth

What Is Embedded Analytics?

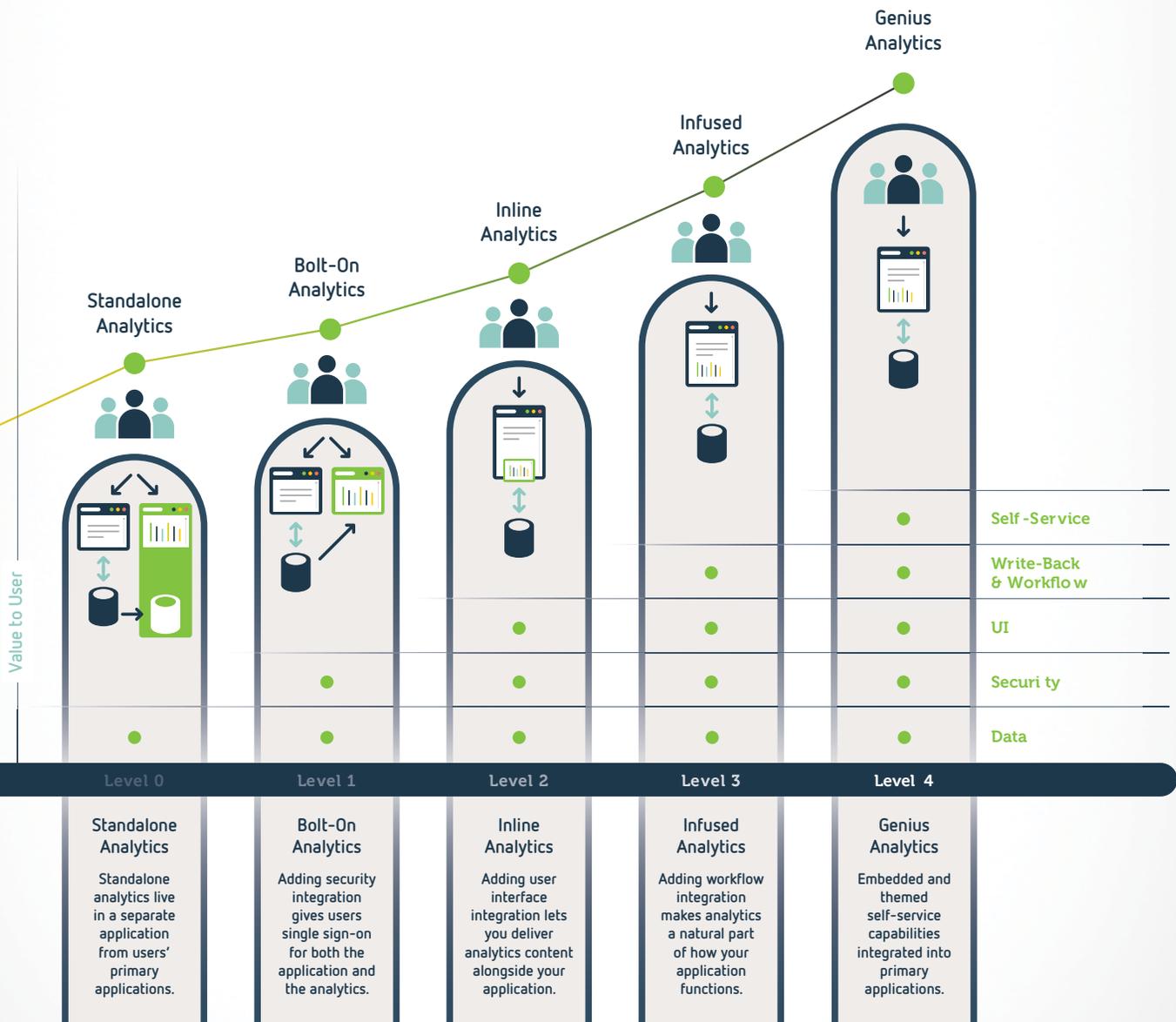
Embedded analytics is the integration of data analytics capabilities within business applications. Historically, embedded analytics has focused on ISV and SaaS vendors. But today, more and more organizations are embedding analytics in their own applications to help employees make data-driven decisions.



Embedded analytics helps users work smarter by incorporating relevant data to solve high-value business problems and create a more efficient user experience. This is in contrast to traditional business intelligence tools, which focus on extracting insights from data within the silo of analysis. Embedded analytics strives to bring together insight and action into the same context by integrating analytics as deeply as possible within business applications and workflows.

A Framework for Embedded Capabilities: The Analytics Maturity Model

To illustrate the different levels of analytics capabilities—from basic visualizations up to the advanced features listed above—we developed the Analytics Maturity Model. This framework highlights how analytics changes over time, and how new features and capabilities can add value to existing applications.



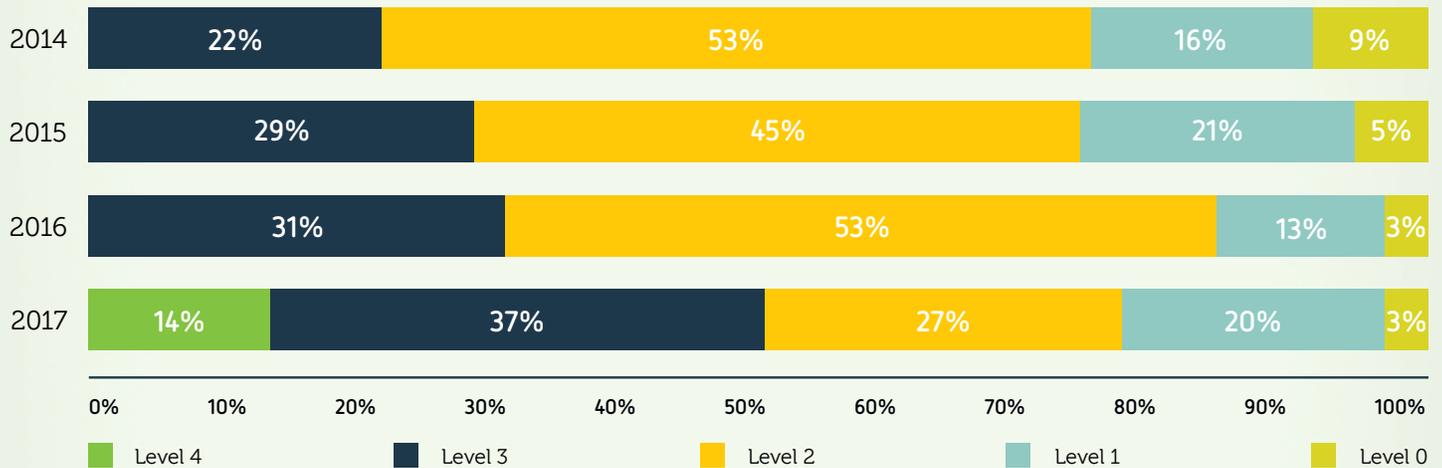
THE 5 LEVELS OF ANALYTICS MATURITY

Five to 10 years ago, traditional BI tools such as Business Objects, Crystal Reports, and SQL Server Reporting Services made it possible for companies to reach Levels 0 and 1—standalone analytics tools with simple dashboards and data visualizations. Over time, the baseline requirements have shifted towards Levels 2 and 3, where analytics are offered in context of other applications.

Today, 50 percent of survey respondents say they’re embedding at Level 3 or higher. In 2014, just 22 percent of respondents indicated they had reached Level 3. What’s more, in the last four years the number of companies not embedding at all has declined each year; in 2017, that number is just one-third of the same number in 2014.

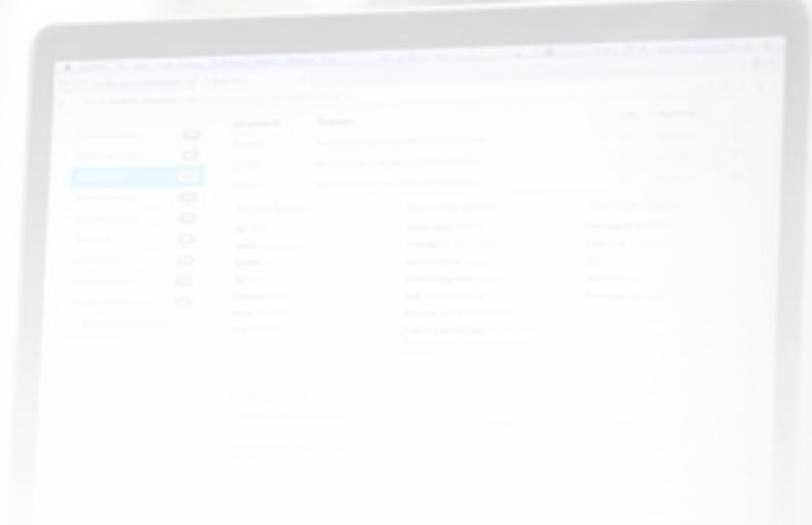
This is an indication that application teams are adding both the capabilities users need today and also features they may demand in the future. It’s also good news for companies looking to use analytics to drive revenue. Levels 1 and 2 don’t always come with enough improvements to justify charging a premium. Levels 3 and 4 may take slightly more effort, but yield far greater results today and in the future.

HOW HAVE YOU EMBEDDED BUSINESS INTELLIGENCE AND ANALYTICS WITHIN YOUR APPLICATION?*



*Level 4 was an answer choice for the first time in the 2017 survey.

