



THE 5 LEVELS OF ANALYTICS:

FROM BASIC BUSINESS INTELLIGENCE REQUIREMENTS TO SOPHISTICATED PRODUCT DIFFERENTIATORS

Do the analytic offerings in your application make you stand out from the crowd? See where your offerings fall on the analytics maturity scale—and learn how sophisticated capabilities can differentiate your product.



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User Demands Are Ever-Changing...

Any product manager knows the disruptive nature of innovation – especially application owners competing in the hyper-competitive software market. The market has been thoroughly transformed over the past decade by the transition to mobile, the emergence of the freemium business model, and the move to SaaS.

These trends are most evident in the consumer market. But the business market is following suit, driven by the demands of users who expect every application to mirror their best consumer application experiences. As a result, the new world of software development is increasingly characterized by:

- **Shrinking contracts.** Today, you're lucky if your customers commit to multi-year terms. This shorter renewal cycle means you must keep up with customer demands or risk losing the business.
- **Competition from every direction.** It's easier than ever for companies of any size to jump into the fray with their software. All they need is a website, a free trial, and targeted advertising on Google or Facebook.
- **Relentless pressure for improvement.** Momentum from the consumer market—where some apps are updated every month—is pressuring business apps to significantly improve at least once a year.

...But Analytics Are a Long-Term Differentiator

Analytics are an increasing component of an application's value. Research presented in Logi's [State of Embedded Analytics Report](#) showed that application providers currently assign analytics a relative value of 54 percent of overall product value (up from 45 percent last year).

At Logi, we believe **users will continue demanding deeper, more sophisticated analytics capabilities**. And we've seen application teams capitalizing on this trend to significantly:

- increase customer satisfaction
- differentiate their products and brands
- drive continuous improvements
- drive higher value for their customers

Read on to learn why!

“The real power comes from adoption... Companies must embed analytics in the operating models of real-world processes and day-to-day work flows.”

[Making data analytics work for you—instead of the other way around](#)

McKinsey & Company
December 2016

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Bare-Minimum Analytics Are No Longer Cutting It

While every user may not be demanding “analytics” by name, study after study shows business users want a convenient way to leverage data. According to a [recent report](#), 84 percent of business users say it’s important for them to access analytics embedded within the applications they’re already using.

Unfortunately, many of these users are out of luck. Nearly 67 percent of business users have to switch to separate analytics tools to get the data or analysis they need, whether it’s a fundamental tool like Excel or a separate, complicated solution like Qlik or Birst. This disconnect hinders user adoption. While adoption of embedded analytics has been rising, adoption of standalone self-serve analytics has dropped—down 20 percent over the past two years.

“Many users are befuddled by what to do with an analytics application,” says Anne Moxie, analyst at Nucleus Research. “It can seem like there’s an overwhelming number of possibilities for analysis when going into a standalone, blank-canvas analytics application.”

But business users know exactly what to do when analysis happens in the context of work they’re already doing. **When analytics are integrated into primary applications, adoption happens naturally—often without users even realizing it.** And if embedding is done

really well, the natural human tendency to want more of something good kicks in, driving demand for more sophisticated levels of analytics capabilities.

Of course, every user won't need the same capabilities at the same time. Imagine your end users in cars driving down a road at different speeds. For some users, simple data visualizations and dashboards will meet their needs for miles to come. Others begin with something basic like dashboards and visualizations, but quickly rev up and need more. Still others want sophisticated capabilities under the hood of their apps right from the start. Over time, new users enter the lanes, and current users shift into different lanes at variable speeds.

Ultimately, your users are all moving ahead—and **eventually everyone will want more capabilities than they currently have**. This creates tremendous market momentum. Application teams and software providers have a huge opportunity to fuel this demand by delivering sophisticated, next-level analytics to a diverse set of users in a way that makes analytics a natural part of their everyday work.



“The deeper you embed analytics capabilities into the unique fabric of your application, the more of a differentiator it becomes—and the harder it is for competitors to replicate your success.”

