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I’ve been noticing some fascinating trends in business intelligence and analytics lately.

First is that self-service BI, while still strong, is no longer at the forefront of the analytics world. Embedded BI—which integrates analytic content and capabilities within business applications and portals—is currently the fastest growing area in business intelligence. And after relishing in the self-service BI revolution for the past few years, businesses now have a renewed appreciation for traditional reporting.

The Logi Analytics State of Analytics Adoption Report confirms many of these trends, and also reveals some new information. The survey showed, somewhat unexpectedly, that adoption of self-service BI tools is slightly declining. It indicates that self-service BI has peaked and is now in a two-year adoption decline. Despite increased access to modern self-service BI tools, over 83 percent of business users who responded to the survey expressed a strong desire to stay in one application instead of switching to a standalone analytics app.

No surprise, then, that bringing analytics to the app—right when and where a decision is needed—via embedded BI is the area with the most market growth. That trend reflects the same digital transformation and “smart app” preference seen in the artificial intelligence space.

During the peak of self-service BI adoption in 2014, I wrote a controversial article about the BI industry’s midlife crisis, and predicted that business affection for traditional BI would inevitably return. In reviewing the responses to this year’s survey, we now see this shift to a more governed approach starting to happen.

Aside from human resistance to change, business users who don’t analyze data for a living are not likely to be interested in it—nor have the time to learn how to do so. I never believed everyone would embrace self-service analytics. Especially if they did not look at analytics built by others.

Historically, we have seen adoption rates up to 40 percent at best, with the use of mobile push delivery in traditional BI. Although self-service BI solutions have become simpler to use, I still see the same data-savvy power users that I saw ten years ago using them. They’re just enjoying more innovative tools.
Most business users I know still love Excel, and this latest survey confirms Excel is still extremely popular. With both business and technical personas listing Excel export in the top four most-wanted features from analytics tools, we can safely say self-service BI tools are not replacing the unique value of Excel.

Another intriguing finding this year points to consolidation in the niche self-service BI market. Market pressure on niche players has already been evident with privatization activities and massive stock price declines. Both self-service BI growth and adoption rates are waning. The market is also seeing intensified competition for the remaining 33 percent of organizations that have not yet adopted these solutions. In the meantime, more analytic capabilities are being embedded directly into apps, ultimately reducing self-service BI needs. It is time for niche vendors to expand offerings to remain relevant or be acquired by a bigger fish.

On a brighter note, this year we saw an increase in access to modern analytics tools for everyone. Changing human behavior is the fundamental challenge to conquer. Thus embedding analytics into the apps the business already uses might just be the magical BI adoption formula for truly becoming a data-driven organization.

Thank you, Logi Analytics, for conducting this enlightening research on current industry trends.

“EMBEDDING ANALYTICS INTO THE APPS THE BUSINESS ALREADY USES MIGHT JUST BE THE MAGICAL BI ADOPTION FORMULA.”

JEN UNDERWOOD
Founder and Principal Consultant, Impact Analytix
The annual State of Analytics Adoption Report by Logi Analytics provides insights for executives, product managers, and technology leaders on how broadly and deeply users are adopting business intelligence and analytics tools.

Survey respondents included members of IT teams who provide analytics tools to end users, as well as the end users of BI and analytics tools. The majority (65 percent) of respondents were from North America, with 28 percent from the United Kingdom.

Respondents’ roles were primarily department managers (24 percent) and individual contributors (30 percent), with 16 percent identifying themselves as executives, 6 percent as corporate analysts, and 25 percent as “other.” A variety of industries were represented, including technology, education, healthcare, retail, and manufacturing.

For more information, contact us at Info@LogiAnalytics.com.
TODAY’S ANALYTICS TOOLS ARE FALLING FLAT

For years, the analytics industry has focused on self-service as a total market solution. Self-service is so pervasive that over 67 percent of IT respondents today said they are already providing or have started to provide these solutions to their end users.

In fact, according to the business users themselves, their access to self-service analytics tools is higher than ever – up 21 percent this year from the past two years.

But adoption of these tools has not only failed to grow, it has actually declined. Despite the wider availability of analytics tools, user adoption is down 20 percent from the past two years.

