

REPORT

# Accelerating embedded analytics:

From build vs. buy to hybrid solutions

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# Introduction

Developers consider analytics core to their products and critical to the business. Despite this common theme, however, many have yet to find the optimal analytics solution. Traditional analytics platforms tend to force a choice between the speed that third-party tools provide and the control that building in-house offers.

As a result, many developer teams continue to seek an analytics solution that offers the speed, control, and functionality they need. The majority have already replaced one type of tool (custom-built or third-party) with the other or are considering doing so.

However, the ideal option for many developer teams may be embedded analytics: a third-party solution that lets them customize with low- or no-code. With embedded analytics, developers can retain complete control and embed the functional AI features they want while still moving fast.

This report aims to understand how developers and technical leaders approach implementing analytics. It explores the tensions that drive their technology choices, analyzes their AI preferences, and considers the viability of an embedded analytics solution.



# Key takeaways

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## Satisfaction

86% of developers report satisfaction with their current analytics tools' capabilities. Yet 82% have already switched or have considered switching between custom-built and third-party solutions as their demands outgrow what any single solution can support.

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## Hybrid solution

49% of developers are already using a combination of custom-built and third-party analytics platforms. 58% say they would definitely consider a tool that lets them build and embed analytics quickly, suggesting a clear interest in a hybrid solution.

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## Generative AI

AI generates ample conversation in developer communities, but most opt to focus on where analytics provides real value and time savings. 67% already use predictive analytics, and 25% consider GenAI the most exciting emerging analytics trend.



# Analytics as a strategic priority

Developers view analytics as a core part of product infrastructure and a key business driver for the organization. This causes many developer teams to prioritize functional analytics capabilities like accuracy and performance.

This practical approach carries over to how developer teams typically view AI in analytics. Most teams leverage AI in practical ways but express less interest in more experimental applications that don't directly reflect their view of analytics as a strategic priority.

For most developer teams, analytics requirements are at the forefront early in the development lifecycle. 38% consider analytics requirements during the initial planning or discovery phase, while 35% do so during design and architecture. Just 8% consider them post-deployment or during iterative improvements (Figure 1.1).

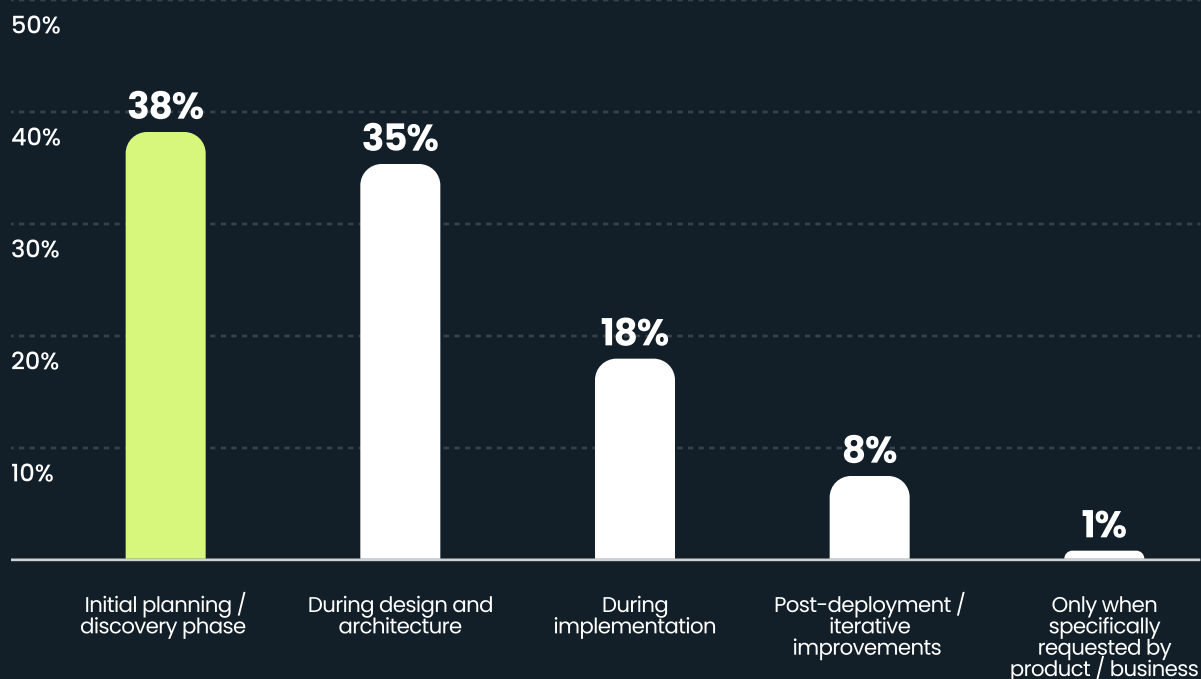
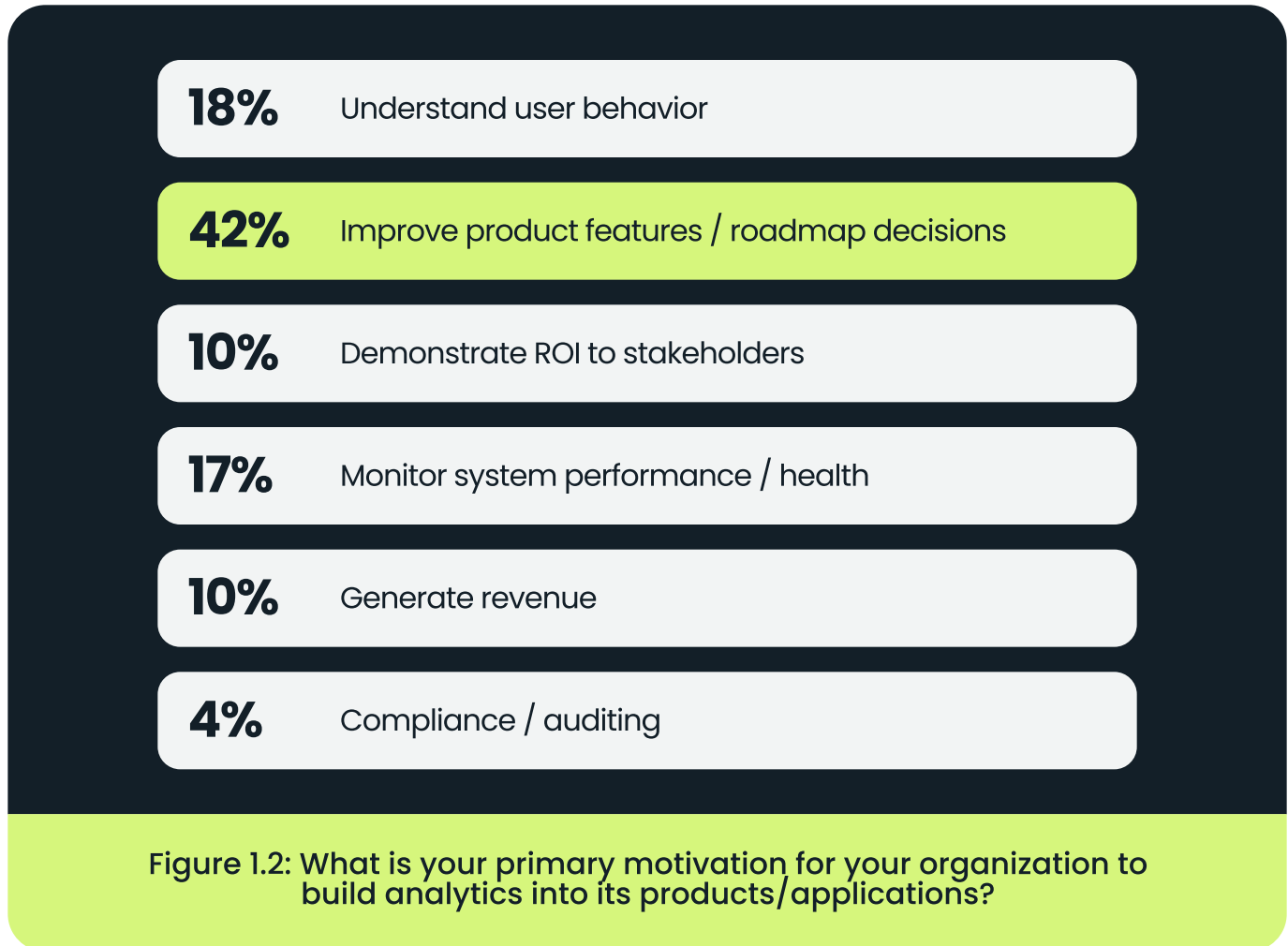