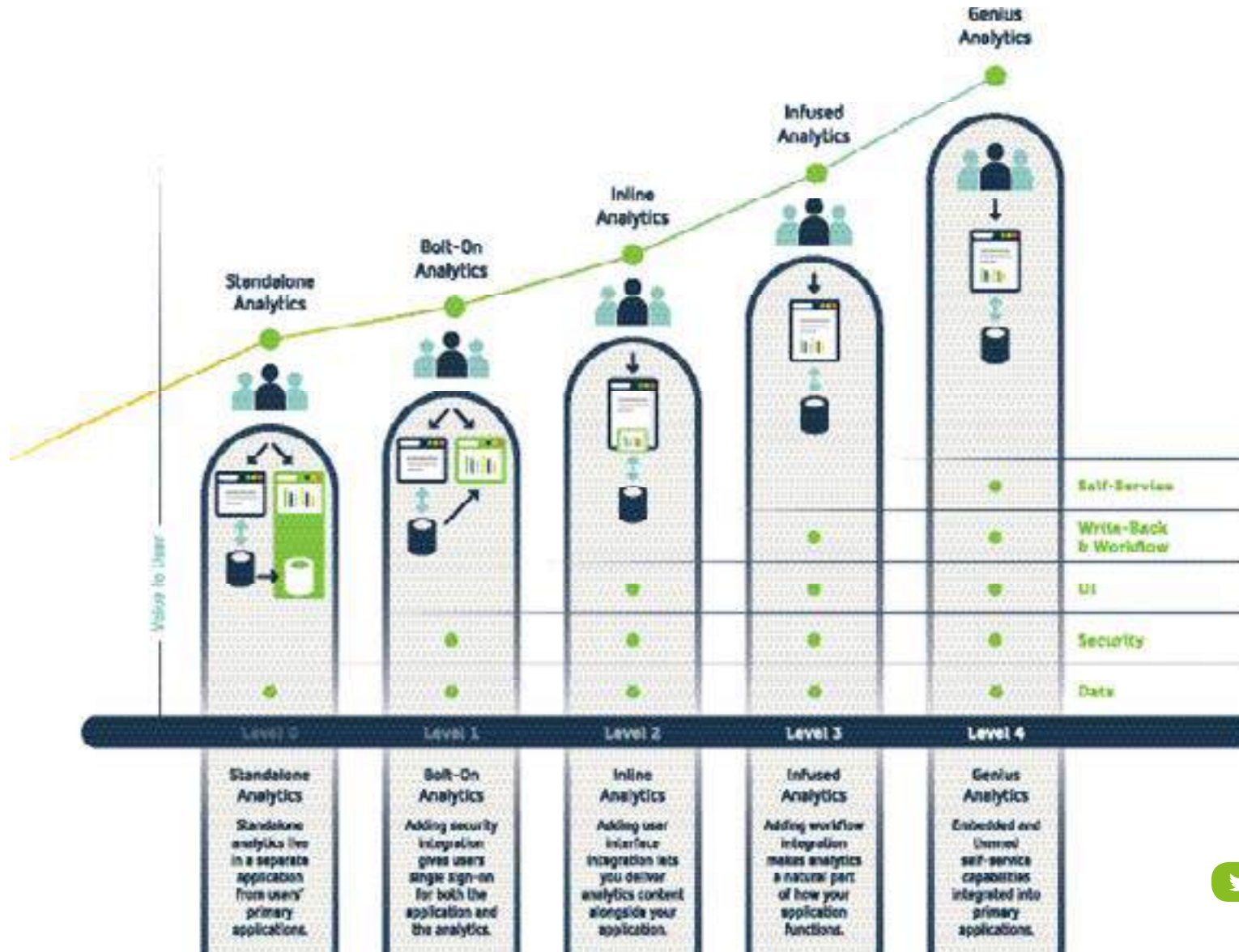
Deeper Embedding Increases Application Value

The best way to make analytics a natural part of everyday work is to embed it seamlessly into business applications. And the more sophisticated capabilities you can weave into the fabric of your application, the higher your user adoption and satisfaction will be.

Logi developed the [Analytics Maturity Model](#) to represent the various analytics implementations we’ve observed in thousands of customer applications. Five to ten years ago, companies began with a simple standalone analytics instance, then gradually tightened the relationship between applications and analytics by adding single sign-on security, co-presentation of content, and eventually workflow integration. Over time, the baseline requirements have shifted to, at a minimum, offering analytics in context of other applications. Increasingly, the ceiling has risen as companies begin providing self-service data exploration capabilities inside primary apps.