The Analytics Maturity Model is not static. The outer bounds of capabilities will continue to evolve. This year, we added embedded self-service at Level 4. In the future, the framework will likely include emerging capabilities such as predictive analytics, smarter data preparation, and even artificial intelligence. But for now, most companies are beginning to stretch their limits towards Level 4—showing that it’s necessary to evolve analytics to keep customers happy, engaged, and paying money.



PART 1: EMBEDDED ANALYTICS IS PERVASIVE

Embedded analytics is a requirement for application owners at ISVs and enterprises alike. The number of survey respondents who have already embedded analytics—93 percent—has never been higher.

Why is embedded analytics so pervasive? In part, it has proven to be a more efficient solution than traditional standalone BI tools. Embedded analytics keeps users in the tools they use every day and puts data in the context of the applications people already use.

In Part 1 of this report, you'll discover:

- **Why most applications already offer embedded analytics.** With so many applications offering embedded analytics, it's more important now than ever not to stop at embedded dashboards. Consider what advanced features you can add to win more discerning users now and in the future.
- **Executives are pushing analytics.** CEOs and other executives have become increasingly influential in driving analytics initiatives forward. For the first time in the history of this survey, the C-suite was the primary driver over other business groups.

The Majority of Applications Have Embedded Analytics

Ninety-three percent of applications already embed analytics capabilities--up from 78 percent last year. We see several reasons for this new market reality.

First, application owners need users to remain engaged in their application. They understand that insufficient analytics causes people to export data and leave the application.

Second, embedded analytics is a competitive differentiator. It helps application owners provide unique value to end users.

Finally, having analytics in a separate application is simply inefficient. According to the [2017 State of Analytics Adoption Report](#), 84 percent of business users want access to analytics within the applications they're already using. But 66 percent of users said they found themselves switching from their usual business apps to separate analytics tools to get the data or analysis needed.

In their report, [Augmenting Intelligence with Embedded Analytics](#), Nucleus Research estimates that this "swivel chair effect" wastes up to two hours of productivity per worker each week.

When users have to leave their usual applications to analyze data in a standalone analytics app, those analytics simply won't be used. That's why embedded analytics is so appealing. Where adoption of standalone self-service tools has hovered around 20 percent for the past three years, adoption of embedded analytics is higher than ever this year—60 percent. Whether a company is releasing commercial software or an internal application for employees, they know that embedded analytics solves the adoption challenges that have plagued standalone data discovery tools.

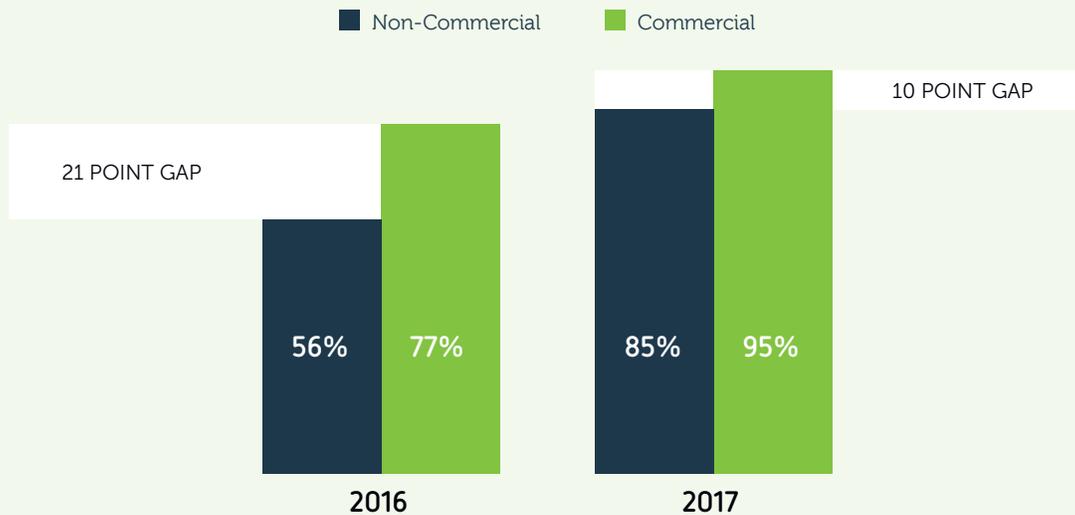
"Where adoption of standalone self-service tools has hovered around 20 percent for the past three years, adoption of embedded analytics is higher than ever this year—60 percent."

 TWEET THIS

In the past, we've seen a gap in the number of commercial versus non-commercial applications that include embedded analytics. As recently as 2016, we saw a 21 percentage point gap between the number of commercial versus non-commercial applications that had embedded analytics. This year, that gap decreased to just 10 points. Even internal application teams have realized the role embedded analytics plays in growing adoption and engagement.

Today, 85 percent of all non-commercial applications and 95 percent of commercial applications have embedded analytics.

THOSE EMBEDDING ANALYTICS: CLOSING THE GAP BETWEEN NON-COMMERCIAL AND COMMERCIAL APPLICATIONS

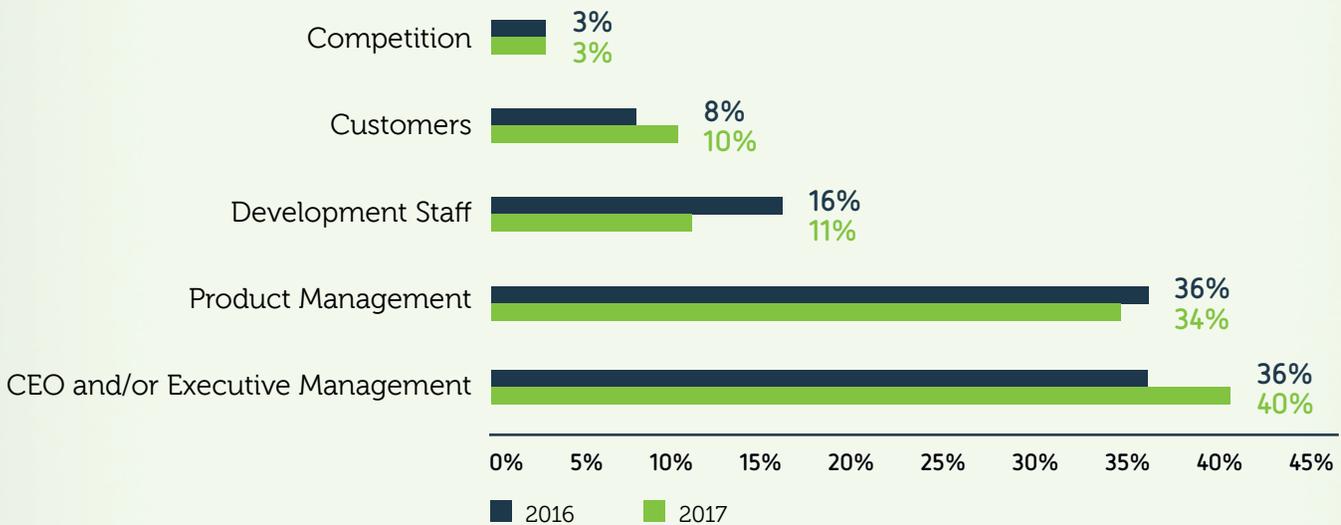


We expect this gap to continue to close. By next year, there might even be parity between commercial and non-commercial applications.

Management Is Driving Analytics Initiatives

Last year was the first time that influence by executives matched influence by product management in driving analytics initiatives. This year, the influence of executives grew even further (up 4 percent), while that of product managers declined (down 2 percent).

WHO WAS THE PRIMARY DRIVER OF YOUR DECISION TO ADD BUSINESS INTELLIGENCE AND ANALYTICS TO YOUR APPLICATION?

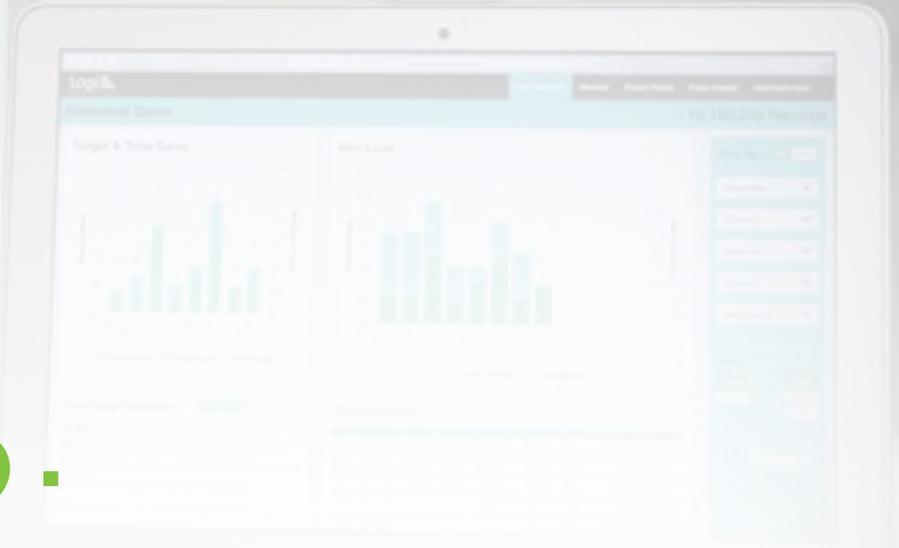


This theme is mirrored in other survey results. When we asked respondents what led them to embed analytics in their software, 33 percent said, “My boss asked me to look into embedded analytics.”