Data discovery vendors have spent millions to reduce end-user friction. Even so, adoption continues to decline. The people who demanded and benefit from data discovery have already adopted these solutions. Now, remaining end users are rejecting these analytics tools—even though they still need analytics to effectively do their jobs. Why?

We see a key trend at play here: Usage of self-service solutions (also known as data discovery tools) has peaked. The broader market either does not see the value these tools offer or has tried them and disliked them—in large part because users don’t like being forced to open stand-alone applications to analyze their data. It inhibits their ability to readily see strategic business insights, which is why more and more knowledge workers are actively stopping use of these solutions.

THE SOLUTION: EMBEDDED ANALYTICS

What exactly do business users want from their analytics tools? Let’s start by looking at the top user complaints about existing BI solutions:

› Users find them difficult to use
› They don’t like switching over from their usual applications to separate analytics tools
› They don’t have easy access to analytics tools in their daily workflows

Embedded analytics endeavors to fix these pains by putting analytics where users are already working. The goal is to empower people to make informed decisions in the context of information they see every day.
Business intelligence and analytics solutions can be provided to end users in a variety of ways. The three most common instances of analytics are traditional BI, which consists of legacy standalone analytics solutions that support static, repetitive reporting tasks; self-service BI or data-discovery tools, which are standalone systems that enable end users to analyze data without relying on IT; and embedded analytics, in which BI content and capabilities are integrated within business process applications or portals.

In this year’s survey, we asked respondents which style of analytics their company has, and to what degree they’ve implemented that BI type.
TRADITIONAL BI STILL HAS ITS PLACE

The majority of IT respondents (66 percent) say their organizations have begun to implement or have already implemented traditional BI – legacy standalone solutions that are best suited for static, repetitive reporting tasks. Since traditional BI is by far the most mature area of the industry – going back to the 1990s with ETL software – this high adoption rate is unsurprising.

Only 7 percent of IT teams today have never considered traditional BI.
THE STATE OF ANALYTICS TODAY

AVAILABILITY OF SELF-SERVICE & DATA DISCOVERY TOOLS HOLDING STRONG

Self-service and data discovery solutions enable users to analyze data without relying on IT. Availability of these tools has been growing for years, and today, 67 percent of IT teams say their organizations have started to implement or have already implemented self-service BI solutions.

While self-service has been a growing area of BI, we see in this report that these solutions have reached their peak. Although the vendor battle continues to rage for the 33 percent of organizations that have not yet adopted self-service, it may not really matter. The low adoption rates we see in this survey indicate that moving away from self-service tools may be more prudent.

If these trend lines continue, we may see more BI vendors asking themselves new questions: Of the customers that currently have self-service and data discovery tools, how likely are they to migrate to a better solution? Where are the gaps in the self-service tools currently on the market? What else can BI vendors offer to differentiate themselves and find more growth opportunities?

EMBEDDED ANALYTICS KEEPS GAINING SPEED

Embedded analytics means integrating BI content and capabilities within the business applications and portals that people are already using. This is the fastest-growing area of BI. Over 66 percent of IT teams are already using embedded analytics in their organizations – and nearly 30 percent are considering it.

Why? Most likely, organizations are seeing the value of including analytics in the apps people are using on a daily basis – in effect, delivering analytics when and where users need it to make decisions. This is an exciting revenue opportunity for independent software vendors (ISVs), as organizations will now rely on multiple solutions embedded in various platforms, instead of a single standalone solution.

Business users want to stay in one place, not jump from application to application to get what they need. But so many analytics tools fail to meet this need – which may be why low user adoption is an issue, as we’ll see next.
Access to BI tools of all types is generally up. In particular, the number of self-service BI tools is higher than ever. But despite the increase in organizations offering self-service analytics solutions, both IT respondents and end users reported low user adoption of these tools for the third year in a row.

In this section, we’ll review how adoption of analytics has fluctuated over the years and explore how perceptions differ between IT and end users.
HOW MANY USERS ARE ADOPTING ANALYTICS TOOLS TODAY?

If you ask IT, they say that 53 percent of their organization’s end users have access to self-service analytics without having to make a special request to IT. This is close to what end users report: Nearly half (47 percent) of users agree that they have access to self-service BI tools.