Figure 1.1: At what stage of the development lifecycle do you or your team typically consider analytics requirements?



Analytics is a critical component early in the development lifecycle because it directly impacts the business. In fact, respondents' primary motivation for building analytics into products and applications is improving product features and informing roadmap decisions (Figure 1.2).

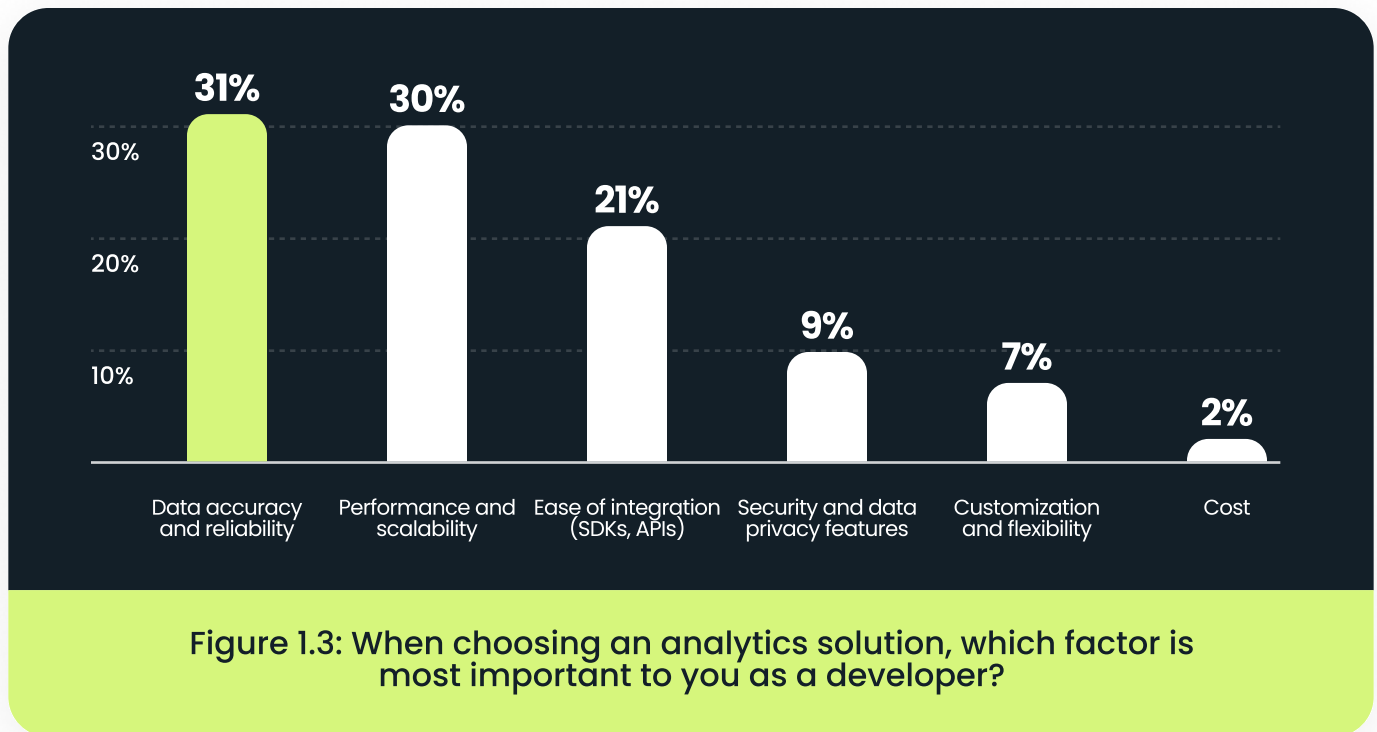


By prioritizing feature improvement and roadmap decisions, analytics can contribute to increased user satisfaction and effective resource allocation. These outcomes can positively impact the business by driving increased customer retention and greater operational efficiency.



Because analytics affects both product decisions and business outcomes, developers tend to prioritize factors like accuracy and performance over cost or customization. When choosing an analytics solution, 31% of respondents say that data accuracy and reliability are the most important factors (Figure 1.3).

An additional 30% say performance and scalability are essential, and 21% say ease of integration is a top priority. However, factors like cost (2%) are by far the least important.