Why are executives playing a more active role? It’s likely that they’re paying more attention as their competitors use analytics to win and retain customers. The competitive nature of an increasingly SaaS software world means customers are always ripe for churn. The competition relies on analytics to steal users, which puts products with bare-bones analytics (or no analytics) at risk.

Additionally, analytics projects now go beyond simply adding open-source charts or static visualizations. Companies are willing to spend the time and resources to embed sophisticated analytics that impress end users and move the needle. The increased investment and competitive pressure begets executive involvement.

The upside to all this attention? Analytics projects may start receiving bigger budgets and more resources. However, this will also result in increased scrutiny of these initiatives and their successes—or failures.



PART 2: THE VALUE OF EMBEDDED ANALYTICS

Everyone is adding analytics to their software. But are the efforts yielding results?

In short, yes. For ISVs looking to drive revenue, investing in analytics means they can charge more for their products. And even ISVs that don't charge more say they're using analytics to stave off the competition.

But the value of analytics can be measured by more than just revenue. Respondents believe that analytics differentiates their product, improves the user experience, and drives user engagement.

In Part 2 of this report, you'll discover:

- **Revenue is still the primary motivator for ISVs.** Commercial software vendors need revenue to continue iterating on their products. No wonder, then, that it's their primary objective for enhancing an application's analytics.
- **Embedded analytics sees higher adoption than traditional BI tools.** Adoption of standalone self-service analytics tools has consistently hovered around 25 percent, **and has even dropped over the past two years**. But adoption of embedded analytics has steadily increased—and this year hit the highest adoption rate we've seen, at 60 percent.
- **Engaging users is key for all application owners.** As seen throughout this report, the objectives for commercial and non-commercial ISVs are aligning as their problems (engaging users, improving the end user experience, and attracting users) are becoming similar.
- **Self-service reduces ad hoc requests.** A lesser discussed but important goal is reducing the backlog of requests for development teams. More than 64 percent of companies that embed self-service capabilities saw a decline in ad hoc requests from users.

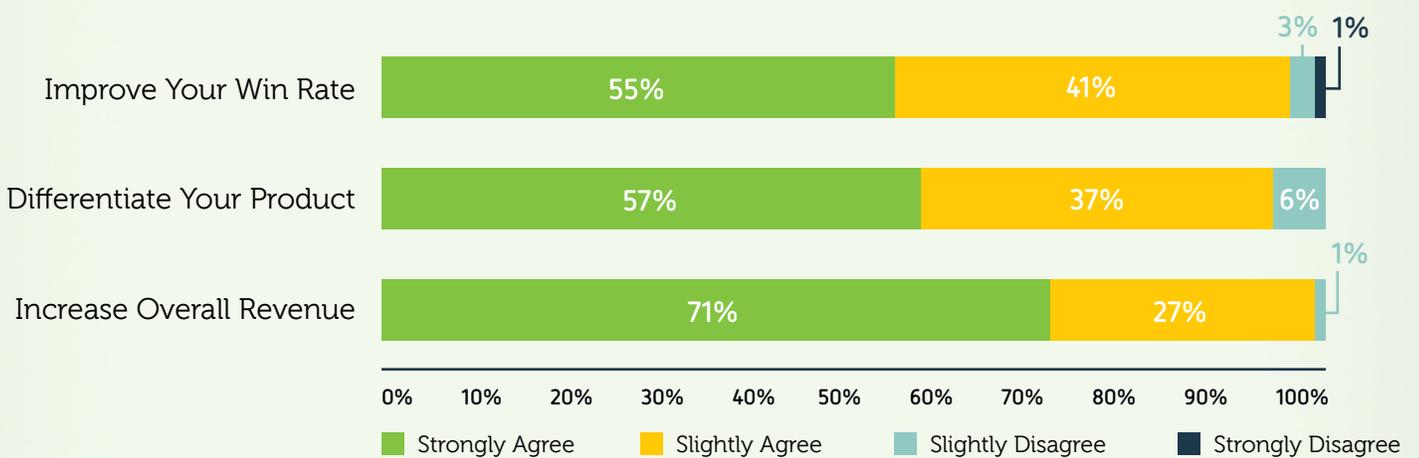
Embedded Analytics Drives Revenue for ISVs

Despite the similarities between ISVs and internal application teams, a few objectives remain exclusive to commercial software companies: driving revenue, differentiating the product, and improving win rates. Embedded analytics helps on all fronts.

We asked ISVs how embedded analytics helped them:

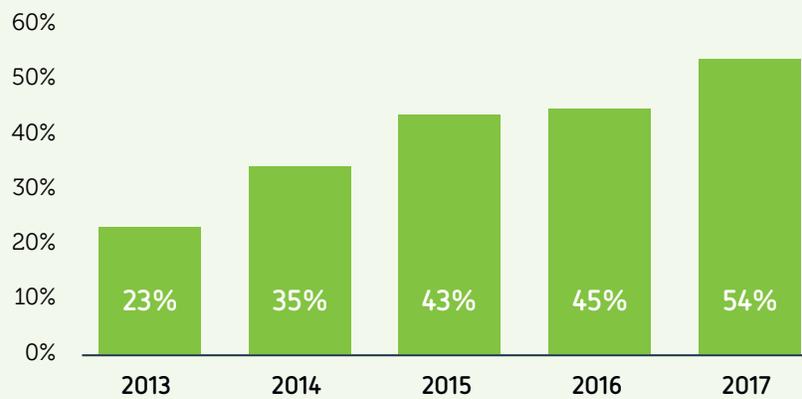
- Improve Win Rate: 55 percent strongly agreed
- Differentiate the Product: 57 percent strongly agreed
- Increase Revenue: 71 percent strongly agreed

DESCRIBE TO WHAT EXTENT EMBEDDED BUSINESS INTELLIGENCE AND ANALYTICS HELPS YOU TO:



What percentage of the overall value of their products would respondents assign to embedded analytics? Respondents estimated the value of embedded analytics at 54 percent—up from 45 percent last year. This growth demonstrates the value that both users and product teams are realizing from embedded analytics. By creating a reliable, consistent, and easy-to-use source of data for professionals across a range of responsibilities and skill sets, companies are increasing the value of their software. Their applications are driving operational efficiencies, enabling better decisions, and serving as a single source of truth for companies.

WHAT PERCENTAGE OF THE OVERALL VALUE OF YOUR PRODUCT WOULD YOU ASSIGN TO BI AND ANALYTICS?



Embedded Analytics Boasts Higher Adoption Than Standalone Tools

User adoption of embedded analytics continues to exceed that of standalone data discovery and self-service analytics solutions. Despite the wide availability of these traditional BI tools, user adoption of self-service analytics has steadily decreased over the past two years. This year's **State of Analytics Adoption Report** found that only 21 percent of business users have access to and actually use self-service analytics tools when they needed them.

While standalone self-service tools have peaked around 25 percent user adoption, the adoption of embedded analytics has increased steadily over the past four years. This year, survey respondents indicated that 60 percent of their application's total user base leverages embedded analytics on a regular basis. That's significantly higher than the 43 percent reported last year and is the highest usage number we've seen since starting this survey in 2013.

"60 percent of application users leverage embedded analytics on a regular basis."

TWEET THIS

COMPARING ADOPTION OF ANALYTICS TOOLS



of end users who have access to standalone self-service solutions actually use those tools on a regular basis

Compared To:



of end users who leverage embedded analytics on a regular basis

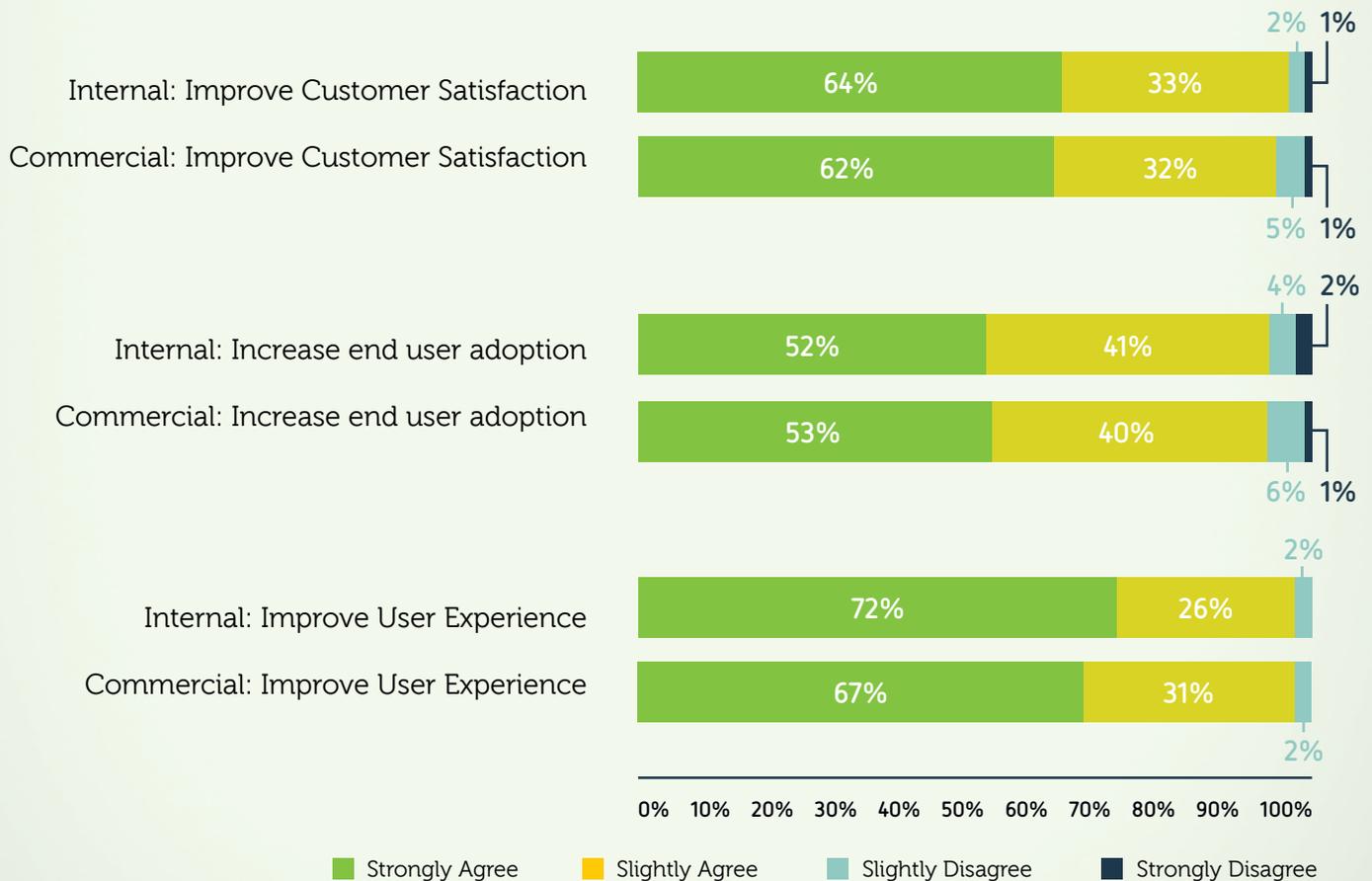
Embedded Analytics Drives Usage and Engagement

The adoption rate for embedded analytics far exceeds that of standalone self-service and data discovery tools. It may be unsurprising, then, that it also increases the usage of applications that have embedded analytics.

User engagement is essential to an application’s success—and it starts with a great user experience. No matter whether a company is providing a commercial application or an application for internal use, the satisfaction of end users (and, likewise, the overall user experience and the end user adoption) are all key metrics.

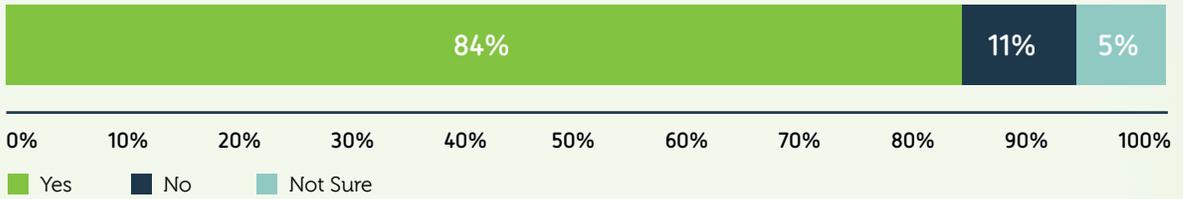
Both groups reported that embedded analytics plays a critical role in moving the needle on all three metrics.

DESCRIBE TO WHAT EXTENT EMBEDDED BUSINESS INTELLIGENCE AND ANALYTICS HELPS YOU TO...



The survey also found that embedded analytics doesn't just increase user adoption and customer satisfaction. It also increases the time spent in an application. Just by adding or improving the embedded analytics in their applications, companies see the time spent in their application increase.

HAVE YOU SEEN AN INCREASE IN THE TIME SPEND IN YOUR APPLICATION SINCE ADDING OR IMPROVING YOUR EMBEDDED ANALYTICS?



Reduced Ad Hoc Requests

When you give people information, it's natural for them to want more. After they get used to the analytics they have, users will inevitably want data visualized in different ways or ask for a different cut of the data.

Standalone self-service tools that support free-form data discovery have tried to solve this problem. But **adoption of those tools is steadily declining**, in part because users dislike switching between applications.

Instead, users tend to send ad hoc requests to application teams to get what they want—which leads to an unnecessary expense of developers' time and resources to keep up with user demands. These time-consuming requests are anathema to updating software on schedule. They take valuable time and resources away from more important matters like improving the company's core IP.

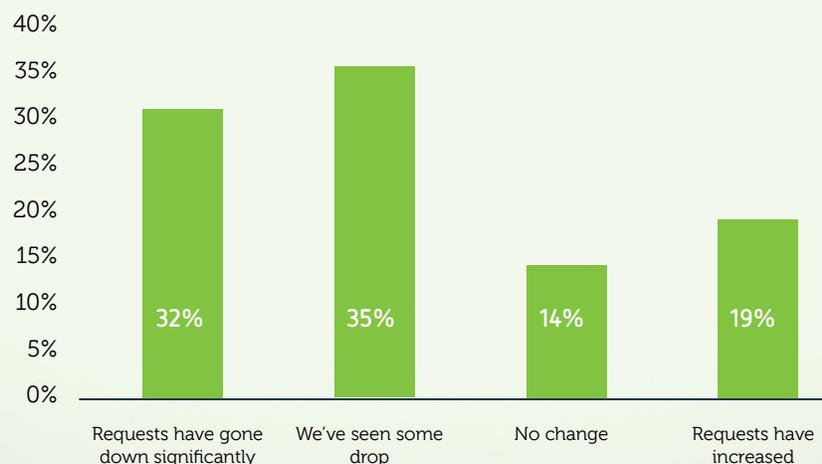
The answer? Take those self-service capabilities and embed them as deeply as possible in the application. End users get what they need, and the development team is left to focus on other priorities.

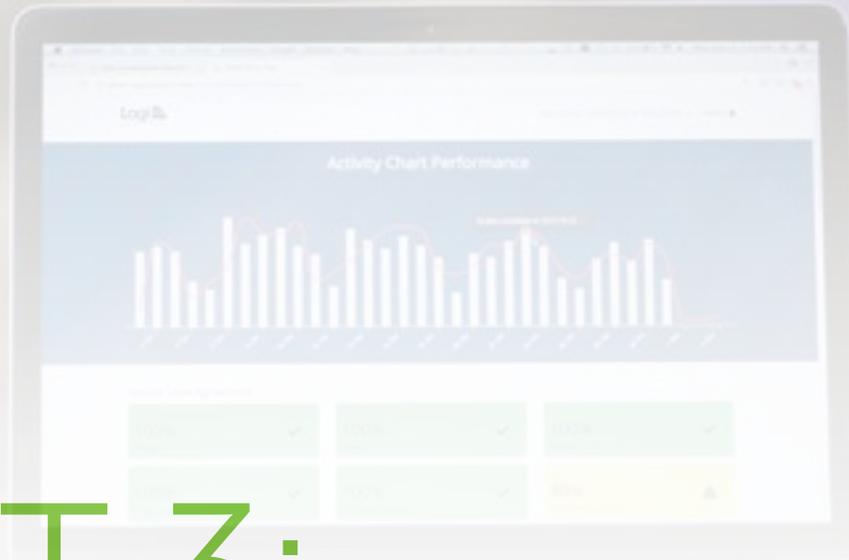
According to respondents, more than 64 percent saw a decrease in ad hoc requests after embedding self-service within their applications.

However, for 19 percent of companies, requests have actually increased. Why might this be the case?

While the survey did not delve into specific reasons, anecdotal evidence suggests that it could be tied to the fact that application owners are not usually self-service UI experts. As application providers offer self-service capabilities to end users, those users begin to expect certain capabilities as they explore data—for example, drilling, filtering, and workflow integration. If the self-service analytics UI has been implemented poorly, it can lead to user frustration—and thus more ad hoc requests.

HAS OFFERING SELF-SERVICE ANALYTICS AFFECTED THE NUMBER OF AD-HOC REPORT AND DATA REQUESTS YOU RECEIVE?





PART 3: HOW EMBEDDED ANALYTICS DRIVES REVENUE

As basic data dashboards and reports become commoditized, companies are increasingly adding new, more sophisticated analytics capabilities to drive value. It's not surprising, then, that the companies embedding the deepest—up to and including embedded self-service—are also more likely to charge a premium for their analytics.

We believe that over time, companies that are either late to the analytics game or anxious to drive future revenue streams will continue enhancing their offerings.

In Part 3 of this report, you'll discover:

- **Most ISVs charge more for analytics.** More than 78 percent of ISVs with a paid commercial application charge more for analytics offerings. For companies that don't charge for analytics, it's often because their competition has a stronghold and they need analytics either to keep up or catch up.
- **The deeper you embed, the more you can charge.** According to respondents, those that embed up to Level 4 of the Analytics Maturity Model—in-app self-service—have the greatest likelihood (84 percent) of charging more for their analytics.
- **Subscription business models are more likely to charge for analytics.** An important factor when deciding whether you can charge more for analytics is your business model. Companies that have a subscription model versus a perpetual one are considerably more likely to charge more for their analytics and realize better ROI for their efforts.