Deeper embedding increases the value of your application to users as well as the time they spend in it, which in turn can justify premium pricing. Plus, **the deeper you embed analytics capabilities into the unique fabric of your application, the more of a differentiator it becomes—and the harder it is for competitors to replicate your success.**

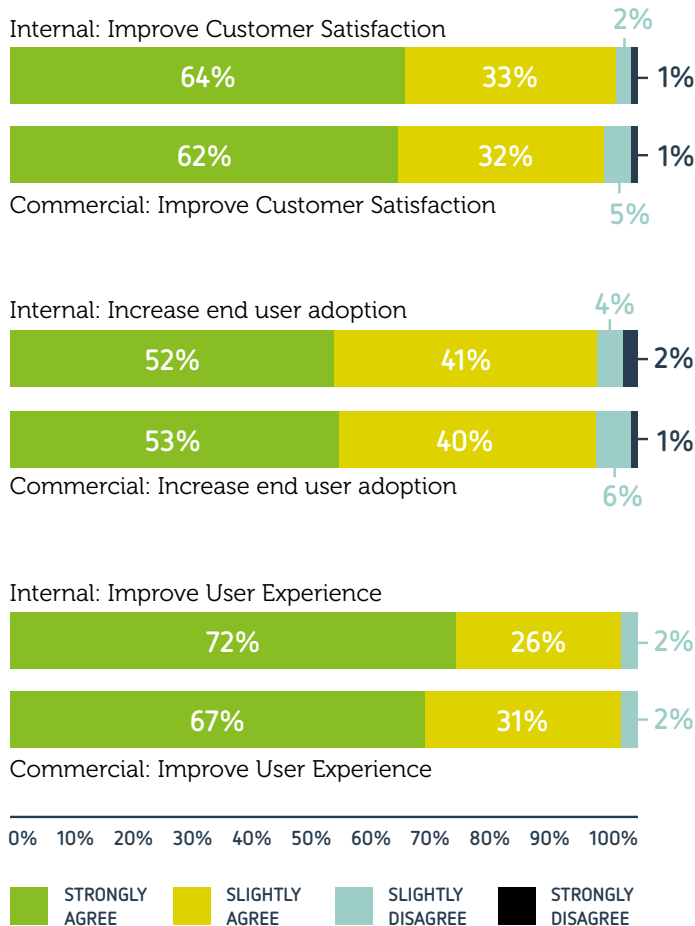
THE 5 LEVELS OF ANALYTICS MATURITY



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

Internal Corporate Applications and Commercial Applications



Deeper Embedding Increases Your Strategic Benefits

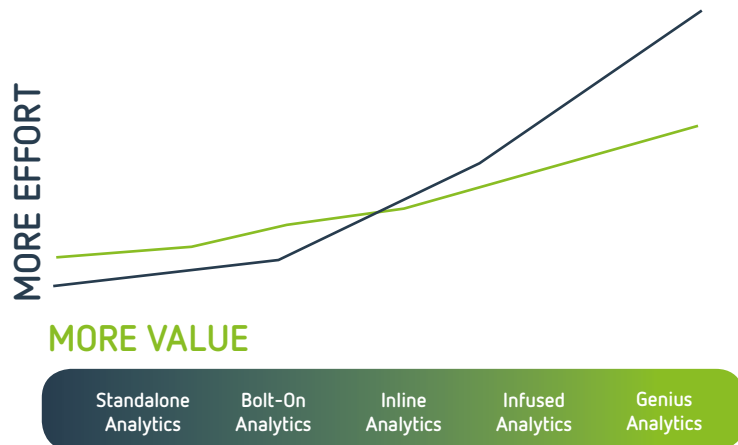
The farther you advance on the Analytics Maturity Model, the more value you'll add to your software application. In the [State of Embedded Analytics Report](#), 98 percent of respondents said embedded analytics contributed to revenue growth. An additional 82 percent said time spent in their application increased after embedding analytics.

Similarly, more than 93 percent of IT application providers credited embedded analytics with improving user experience and increasing end user adoption. And 98 percent said it helped improve customer satisfaction.

What really got interesting, however, was seeing how strongly respondents felt about these strategic benefits of embedded analytics as they moved across the [Analytics Maturity Model](#). We found that, as the capabilities advanced from Level 0 to Level 3, the estimated values climb steadily as well. We don't have data yet for Level 4, but you can see where this is going...

Some embedding solutions make it easy to provide loosely entwined basic capabilities, but it gets tougher when you want to go further

Choose an extensible solution that lets you satisfy the full range of expanding user expectations with manageable, predictable increments of effort



For More Opportunity, Move Across the Value Scale

While not every application requires, or is even appropriate for, deep embedding, we believe the biggest opportunities for application providers over the next several years will be found at Levels 3 and 4 of the Analytics Maturity Model.

To an increasing degree, embedded analytics will need to interact with existing workflows, spur thinking, and erase the barriers between a user asking a question, evaluating results, and taking action. The ISVs, SaaS providers, and IT developers that can offer these sophisticated capabilities within their existing software apps will see more business value than those who stick with standalone analytics tools.