When attempting to embed analytics within their product, developers often juggle several challenges. While these problems vary, a few stand out as the most persistent.

"In every product, you always have to choose how to balance your resources and where to invest in. This balance almost always needs to represent a healthy mix of core features needed to improve the product, with strategic innovations aiming to strengthen the product differentiation, make it more powerful, and drive toward your strategic goals."



**Yigal Edery**

SVP, Product and Strategy – Sisense



Half (50%) of respondents say they've encountered security and privacy concerns, while just under half have struggled with integration complexities (46%) and performance issues (44%). Many have also dealt with limited data access or control (38%) and difficulty customizing the UI (37%) for their analytics implementation (Figure 1.4).

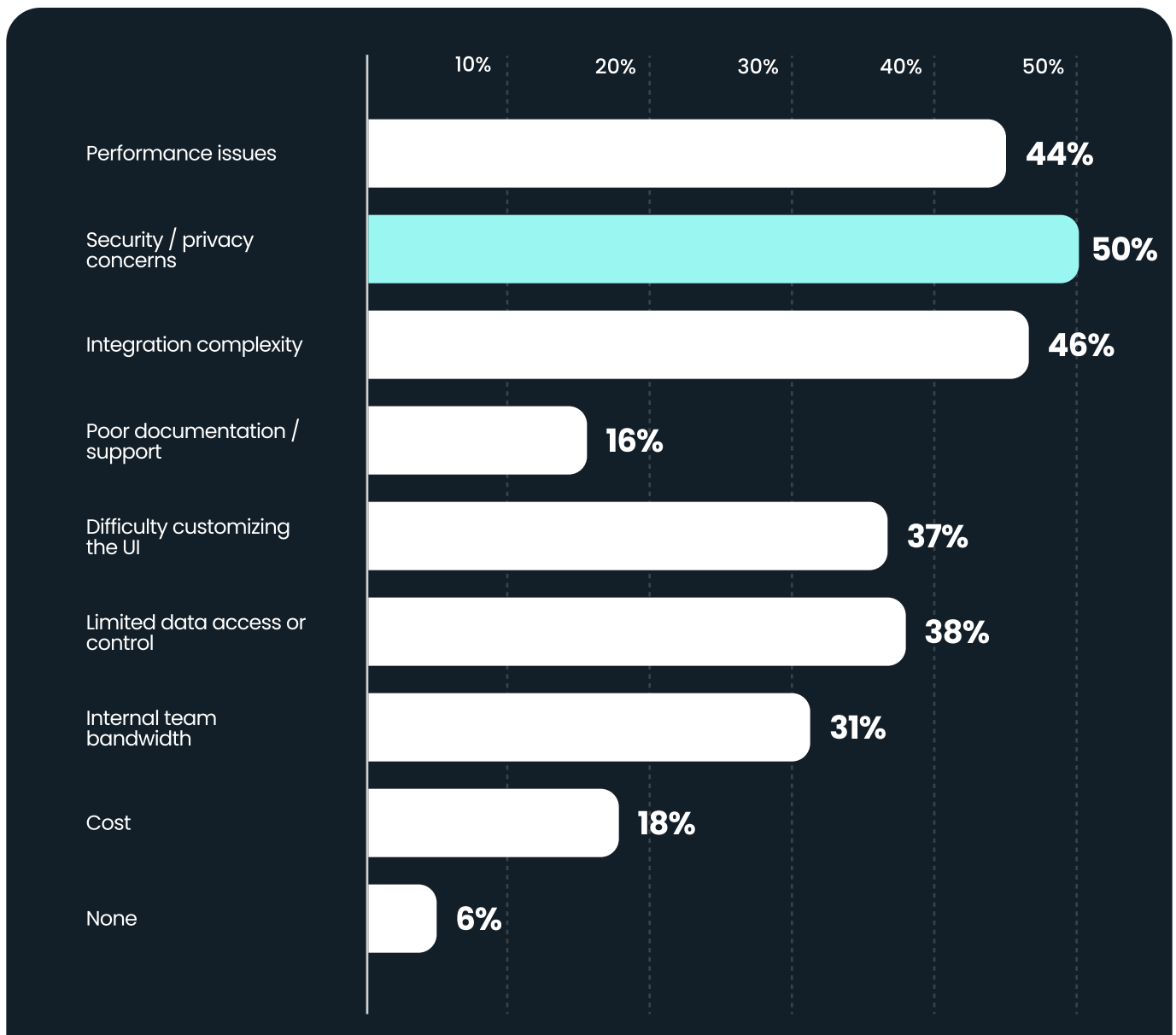


Figure 1.4: What challenges have you encountered when attempting to embed analytics within your product?