We also asked both groups this question: Out of those users who have access to self-service tools, how many actually use those tools when they need them? IT estimates that 52 percent of end users actually use the self-service tools they’re provided. End users had a slightly lower estimate, with 45 percent of them saying they use self-service analytics when needed.

We’re happy to see there is only a seven percent discrepancy between IT’s and end users’ perceptions of how self-service tools are used. However, any gap could be risky: If IT overestimates usage, they may think business users are satisfied with the solutions they have—when in fact, users may crave something better.
PART 2: USER ADOPTION OF ANALYTICS IS STEADILY DECLINING

ADOPTION OF SELF-SERVICE ANALYTICS OVER THE YEARS

When we compare these stats to previous years, this trend of stagnating adoption rates becomes even more evident. Over the past three years, both IT and end users agree that access to self-service tools has steadily increased. In fact, end users say access is 21 percent higher than in 2014. But adoption of these tools is way down – 20 percent lower than two years ago.

While IT agrees that access to self-service solutions has increased, they describe user adoption as steadier over the past three years than end users have reported.

Looked at in aggregate, end users report that only 21 percent of their departments both have access to and use self-service analytics tools.

ADOPTION OF SELF-SERVICE ANALYTICS DOWN 20%

What percentage of your department has access to self-service analytics tools?

Out of those who have access to self-service analytics tools, how many actually use these tools?
PART 2: USER ADOPTION OF ANALYTICS IS IN A THREE-YEAR DECLINE

ANOTHER DISCREPANCY: ACCESS THROUGH THE EYES OF IT VS. END USERS

You may notice that the level of access to self-service tools we see here doesn’t jibe with what we saw in Part 1. As you may recall, sixty-eight percent of IT respondents said they’re providing their organizations with self-service BI tools.

But if that’s true, then why are only 47 percent of end users saying they have access to BI on their own? Is there a problem with awareness among end users? Do they even know these tools are available to them?

In today’s data-driven world, there’s no excuse for so many business users thinking they don’t have access to the tools they need to do their jobs effectively. The systemic challenges of standalone self-service tools – especially the fact that IT has to consistently educate users on them, deploy them, and maintain them – hinder user awareness and adoption of analytics.
Despite the industry’s increased focus on providing users with self-service analytics, the adoption numbers that once held steady have started to dip. The question we’ve been waiting to answer is: why?

As mentioned earlier, we’ve hit the maximum level of user adoption for self-service BI tools. We’ll explore some of the reasons behind the decline in this section.
Years ago, self-service seemed like the perfect solution: It allowed users to access information without the help of over-burdened IT teams. But today, both IT and the tools have caught up.

While this approach to BI – which usually relies on analytics tools that are separate from the applications people are already using – may be fine for some users, it is no longer cutting it for the broader user base. The self-service solutions foisted on the market simply aren’t doing the job for a variety of reasons which we’ll explore here.

**THE BIGGEST CHALLENGES WITH ANALYTICS TOOLS**

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<thead>
<tr>
<th>Challenge</th>
<th>IT</th>
<th>USERS</th>
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<tbody>
<tr>
<td>It’s expensive to maintain.</td>
<td>21%</td>
<td>15%</td>
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<tr>
<td>People don’t like switching over from their usual applications to a separate analytics tool.</td>
<td>17%</td>
<td>17%</td>
</tr>
<tr>
<td>Users find it too difficult to use.</td>
<td>17%</td>
<td>19%</td>
</tr>
<tr>
<td>Everything is disjointed because different teams are using different solutions.</td>
<td>13%</td>
<td>13%</td>
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<tr>
<td>Users don’t have easy access to the tools in their daily workflows.</td>
<td>12%</td>
<td>12%</td>
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<tr>
<td>Important information is missing from it.</td>
<td>10%</td>
<td>5%</td>
</tr>
<tr>
<td>It doesn’t bring in data from multiple systems.</td>
<td>7%</td>
<td>11%</td>
</tr>
<tr>
<td>The platform doesn’t scale and shift as requirements change and users get added.</td>
<td>4%</td>
<td>7%</td>
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PART 3: WHY IS USER ADOPTION STILL LOW?

FRICTION INHIBITS BOTH ADOPTION & VALUE

Both IT teams (17 percent) and business users (17 percent) report this as their second biggest challenge with their current solution: “People don’t like switching over from their usual applications to a separate analytics tool.” Another 12 percent of both segments report this leading challenge: “Users don’t have easy access to the tools in their daily workflows.”