Meeting customer demands and offering more sophisticated analytics capabilities depends in large part on the solution you choose. Some analytics partners make it easy to reach Levels 0, 1 and 2—but when you want to take your solution further, you’ll have to substantially increase the amount of resources and effort to get there. More forward-thinking embedded analytics platforms make it easy to add sophisticated capabilities and enhance your offerings with minimal incremental development effort.

Ultimately, we've seen deeper embedding open the door for applications that operationalize and mainstream advanced analytics, and expand self-service data discovery to include every user. And that's a very big opportunity indeed.

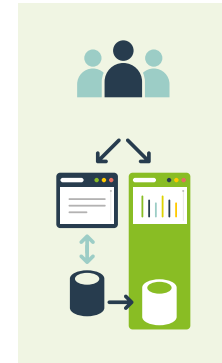
Now, let's take a closer look at the five levels of embedded analytics—each increasing the value you can bring to your customers.

LEVELS 0 and 1: Companion and Bolt-On Analytics

Commoditized. High-friction user experience. May be a good place to beta test.

The number of companies offering apps with embedded analytics at these basic levels is at 23 percent this year.

- At Level 0, **Standalone Analytics**, the primary application shares data with a standalone analytics application. End users have to switch to the standalone solution to analyze their data.
- At Level 1, **Bolt-On Analytics**, the addition of security integration provides single sign-on functionality. However, users still have to toggle from one application to another.



This dashboard is bolted on to the website.
You have to click to see the dashboard in full.

Click on the image and you'll jump into a separate site and
separate application to interact with the dashboard.

“Jumping back and forth between applications is not only irritating, it’s inefficient.”

Either way, it’s a poor user experience. **Jumping back and forth between applications is not only irritating, it’s inefficient.** According to [Nucleus Research](#), it can waste up to two hours of an employee’s time per week.

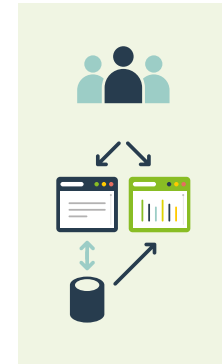
While there’s little or no opportunity for competitive differentiation at these levels, you may find Levels 1 and 2 helpful for beta testing. Trying out loosely coupled analytics can help you determine the types of data analysis your users need as you wireframe how to seamlessly add analytics to your application.

To some extent, you may also be able to test how people adopt and use these analytics—but be cautious if you decide to do this. When analytics are presented separate from primary applications, user behavior may not reflect how they would actually work with fully embedded capabilities. Earlier we mentioned this observation from Anne Moxie of Nucleus Research: Users can become overwhelmed by the possibilities of a “blank-canvas analytics application,” which can skew adoption and usage results. So if you’re going to test at these levels, do everything you can to encourage usage of the standalone analytics solutions. Provide explicit guidance to help users understand the practical relevancy of the analytics to tasks they’re currently performing with your application.

LEVEL 2: Inline Analytics

This year's table stakes—but not for much longer

The number of companies offering applications with embedded analytics at this level shrunk from 53 percent to 27 percent over the past year—in part because the number of companies embedding at more advanced levels has increased. These trends indicate that companies are realizing they must enhance their bolted-on or companion applications to meet changing consumer preferences.



- At Level 2, **Inline Analytics**, the addition of user interface integration allows co-presentation of analytics content and functions with primary application content and functions. Companies embedding analytics at this level can offer business intelligence in context of an existing application—although they still have some limitations.



This embedded dashboard appears alongside the application. You can still access the rest of the application's interface in the menu on the left-hand side.

“Delivering analytics where users are already working keeps them in your application throughout their work process and improves task efficiency.”

While the primary application and analytics solution still function separately with inline analytics, users are likely unaware of it. Reports, dashboards, and data discovery tools are co-presented alongside the primary application. Delivering analytics where users are already working keeps them in your application throughout their work process and improves task efficiency.

Companies have minimal opportunities here for competitive differentiation and increased pricing. Logi’s [State of Embedded Analytics Adoption Report](#) showed that 98 percent of companies say embedded analytics has helped them increase revenue. In our experience, we see revenue opportunities increase as the depth of embedding and sophistication of capabilities improves.

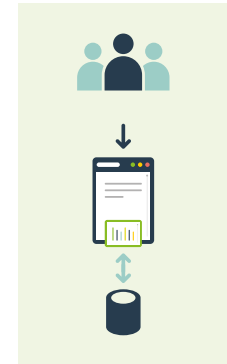
While many applications have inline analytics, their co-presentation is inconsistent. Best practices include white labeling and custom styling that make the analytics look and feel like the application, maintaining your brand identity while improving customer satisfaction through a consistent UI/UX.