In contrast, only 16% mention poor documentation as a challenge, and just 18% highlight issues with cost. These responses indicate that building a secure solution that works reliably and connects easily is top of mind for developers—much more so than budget.

**For most developers, core analytics functionality takes precedence over AI and ML features.** Among all emerging analytics trends and technologies, the largest group of respondents (30%) is most interested in exploring real-time analytics (Figure 1.5).

“As with any feature, we need to assess the cost versus benefit. In terms of AI features, cost has many vectors: computational cost, storage cost, licensing cost, security cost, etc. All of these facets are considered in comparison with the benefit of the output from AI analytics features. Benefits include finding new patterns in data that weren't recognized by human experts, rapidly retrieving information from complex, large data stores using natural language, reducing time-to-market for new analytics solutions, and enabling end-users with self-service and self-extension of the analytics solutions.”

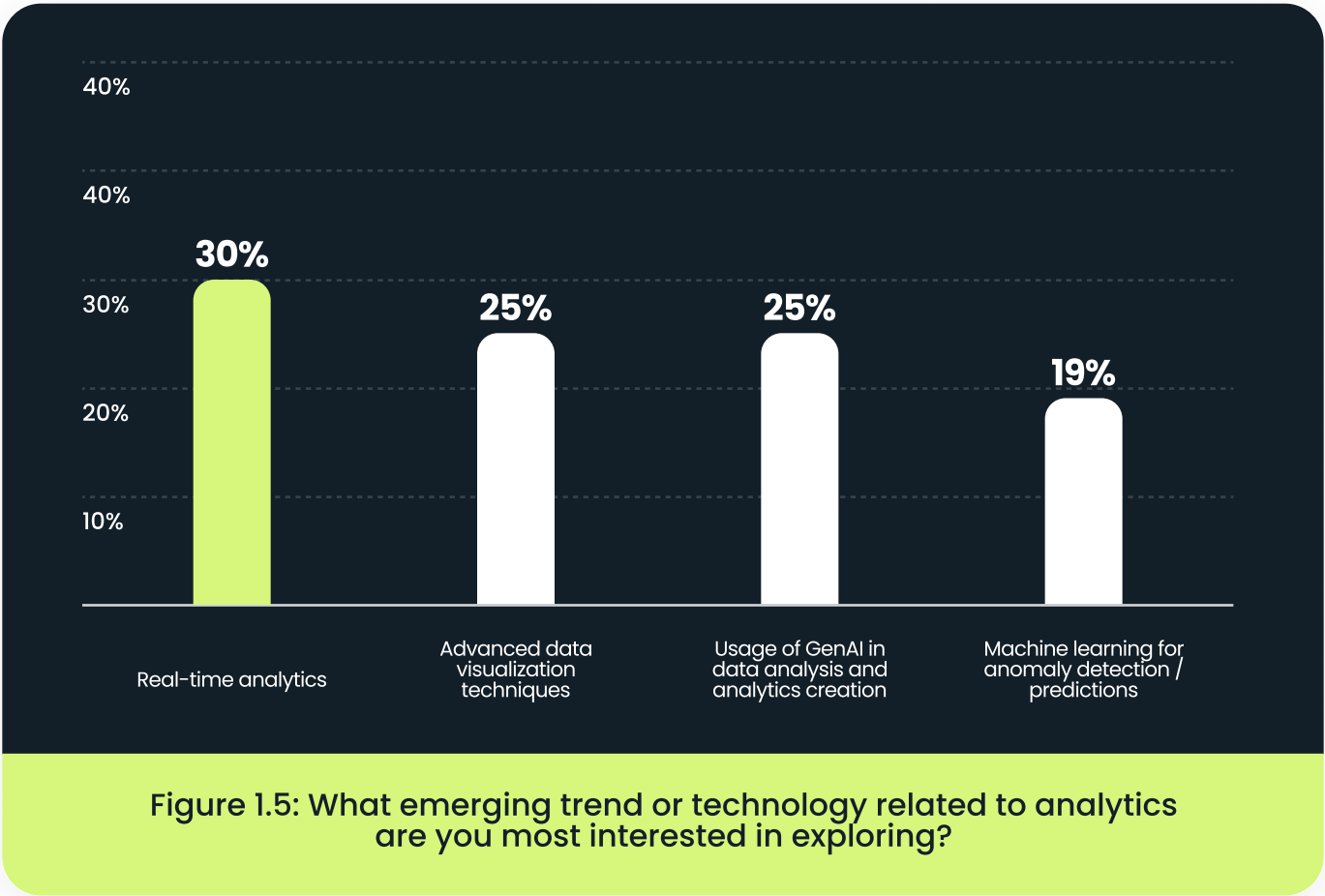


**Devin Vyain**

Data Solutions Architect at Barrios



The second largest groups express interest in advanced data visualization techniques (25%) and GenAI (25%). ML for anomaly detection and predictions (19%) takes third place.





This suggests that developers tend to view AI as an ingredient, not the main dish in an analytics implementation. Instead of serving as the primary attraction, AI is a key component that can improve outcomes when used effectively.

“We evaluate AI-powered features by looking at three things: accuracy, regulatory readiness, and sponsor adoption. If the AI reliably interprets natural language queries on top of our semantic models, generates accurate narrative insights, and integrates smoothly with validated widgets, we see value. If it introduces inconsistencies or confusion, it won’t provide the confidence that our end users are receiving what they would want to know or come to expect.”