Analytics as a New Revenue Stream

As discussed in the previous section, commercial ISVs report that analytics allowed them to grow revenue. How? Usually simply by charging more for the analytics solutions they embed. In fact, nearly 80 percent of all respondents said they charged more for the analytics in their commercial applications.



Of those that did not charge more, most cited the competition. In a SaaS world where free trials are abundant, contracts are short, and switching costs are low, competition is a major pricing motivator.



Deeper Embedding Means More Chance to Charge Money

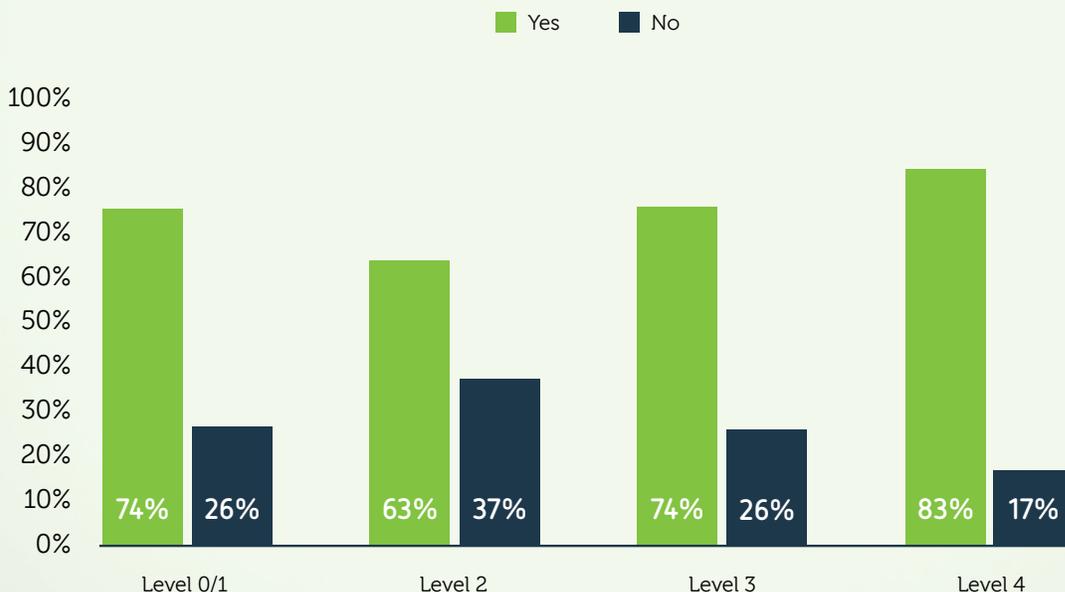
We noticed a curious anomaly in the data: Companies that are embedding analytics in the most basic ways tend to be more likely to charge than companies embedding at more sophisticated levels. Seventy-four percent of those embedding at Level 0 or 1 on the Analytics Maturity Model stated they charge more for their applications.

The most likely reason for this is that these companies had a few big customers who began demanding analytics, which forced them to accommodate the need. For a rapid, cheap deployment, they likely relied on a simple bolt-on analytics model.

This might satisfy the short-term needs for some companies—and may even drive some extra revenue for a while. But as more companies improve their embedded analytics, these bolt-on solutions will look increasingly anachronistic. In fact, of those companies offering analytics at Levels 0, 1, or 2 today, nearly 35 percent plan to embed their analytics at a deeper level in the future.

Outside of this small group, there is clear evidence that the more deeply a company embeds analytics, the greater the likelihood they can charge a premium for those capabilities.

DO YOU CHARGE MORE FOR ANALYTICS BY LEVEL OF EMBEDDING?



Subscription Companies Are More Likely to Charge More for Analytics

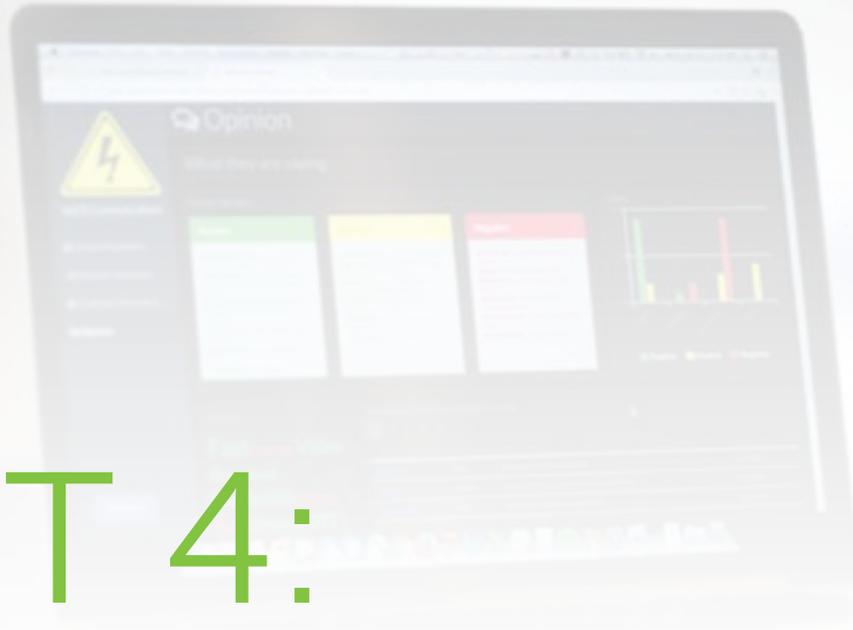
The business model of a software vendor impacts whether that company charges for analytics. Vendors with a subscription business model are 1.4 times more likely to charge for analytics than those with a one-time purchase model.

Why are subscription companies able to charge more for embedded analytics? We see three likely reasons:

- 1. Subscription software buyers are used to tiered offerings.** This allows software vendors to create a base package and add modules that cost more.
- 2. Subscriptions keep upfront costs low.** For companies selling software once, they must charge customers the entire cost of analytics up front instead of streaming it over time. If a product is too expensive and starts driving customers away, the company may simply raise the price and include analytics or keep prices the same and leave analytics out. Subscription companies can earn back that money incrementally over time.
- 3. Iterate more quickly.** Because subscription vendors have an ongoing relationship with customers, they can push out updates at regular intervals, promote new tiers of service, and offer new features regularly. Because the upfront cost is smaller, and since there's an ongoing expectation of new capabilities, it's easier to monetize new features for the entire subscriber base.

DO YOU CHARGE MORE FOR ANALYTICS?





PART 4: IMPLEMENTING EMBEDDED ANALYTICS

When improving the analytics in their applications, one key question companies face is whether to code a solution themselves or buy one they can embed within their software. A third choice is to do both.

This year's survey found that more companies are choosing to build solutions on their own. But we also discovered that those who take the combined approach see the biggest benefits—faster time to market, more sophisticated capabilities, and deeper embedding overall. This section of the report highlights how companies have chosen to tackle embedding analytics.

In Part 4 of this report, you'll discover:

- **It's getting faster to embed analytics.** We see a clear trend that embedding analytics is taking less time than it has in the past. Since 2015, the number of projects that took more than a year to complete has gone down by half.
- **Companies that combine the build and buy approaches yield the best results.** By both building and buying, companies can get to market faster while still customizing the experiences to their application. They're able to embed more deeply than either building or buying alone, and they tend to embed more sophisticated features.
- **Get to market faster.** Generally, respondents noted that relying on third-party tools have allowed them to get to market faster than if they were to code a solution themselves.

Time to Deploy Embedded Analytics Is Down

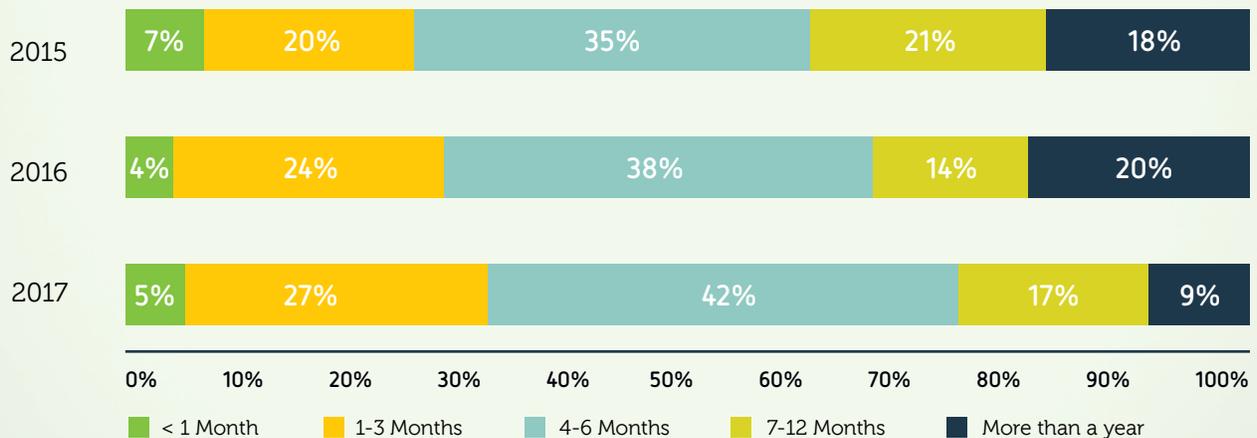
In today’s increasingly competitive software market, companies are significantly reducing the time-to-market required for embedding analytics. In 2015, 39 percent of deployments took more than seven months. Today, that number is down to 26 percent. And the number of deployments taking over a year has been cut in half.