LEVEL 3: Infused Analytics

The bare minimum for highly competitive industries.

The number of companies offering applications with embedded analytics at this level rose from 31 percent to 37 percent over the past year.

- At Level 3, **Infused Analytics**, the addition of workflow integration allows functional interactions between analytics and the primary application.



As dashboards are integrated into end users' preferred tools, analytics appear in context and have a consistent look and feel as the rest of the application.

“Analytics will become so ubiquitous, we won’t even notice it. From a business perspective, it’s going to transform entire industries.”

Goutham Belliappa
Big Data and Analytics practice
leader, Capgemini North America
Speaking to [InformationWeek](#),
December 2016

At this level, the primary application and analytic application aren’t just co-presenting, they’re talking to each other. Essentially, they’re one application with seamless communication throughout. This tight integration creates a more unified and immersive experience for users.

When users spot a data anomaly that requires intervention, they can kick off a workflow right then and there. For example, a sales manager can analyze performance by territory, identify a poor performer, and change sales team assignments on the same screen. An insurance manager can compare a claim against similar claims within the approval workflow. A nurse on a hospital floor can review a patient’s history while updating records with new information then and there.

Such capabilities make analytics a core part of the application, reduce wasted time, and minimize human error. **Actions are logically linked to information. Knowing flows naturally into doing.**

By embedding analytics at this level, companies have significant opportunities for competitive differentiation and increased revenue, since they can infuse analytics in ways that enhance the unique functionality of their applications. Get ahead of the pack by incorporating custom data analysis techniques into your background processes along with in-context frontends that make them simple to understand and use. Research shows that **when analytics are so deeply infused that they essentially disappear into an application, they increase the value of that application and drive adoption of not only analytics, but also the product overall.**

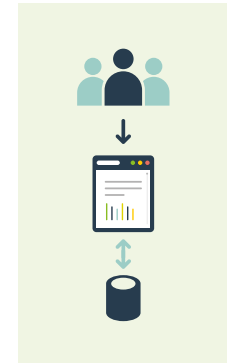
LEVEL 4: Genius Analytics

Competitive differentiator for years to come.

The number of companies offering applications with this level of embedded analytics is currently around 15 percent. At least twice as many companies have plans to advance to Level 4 in the near future.

- At Level 4, **Genius Analytic Applications**, the addition of embedded self-service analytics (including data discovery tools) supports unanticipated use cases within a managed, seamless environment.

At this level, the user experience is liberating and empowering. Data analysis becomes integral to not only how people work, but how they think. Efficiency improves and so does decision making. In essence, **companies are creating custom apps for every user—without the heavy lifting that implies.**



Embedding self-service capabilities empowers end users to customize their data views, add new data, and share information with colleagues.

“Across industries, less than half of the potential improvements from analytics have been realized so far.”

Harvard Business Review
December 2016

With embedded self-service capabilities, users can ask new questions of the data as ideas occur to them. With their business expertise, they come up with ways to leverage information that no software engineer could anticipate. There’s also the immediacy effect: Answers and insights delivered at the point of thought can accelerate problem

solving and spur innovation. (So make sure your embedding solution supports really fast analytic processing.)

Companies have many opportunities here for competitive differentiation—their applications can deliver unprecedented business value. Recently, [Harvard Business Review](#) pointed out that across industries, less than half of the potential improvements from analytics have been realized so far.¹ Your applications can help your customers go the rest of the way.

Because Genius applications augment the current workflows and thought processes of employees, they can be game changers for workforce performance and operational effectiveness. As a recent [article in the McKinsey Quarterly](#) pointed out, “The impact of ‘big data’ analytics is often manifested by thousands—or more—of incrementally small improvements...If an organization can systematically combine small improvements across bigger, multiple processes, the payoff can be exponential.”²

1 [“Most Industries Are Nowhere Close to Realizing the Potential of Analytics,”](#)
hbr.org blog, Dec 2016

2 [“Making data analytics work for you—instead of the other way around,”](#)
McKinsey & Company, Dec 2016



About Logi Analytics

Logi helps companies embed analytics into the fabric of their organization and products. With Logi, companies can create genius analytic applications that are purpose-built to users' unique roles and skills, and delivered in the apps they already rely on – enabling anyone to analyze data when and where they need it.

More than 1,800 customers worldwide rely on Logi Analytics. The company is headquartered in McLean, Virginia.

Learn more at LogiAnalytics.com.

See how deeper embedding of analytics can help you develop more competitive applications:

Watch a free [demo of Logi Analytics](#).