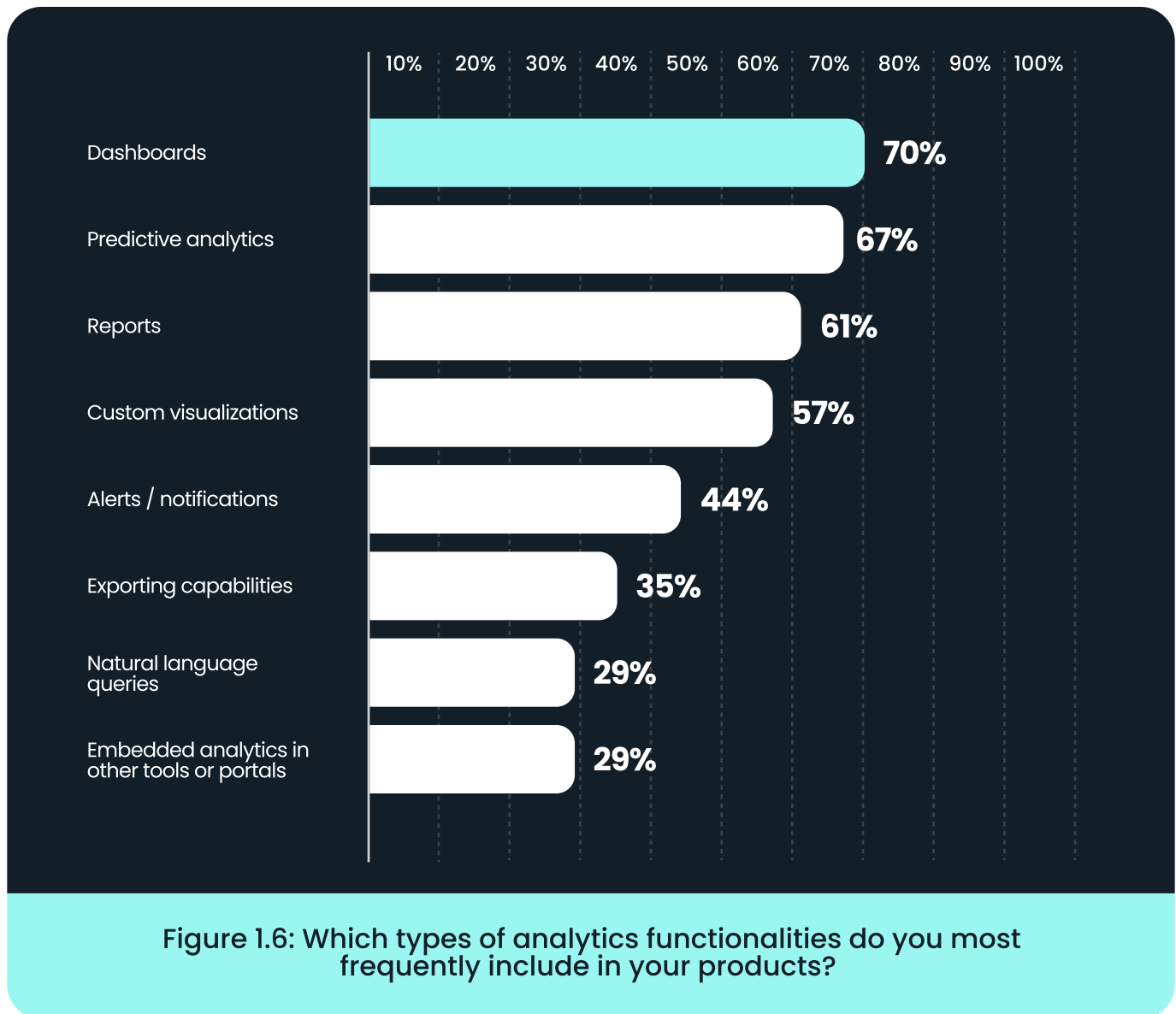
**Francois van Vuuren**

Director, Clinical Data Systems & DM Programming at Bioforum



As a result, developers tend to use AI where it delivers time savings and adds real value. When noting the analytics functionalities they frequently include in products, respondents say predictive analytics (67%) is near the top of the list (Figure 1.6).

In addition, 70% of respondents frequently include dashboards, and 61% build reports into their products. Custom visualizations (57%) are also relatively common.