Why is deployment time down?

- 1. Executive Oversight.** As discussed earlier, executives are increasingly driving analytics initiatives. With executive oversight likely comes more resources, more pressure, and tighter deadlines. Companies are expected to launch more mature analytics faster.
- 2. Faster Projects.** While long projects have declined, projects taking between four to six months have steadily grown.
- 3. More Mature Analytics.** Immediate implementation—projects taking less than a month—has declined since 2015. We believe this is the result of application owners recognizing they need more than basic bolt-on solutions.

When evaluating options for embedded analytics, it’s important for companies to think beyond basic visualizations and dashboards. It’s often easier than companies think to embed more sophisticated features that drive higher ROI and increase customer satisfaction.

HOW LONG DID IT TAKE YOU TO ADD BUSINESS INTELLIGENCE AND ANALYTICS TO YOUR APPLICATION?



More Companies Are Building Instead of Buying

Since 2015, the number of companies choosing to either build their own analytics or do a combination of build and buy has increased. Why is this?

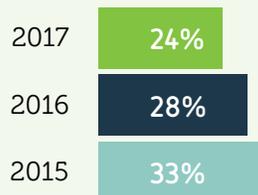
- 1. Control over functionality:** By building embedded analytics themselves, companies can be sure they have total control over the capabilities. They make sure their analytics solutions are unique intellectual property.
- 2. Cost:** Thirty-one percent of respondents indicated that cost was a hurdle when considering third-party analytics solutions. This makes sense, since many options on the market are not designed to scale for the size of embedded audiences, instead focusing on static groups of enterprise users.
- 3. The traditional BI market has failed them:** Most vendors in the BI market aren't focused on higher-level embedded analytics capabilities—giving many companies the impression that these capabilities just don't exist with third-party tools. As application owners saw a dearth of good embedded analytics options, they chose to either go it alone or develop in conjunction with point solutions.

HOW DID YOU ADD ANALYTICS TO YOUR APP

Built **OR** Combination Build and Buy



Buy: Integrated a third-party application or platform



When to Build and When to Buy

Although more of the market is building analytics solutions themselves, most aren't seeing the results they had hoped for. Building takes longer—delaying time to market—and it doesn't allow them to deeply embed the sophisticated capabilities that so many companies need.

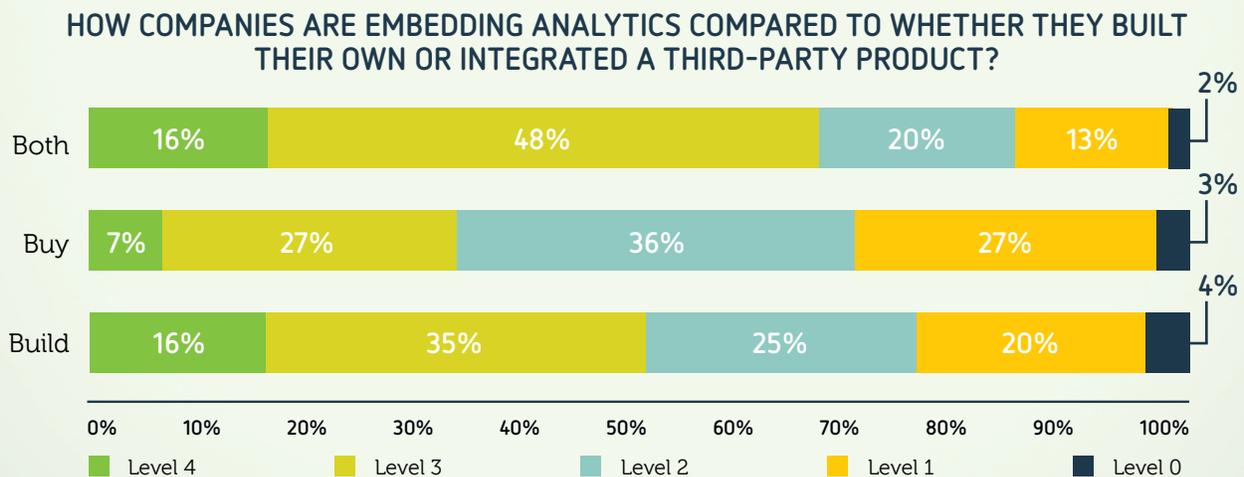
Which implementation approach is best depends on the company's needs.

Build when basic analytics is all you need—if Level 0 or 1 on the Analytics Maturity Model meets your end users' needs. Also consider whether time to market is a key factor. If it isn't, then building should work for your company.

Buy (or take a combined build-and-buy approach) when you want to monetize your analytics or use it for competitive differentiation. If your capability needs are closer to Level 2 or above, it's nearly impossible to get there completely on your own.

Ultimately, a **combined approach yields the best results**. Our survey shows that those who choose to code *and* buy were able to embed the deepest. This stands in contrast to both all-build and all-buy approaches: When companies decided to either build it all on their own or buy a third-party data discovery solution without any coding themselves, they added mostly basic features such as dashboards and visualizations.

A combined approach gives companies the best of both worlds. By coding some elements themselves, they can make it their own and get exactly what they need. And by partnering with an embedded analytics platform that focuses on sophisticated capabilities, companies can get to market faster and more easily manage to keep up with shifting requirements and new, modern trends in analytics.



The Most Valuable Applications Are Developed by Building *and* Buying

Companies that want to drive value through deeply embedded analytics recognize that building on their own is unsustainable. A full 64 percent of companies that relied on a combination of coding and third-party technology embedded at least at Level 3. Comparatively, only 51 percent of companies that coded themselves reached Level 3 or higher on the Analytics Maturity Model, and only 34 percent of those that just bought a solution reached the same level.

Of course, reaching these advanced levels doesn't come instantly. But balancing speed to market—which is crucial for application owners—with the features customers will pay for is essential.

We sought to correlate these factors in this year's survey. As outlined in the prior section, companies that rely on a combination of coding and third-party tools tend to embed deeper. So it's no surprise that this same group also tends to take longer to get to market.

“Companies that rely on a combination of coding and third-party tools are able to embed analytics the deepest.”

 TWEET THIS

Third-Party Solutions Get to Market Faster

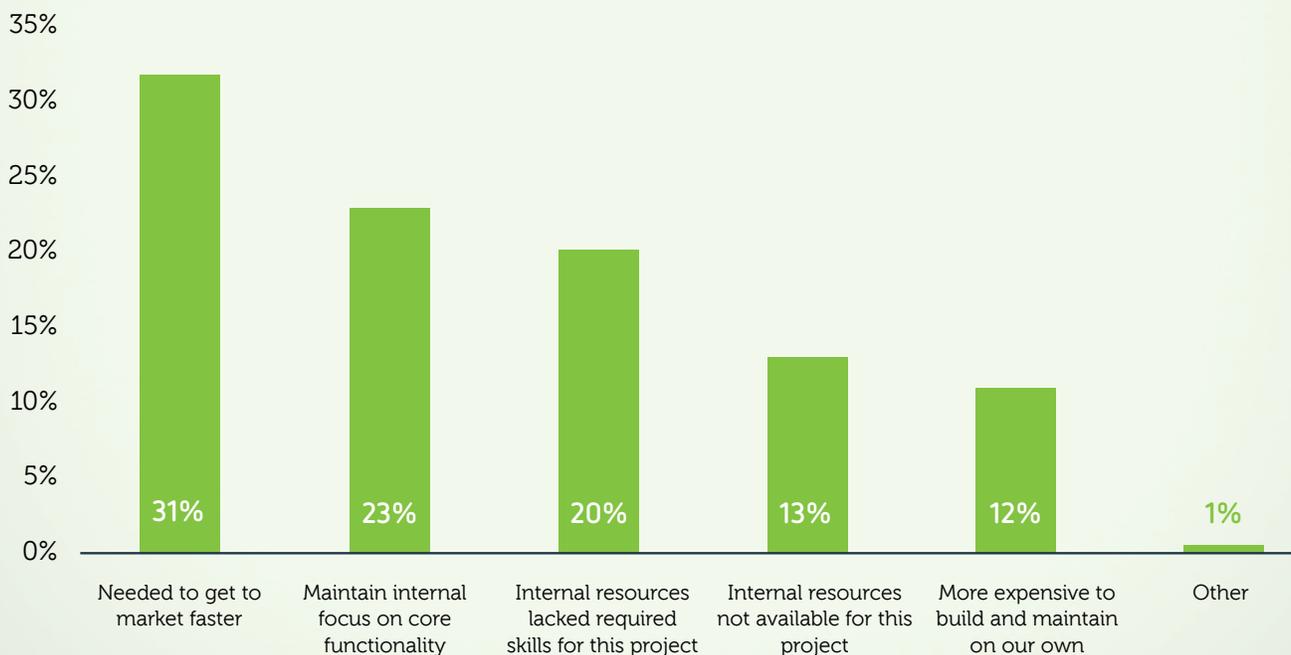
Companies that have relied on third-party tools (either completely or in addition to coding) feel these tools helped them get to market faster.