Both of these challenges fall into the friction category. Together, these data points show that a lack of embedded analytics applications is the biggest challenge users encounter with their current BI solutions.

TOO MANY PEOPLE HAVE TO USE SEPARATE DATA DISCOVERY APPS

Almost 67 percent of business users say they find themselves switching to separate analytics tools to get the data or analysis that they need either “all the time” (16 percent) or “sometimes” (50 percent). The problem is clear: Switching between apps is a hassle, and it’s inefficient.

HOW OFTEN DO YOU FIND YOURSELF SWITCHING FROM YOUR USUAL BUSINESS APPS TO A SEPARATE ANALYTICS TOOL TO GET THE DATA OR ANALYSIS THAT YOU NEED?

What’s more, only 16 percent of business users say they can always access the analytics they need within the apps they already use.
WHAT TOPS THE WISH LIST FOR ANALYTICS TOOLS?

We know user adoption is low, and now we know what IT and end users don’t like about their current solutions. That begs the question: What exactly do users want out of their BI tools? How can IT teams provide tools they will actually use?

ACCORDING TO IT, THE TOP PRIORITIES FOR END USERS ARE:

1. Ease of use and autonomy
2. Exporting data out to analyze it using their own tool (e.g., Excel)
3. Importing data from external sources (e.g., cloud applications, spreadsheets) into the BI app
4. Promoting findings back to an administrator and seeing those changes reflected in the report
5. Interacting with a report/dashboard with filters, dropdowns, and drilldowns
6. Connecting to data that is controlled by IT
7. Capability for collaboration and sharing with coworkers
8. Modifying or changing the data
9. Accessing analytics embedded within existing applications (e.g., Salesforce)

ACCORDING TO BUSINESS USERS, THEIR TOP PRIORITIES IN A BI TOOL ARE:

1. Ease of use and autonomy
2. Interacting with a report/dashboard with filters, dropdowns, and drilldowns
3. Supports collaboration and sharing with coworkers
4. Exporting data out so I can analyze it using my own tool (e.g., Excel)
5. Modifying or changing the data
6. Accessing analytics embedded within existing applications (e.g., Salesforce)
7. Promoting findings back to an administrator and seeing those changes reflected in the report
8. Importing data from external sources (e.g., cloud applications, spreadsheets) into the BI app
9. Connecting to data that is controlled by IT
10. Combining the data I imported into the BI app with the data provided by IT
PART 3: WHY IS USER ADOPTION STILL LOW?

USERS VALUE CONNECTING TO DATA

As we see, it’s clear that business users value connecting to data – and most of all, modifying or changing data. The more data sources, the merrier!

And it’s no surprise that a whopping 91 percent of IT respondents feel that connecting to data controlled by IT is important. IT is on a mission to empower the business with data, not require them to collect and build data sources. This is a good thing, especially when you consider the sensitivity of today’s data along with upcoming data privacy laws in Europe and a general need for governance and accuracy versus chaos and data copies.

Connecting to IT-controlled data is one area where IT and business users are closely aligned in their thinking. Seventy-nine percent of business users agree that connecting to this data is important; that means there’s only a small percentage gap of users who are at risk for shadow IT and rogue reporting.

EXCEL STILL HAS ITS PLACE

Even with all the messaging about Excel reporting pains by data discovery and cloud BI vendors, both IT and business users still highly value the ability to export to Excel. In fact, only 1 percent of IT respondents and 6 percent of business users say it’s not important to them.

What is it about Excel that keeps users coming back? Excel is a known quantity: Even if an application offers easy-to-use self-service data preparation, users may still resort to Excel because they know they can complete their tasks in a certain amount of time. Ultimately, for an application to keep people’s attention longer, it has to allow users to manipulate data in various ways directly in their workflows, so they can quickly answer their questions and make decisions within the applications they use every day.
PART 4

THE VALUE OF EMBEDDED ANALYTICS

For years now, business and IT leaders have viewed self-service analytics as the ultimate BI solution. And it’s true that some users do want self-service solutions – meaning, they want to bring their own data sources and manipulate information themselves.