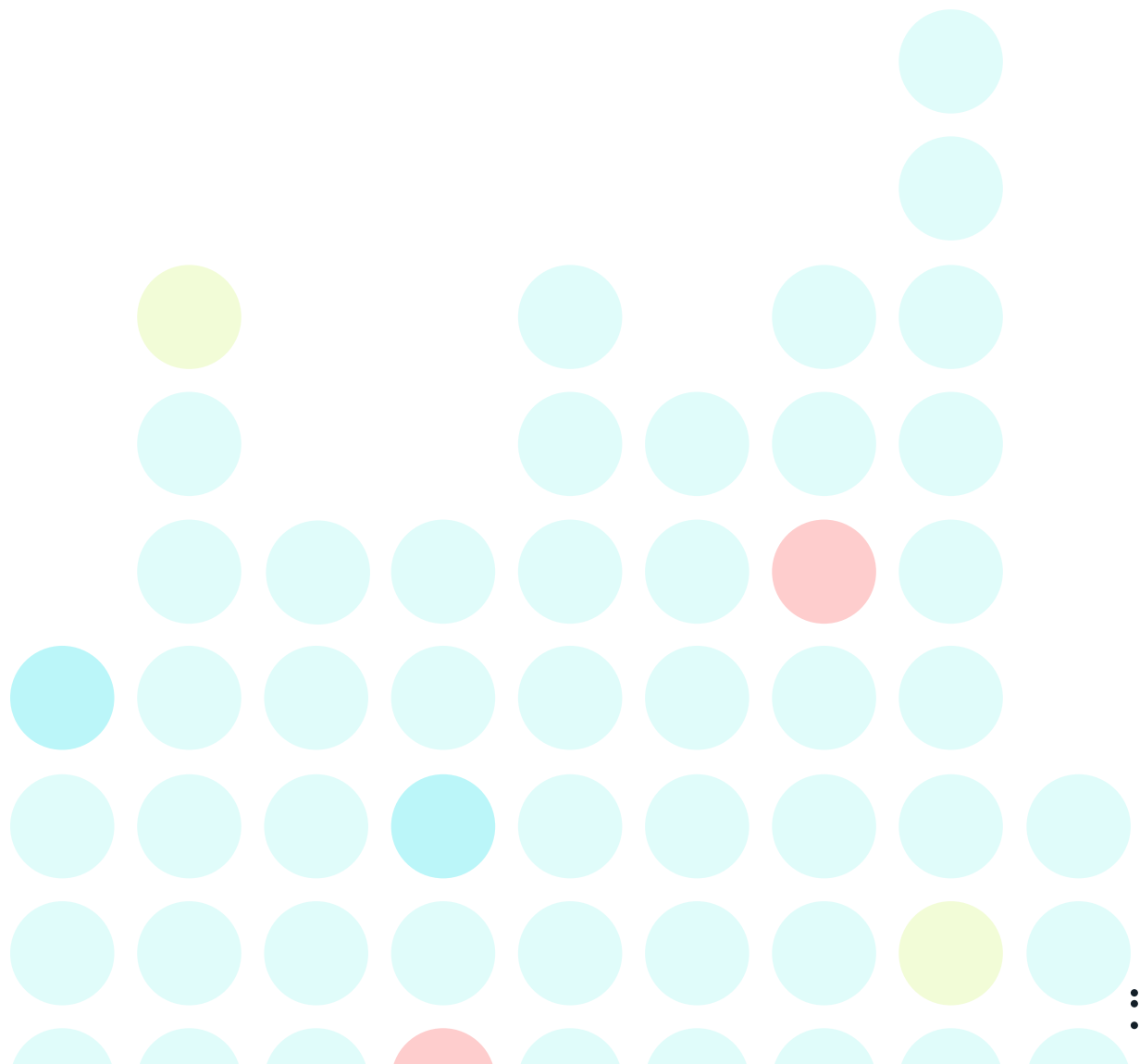


“Developers can easily integrate AI capabilities into their embedded analytics, giving end users new ways to interact with data. For example, a user can simply ask a question in natural language, and the system won’t just provide a chart, but also recommend additional analyses and follow-up questions to explore. The platform acts as an intelligent partner for both the developer and the end user.”