Benefits of Third-Party Solutions

In addition to potentially getting to market faster, companies that decide to partner with a third-party tool see several benefits:

1. Third parties allow development teams to continue developing the core IP of their primary application instead of constantly iterating and updating the analytics features
2. Third-party tools help address gaps in resources or skills, so companies can offer cutting-edge analytics without needing expertise in the space
3. For companies worried about the long-term costs of maintaining documentation on how they implemented open-source tools, third-party solutions offer a less expensive and more scalable alternative over coding oneself

WHY DID YOU CHOOSE TO INTEGRATE A THIRD-PARTY PRODUCT TO DELIVER BUSINESS INTELLIGENCE AND ANALYTICS CAPABILITIES? (SELECT ALL THAT APPLY)



62%

PART 5: THE FUTURE OF EMBEDDED ANALYTICS

Each year since we started this survey in 2013, we've highlighted the continuous growth of investment in embedded analytics. Over the last three years, the pace of growth has steadily accelerated.

Embedded analytics is no longer just a nice-to-have feature that can be bolted on and still satisfy customers. Instead, analytics must be integrated as part of the application. They need to look, feel, and interact in the same way users already know—and above all, they must evolve as demands change.

To achieve this, companies are investing more in embedded analytics and moving up the Analytics Maturity Model.

In Part 5 of this report, you'll discover:

- **Investment is growing.** More than 90 percent of respondents stated that they plan to invest in embedded analytics going forward, and a subset (72 percent) plan to increase spending in the next year.
- **Companies are still stuck on dashboards.** Even though advanced analytics capabilities are essential to future success, companies remain fixated on dashboards. We believe this is due to BI vendors' inability to provide easy-to-use self-service that can be embedded in applications and allows end users to analyze data on their own.
- **Analytics still exists in many forms.** When asked how they will embed analytics over the next year versus today, most respondents indicated they would invest in adding new, more advanced features. A minority indicated they were not seeing benefits from the features they've already added, so they would likely not support them in the coming year.

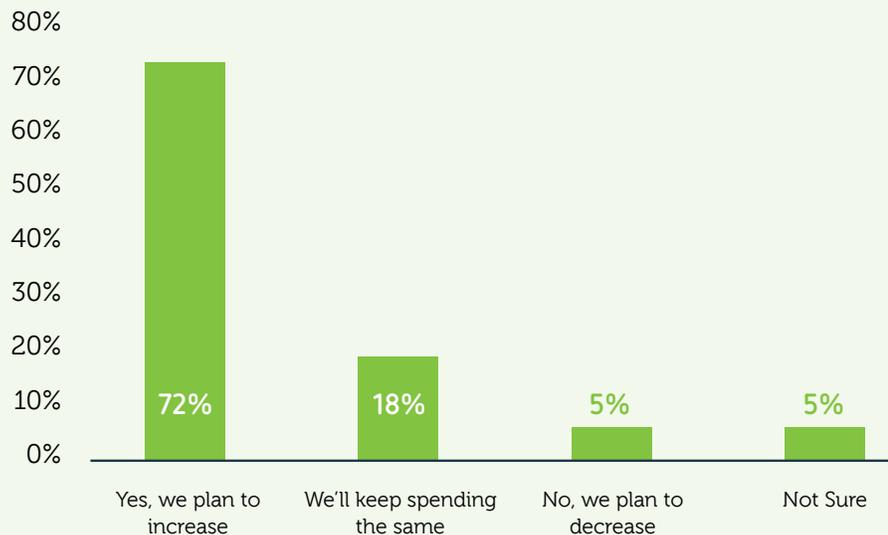
Investment in Embedded Analytics Continues to Grow

Each year, we ask respondents if they plan to continue investing in embedded analytics. Over the last three years, the number of those who said yes has increased from 62 percent in 2015 to 72 percent this year.

Companies are not only continuing their analytics investments, they're actually increasing them. This year we asked if respondents planned to increase spend in the next 12 months. Their resounding response was yes.

Considering most companies still fall at lower levels on the Analytics Maturity Model, this investment will help them mature their offerings and fully monetize their analytics.

ARE YOU PLANNING TO INCREASE YOUR INVESTMENT IN EMBEDDED ANALYTICS IN THE NEXT 12 MONTHS?



Consumption Features Continue to Dominate the Roadmap

When planning their product roadmaps, application teams consider a number of different analytics capabilities. These features break down into three categories.

Consumption

Product owners recognize that they must get the basics right and make data consumption simple and enjoyable. No surprise, then, that table-stakes features such as dashboards remain the most cited for product roadmaps in the next 12 to 18 months. Mobile access and static reports also fall under the baseline requirements that applications must get right to even be in the consideration set for buyers.

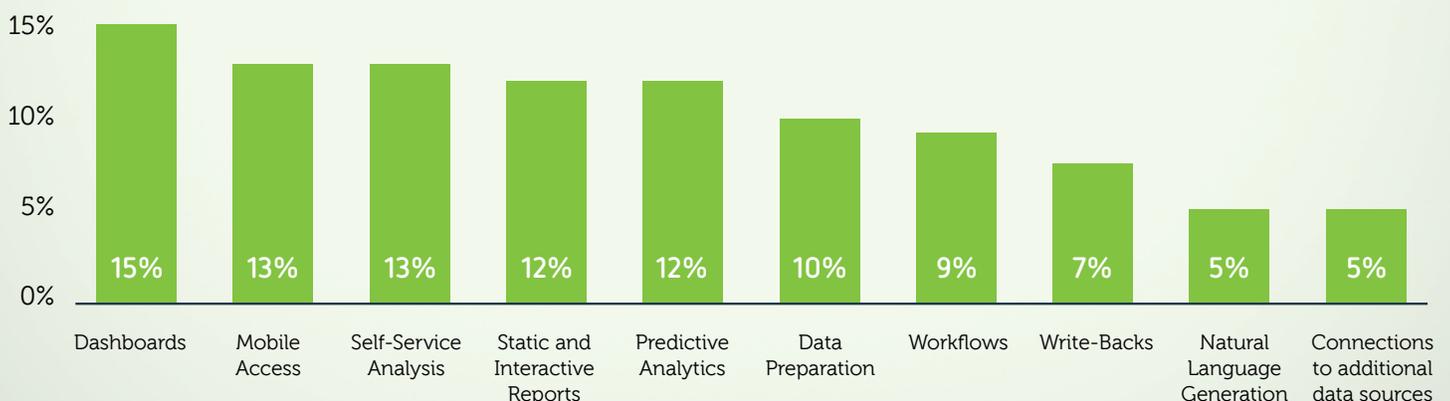
Self-Service

The next feature category focuses on making jobs easier, both for end users and for IT and development teams. As the desire to reduce ad hoc data requests increases—along with user demand for access to do whatever they want with their data, it’s natural that end-user self-service is an important feature in 2017. Data prep is an outgrowth of this by allowing more control to prepare data for user access and control.

Advanced Capabilities

Advanced capabilities rank lower than the two categories above. Product managers are grappling with how they can augment their applications, when customers will want various advanced features, and when they need to implement them. Predictive analytics is a good example of a buzzworthy capability capturing the time and attention of application owners. Other capabilities such as workflow and write-back continue to remain a lower priority as application teams continue to shore up their baseline functionalities. This may not be a surprise, but it is disappointing—considering these are the types of features that can add significant value to an application, improving competitive differentiation and user satisfaction.

**WHICH FEATURES AND FUNCTIONS ARE ON YOUR PRODUCT ROADMAP FOR THE NEXT 12 MONTHS?
(SELECT ALL THAT APPLY)**



Embedding Today and Into the Future

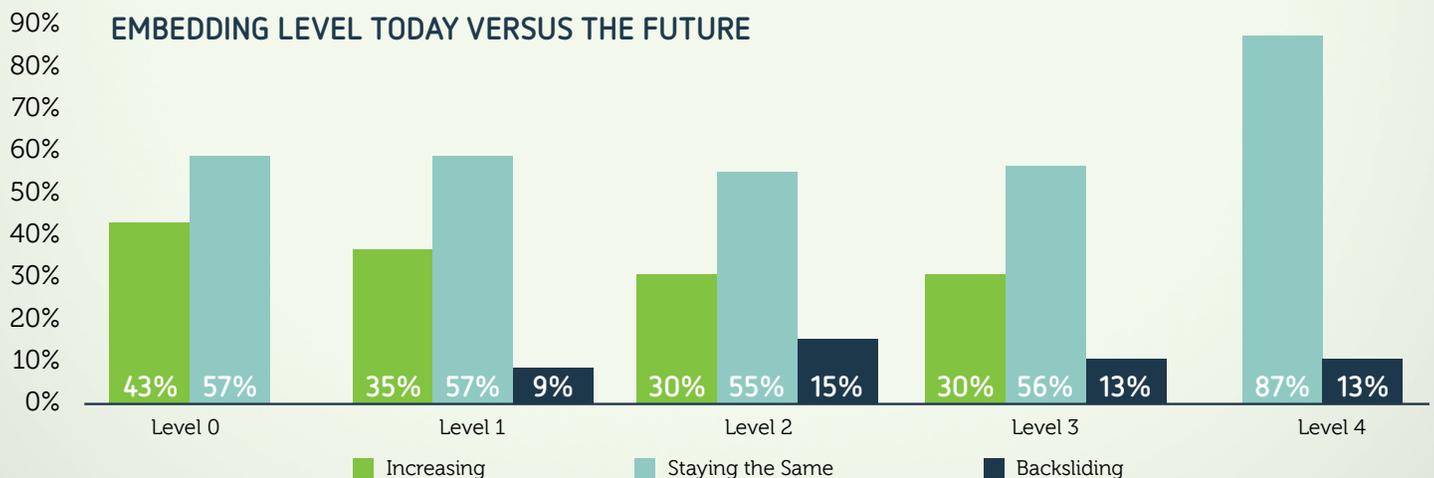
When looking at the spectrum of embedded BI—from basic dashboards and visualizations to sophisticated analytics capabilities—we see more evidence this year than in past years that companies are modernizing their offerings. We asked companies about their current levels of embedding and their intent to either remain at the same level, move across the maturity model, or even eliminate some features.