But the number of these users seems to be stuck at 20 to 25 percent. Only about a quarter of most organizations’ employees actually want to access and use self-service BI solutions. What do the remaining 80 percent of employees want?
If user adoption of self-service analytics hits its limit at 20 to 25 percent, the remaining employees – up to 80 percent of an organization – may have access to self-service analytics tools, but they’re not using them. Why? These tools are likely too complex for most users. And of course, the inefficiency of switching from typical business applications over to data discovery apps is a huge barrier.

So how can IT give end users what they want and increase adoption of these tools? The answer lies in embedded analytics.

PEOPLE WANT TO ACCESS ANALYTICS IN THEIR EXISTING WORKFLOWS

Eighty-four percent of business users say it’s either “very important” or “somewhat important” for them to be able to access analytics embedded within the applications they’re already using (e.g., Salesforce). Even more IT respondents (88 percent) say it’s important for their users to be able to do so.

But notably, most BI solutions do not make it easy to embed analytics. It’s an afterthought – a low-priority feature in product management rankings.

What if the business apps people already use included analytics as part of their existing products? End users could get the analytics they need in the context of their current workflows – without interrupting their flow to switch to another solution. Embedding into apps might just be the magic BI adoption formula that has eluded us all these years.
RIGHT PLACE, RIGHT PERSON, RIGHT TIME = USER ADOPTION

Business users want streamlined tools that help them work efficiently. Standalone analytics tools fail to meet this demand, but embedded analytics addresses this need by injecting analytics right where people are already working.
Although the availability of self-service offerings will likely continue to grow due to current momentum, the drop in end-user adoption we’ve seen over the past three years is likely just the beginning. As IT teams continue to force self-service solutions on their users, the backlash and user rejection of these tools will continue.

We’ve already seen a number of Software as a Service (SaaS) companies buying analytics companies. Because embedded BI is so essential to any application’s overall success, this trend will almost certainly continue. Although some companies may be tempted to build their own analytics tools, many are seeing the value in purchasing analytics companies – or, at the very least, partnering with a vendor that specializes in analytics.

By buying instead of building, these app companies can get scalable solutions into their products quickly without taking valuable resources away from their core offerings.
Historically, commercial ISVs and SaaS providers have embedded analytics in their applications as a way to boost revenue, drive user adoption, and improve customer satisfaction. They used analytics to make money – and they still do. But over the past few years, non-commercial app providers have seen the benefits of embedded analytics for themselves.

Their reasons are essentially the same as those of commercial OEMs: While adding analytics to their apps doesn’t add revenue, internal IT teams are able to see huge boosts in user adoption and satisfaction by providing more robust applications. At the end of the day, IT teams that provide applications to users within their organizations want to make sure those applications and portals are actually being used.

In many cases, these business evangelists may not have started out in technical roles – they may be directors of marketing, sales managers, or HR directors. But in today’s data-driven world, these roles have just as much ownership of the software tools as IT does.

It sounds scarier than it is: By having some ownership over these tools, business leaders will develop a valuable skillset. What’s more, IT teams will be freed up for more important work. When IT isn’t able to help with ad hoc analytics requests because they need to focus on their core product, these business leaders will be empowered to take the reins and find the information they need for themselves.
Logi helps companies embed analytics into the fabric of their organizations 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, with international offices across Europe. Learn more at LogiAnalytics.com.
APPENDIX

DEMOGRAPHICS
725 responses solicited by a third party

335 IT / BI TEAM
386 BUSINESS USERS

LOCATION
- North America: 66%
- UK: 29%
- Other: 7%

JOB ROLE
- Executive: 25%
- Corporate Analyst: 25%
- Dept. Manager: 15%
- Individual Contributor: 30%
- Other: 5%

INDUSTRY
- Utilities: 5%
- Real Estate: 64%
- Legal: 64%
- Energy: 64%
- Agriculture: 12%
- Media & Entertainment: 17%
- Consumer Goods: 19%
- Travel & Hospitality: 26%
- Transportation: 29%
- Financial Services: 29%
- Nonprofit: 32%
- Government: 32%
- Construction: 36%
- Business Services: 36%
- Manufacturing: 41%
- Not Industry Specific: 49%
- Retail: 54%
- Education: 61%
- Healthcare: 75%
- Technology: 76%
- Other: 88%

Total: 21.55%