**Steve Lewis**

Senior Product Manager at Sisense

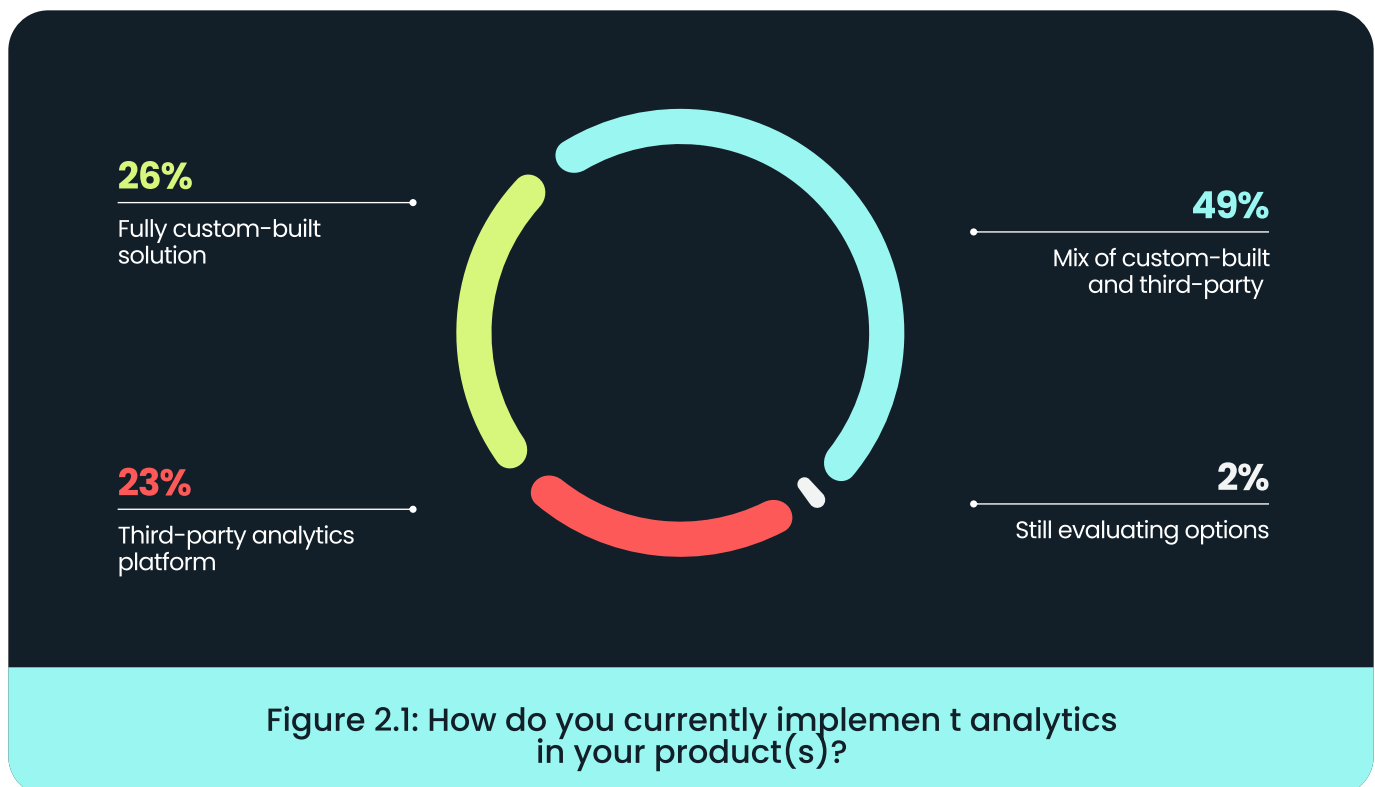


# The build vs. buy analytics dilemma

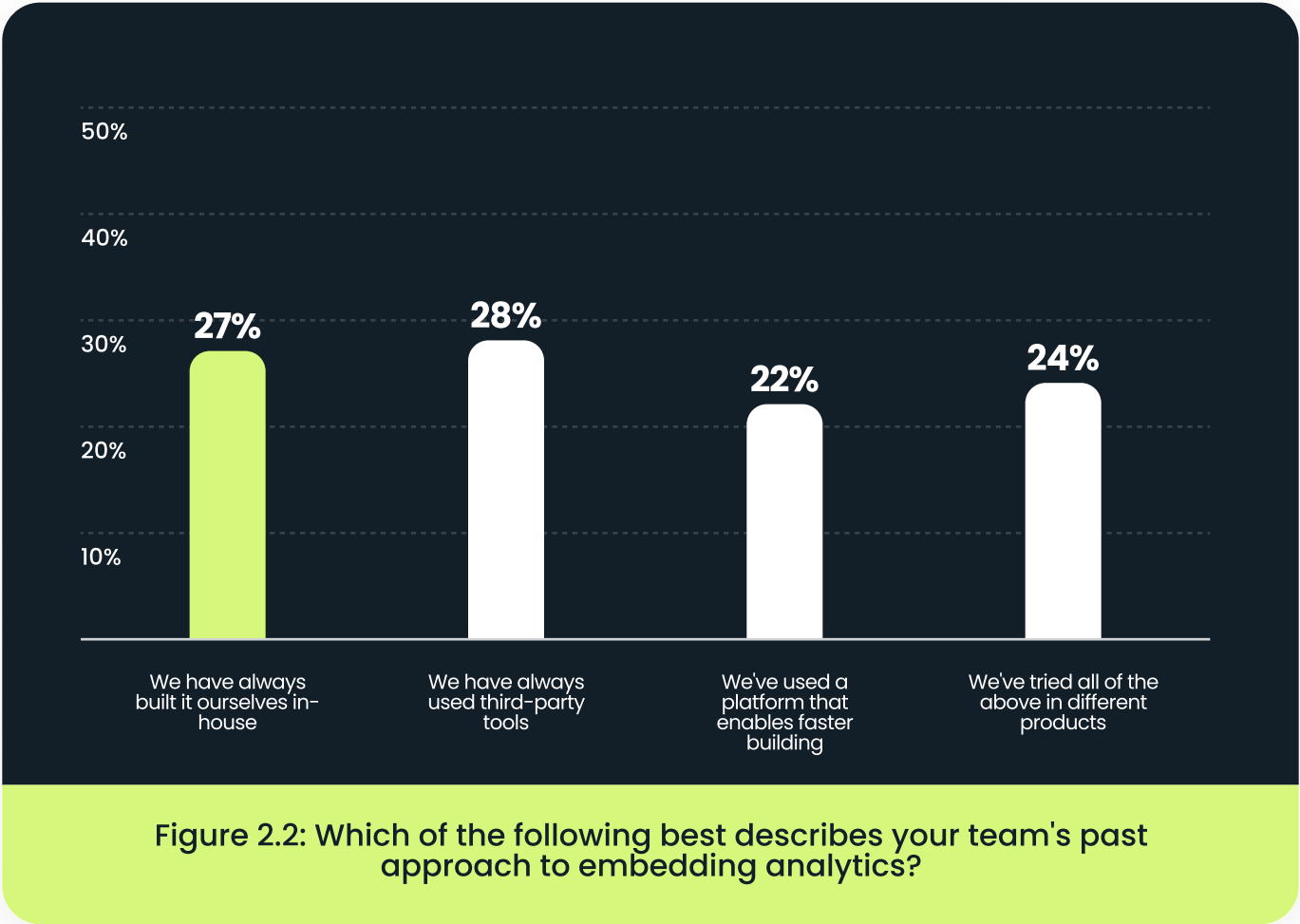
Developers are divided between investing in custom-built and third-party analytics platforms. There are compelling use cases and benefits for both, and no clear consensus has emerged.

Legacy analytics aren't built for every use case or product requirement, which means there's no universal approach to analytics implementation. Developer teams are divided among the available options, and many have attempted multiple methods.

When asked about their current analytics implementation, nearly half (49%) of respondents report using a mix of custom-built and third-party analytics. Teams that currently use a single solution to implement analytics in their products are divided between fully custom-built (26%) and third-party (23%) (Figure 2.1).



When asked about their past approaches to embedding analytics, respondents' answers reveal another clear divide. While 28% say they've always embedded third-party tools, 27% have always built an in-house analytics solution. In addition, 22% have embedded an analytics platform that enables faster building, and 24% have tried all of the available options (Figure 2.2).



Teams that have always built analytics in-house say they choose this option because of the superior performance, greater control, and lower cost it offers. Better performance (73%), data security and privacy concerns (69%), full control over UX and UI (68%), and cost effectiveness over time (60%) stand out as the most common reasons (Figure 2.3).

Some teams say they've chosen this option to avoid vendor lock-in (33%) or because their internal capabilities were sufficient (19%). However, these reasons drive the decision to build in-house far less often.