Most companies intend to add new capabilities and features (other than those at Level 4, where there’s currently no room for advancement). Those at Level 1 have the most interest in advancing to Level 2, which will move analytics inline and co-present dashboards without the need for a new tab or another login.

However, we encourage companies to embed analytics with the future in mind. Levels 1 and 2 may come with some improvements in the user experience, but it’s only a matter of time before end users demand more advanced features. Levels 3 and 4 go a long way toward future-proofing your embedded analytics—and for ISVs, the sophisticated capabilities at these levels are much easier to charge a premium for compared to the capabilities at Level 0, 1, or 2.

Still, while most companies are maturing their analytics, some are backsliding. We see a few possible reasons.

- **Those at Level 1 or 2 failed to see results.** If the primary goal of embedding analytics is to drive revenue, companies that tried to monetize at Level 1 or 2 likely failed. The poor results may have led them to conclude that analytics simply aren’t worth it. So, instead of embedding deeper they chose to abandon their analytics efforts.
- **Those at Level 4 didn’t implement self-service correctly.** As discussed earlier in the report, implementing self-service and implementing self-service well are different things. A poor implementation could lead to more ad hoc requests and fail to yield the benefits an application team is seeking to achieve from their launch.



PREDICTIONS

In 2017, application owners will invest more in analytics than in previous years. This is necessary as they continue to deeply embed analytics within their applications and add more sophisticated capabilities. As these companies move across the Analytics Maturity Model, they'll stave off the competition, drive user engagement, and add new revenue streams.

In addition to this year's findings, we predict several other factors will impact application owners in 2017.

1. Budget will shift from standalone analytics to software with analytics embedded. IT departments have invested in standalone data discovery tools for years. They thought these solutions would lead to higher user adoption of analytics. But according to the [2017 State of Analytics Adoption Report](#), adoption of standalone self-service analytics tools has declined 20 percent over the past two years.

As IT departments realize that adoption of standalone self-service solutions has peaked, they will free up budget and resources for investing in applications that have analytics at their core. This is the perfect opportunity for software vendors seeking to add premium embedded analytics to their products. And by getting to market quickly, they can win some of this newly available budget.

2. Applications without self-service will see ad hoc requests increase. As more applications offer analytics to users, the desire for custom views will accelerate. This fact, coupled with increasing availability of self-service in applications, is making it clear to users that applications are capable of deep, sophisticated data exploration.

If other applications provide self-service, then why doesn't every application? Teams that fail to embed self-service capabilities will see more ad hoc development requests from users for custom visualizations and analysis. As companies spend time and effort keeping up with these requests, they'll find it nearly impossible to iterate on the core product—which will ultimately impact product release dates and ability to compete. The only solution will be to implement self-service.

3. Product owners will struggle to monetize visualizations. Amazon and Google have both released near-free offerings for basic visualizations, accelerating the trend of visualizations as table stakes. As this trend continues, it will drive down the perceived value of visualizations in general—including those embedded within software.

Software vendors will continue to invest in these basic requirements, but will also shift focus to embedding more features and capabilities to set their applications apart. Advanced features include white-labeling embedded analytics, enabling direct data connection to allow for immediate database write-back, and providing embedded self-service tools that allow end users to explore their own data without help. Companies that fail to mature their analytics will begin to see increase in churn and find it difficult to increase their ASP.

ABOUT LOGI ANALYTICS

Logi Analytics aims to solve a fundamental, persistent problem: Most people still don't have the information they need to make better business decisions. Why? Because standalone analytics tools mean switching between one application to another—which wastes time and leads to an inefficient workflow. The best way to deliver information to people is in context of the applications where they already spend their time. Logi Analytics is focused on helping organizations build analytic applications so their users can get the information they need in the context of where they work, empowering them to make decisions and take action immediately.

More than 1,800 customers worldwide rely on Logi. The company is headquartered in McLean, Virginia. Logi Analytics is a privately held, venture-backed firm. For more information, visit LogiAnalytics.com.

APPENDIX

Survey Methodology

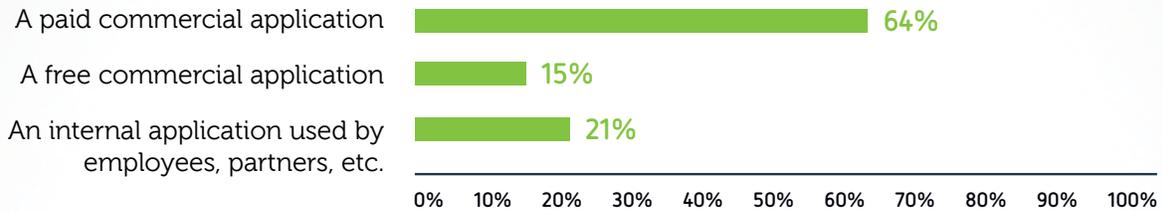
Logi Analytics fielded our 2017 State of Embedded Analytics Survey in January 2017 through an online survey. We received responses from 500 business and technology professionals.

Survey respondents included product management, product development, software engineering, IT, and executives at companies of all different sizes.

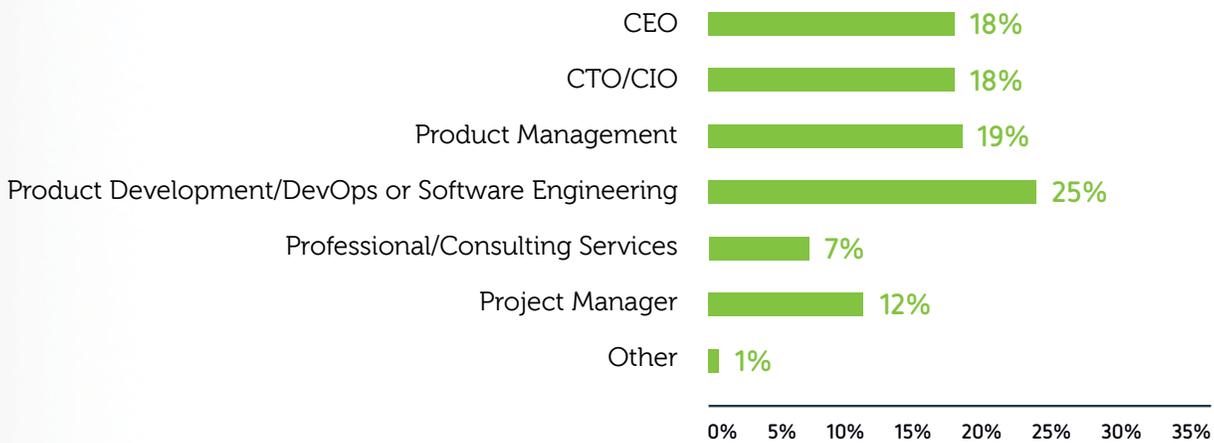
Sixty percent of respondents were from North America, and 37 percent were from the UK. Five percent of respondents identified themselves as customers of Logi Analytics.

To request further information about the design or methodology of this survey-based study, please contact us at info@logianalytics.com.

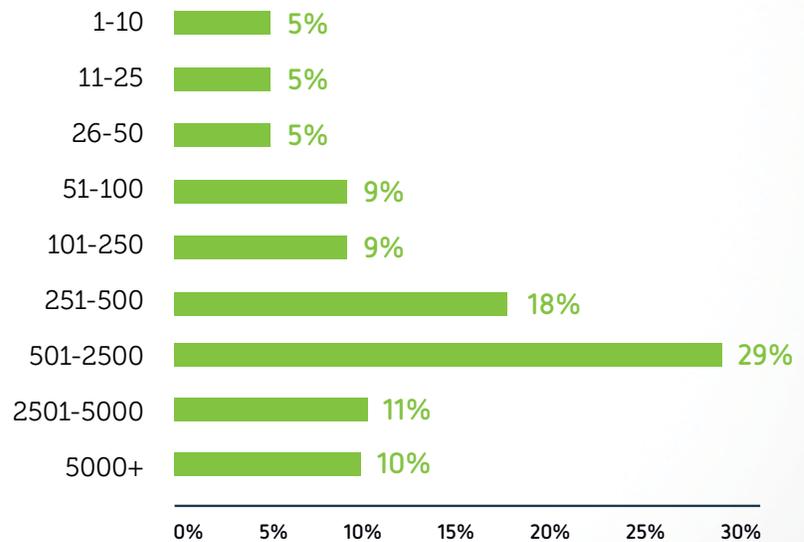
WHICH BEST DESCRIBES THE APPLICATION YOU SPEND MOST OF YOUR TIME ON?



YOUR JOB ROLE



NUMBER OF EMPLOYEES



WHAT INDUSTRY ARE YOU IN/DO YOU SELL INTO?