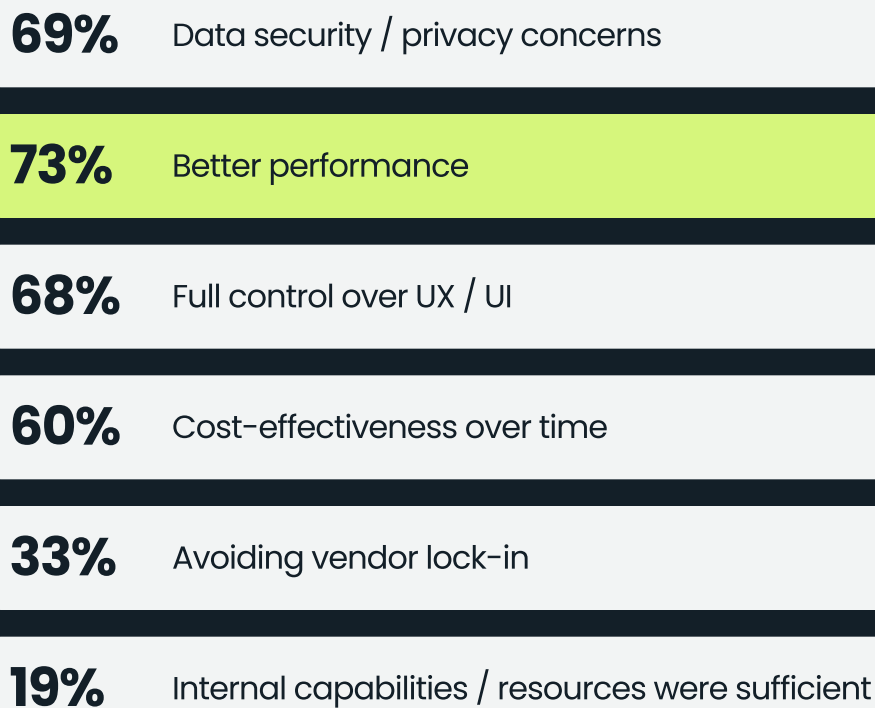


Figure 2.3: Why did your team choose to build analytics in-house?



“Building and embedding allows for customization without the cost of a custom-built tool. HIPAA compliance and security are also must-haves for our product.”



**Zach Williams**

Senior Software Engineer – Integrations at Mytonomy Inc.

Developers believe that in-house solutions give their team an edge. 88% of respondents agree that building analytics in-house helps their organization develop a competitive advantage (Figure 2.4).

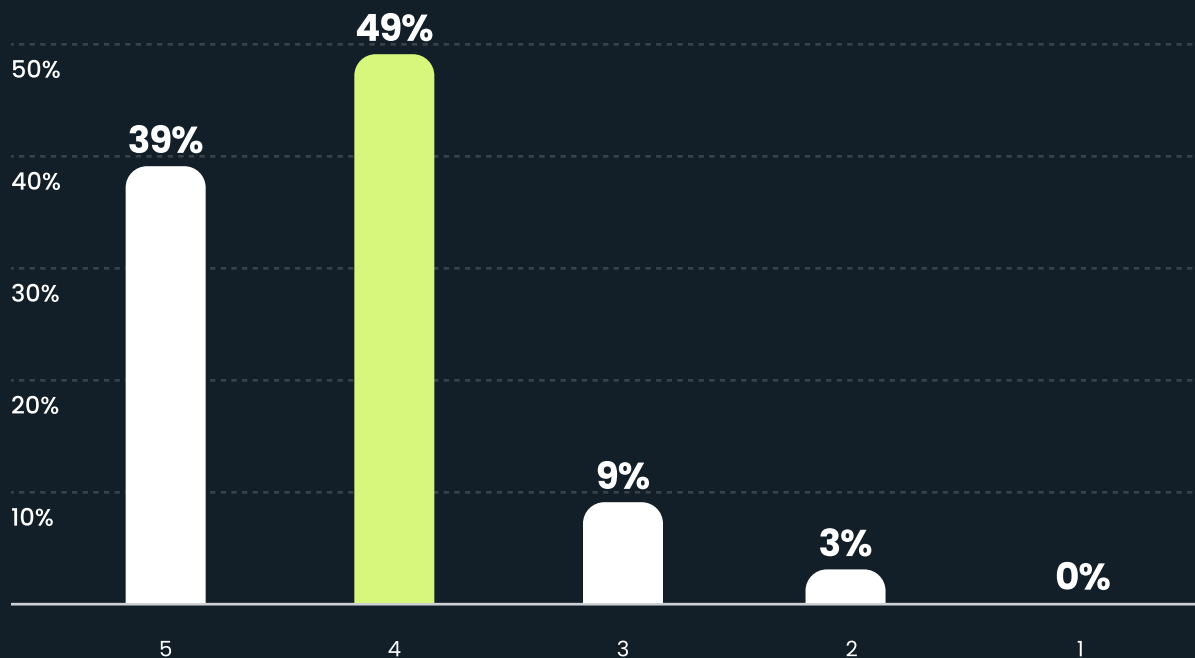


Figure 2.4: To what extent do you agree: “Building analytics in-house gives us a long-term competitive advantage”?



This competitive advantage may manifest in a number of ways. Building in-house can allow for deeper product integration, which may generate more valuable product data. This approach may also empower teams to develop more customized solutions, which they can iterate on as necessary.

“We're seeing teams reduce delivery time significantly by implementing an off-the-shelf embedded analytics solution into their product offering. Product teams ship more value much faster by avoiding spending time on building capabilities that come out of the box with leading embedded analytics solutions: AI-driven insights, full customization, developer-friendly SDKs and APIs, advanced visualization, and automatic alerts. Just as critical, they inherit enterprise-grade security—SSO, row and column-level permissions, audit logging, and certified compliance—tested at scale and continuously updated against new threats.”



**Uri Bahar**

Director, Solution Engineering – International at Sisense





However, third-party analytics platforms offer different potential advantages. Teams that have always opted for third-party analytics tools say they choose this approach because of its fast implementation speed (73%), scalability (66%), and access to advanced features (60%) (Figure 2.5).

Teams that prefer this option also highlight third-party analytics' lower engineering overhead (59%), cost predictability (46%), and better support and documentation (42%). While some teams (20%) mention pressure from business stakeholders, this is one of the least common reasons to choose third-party analytics.

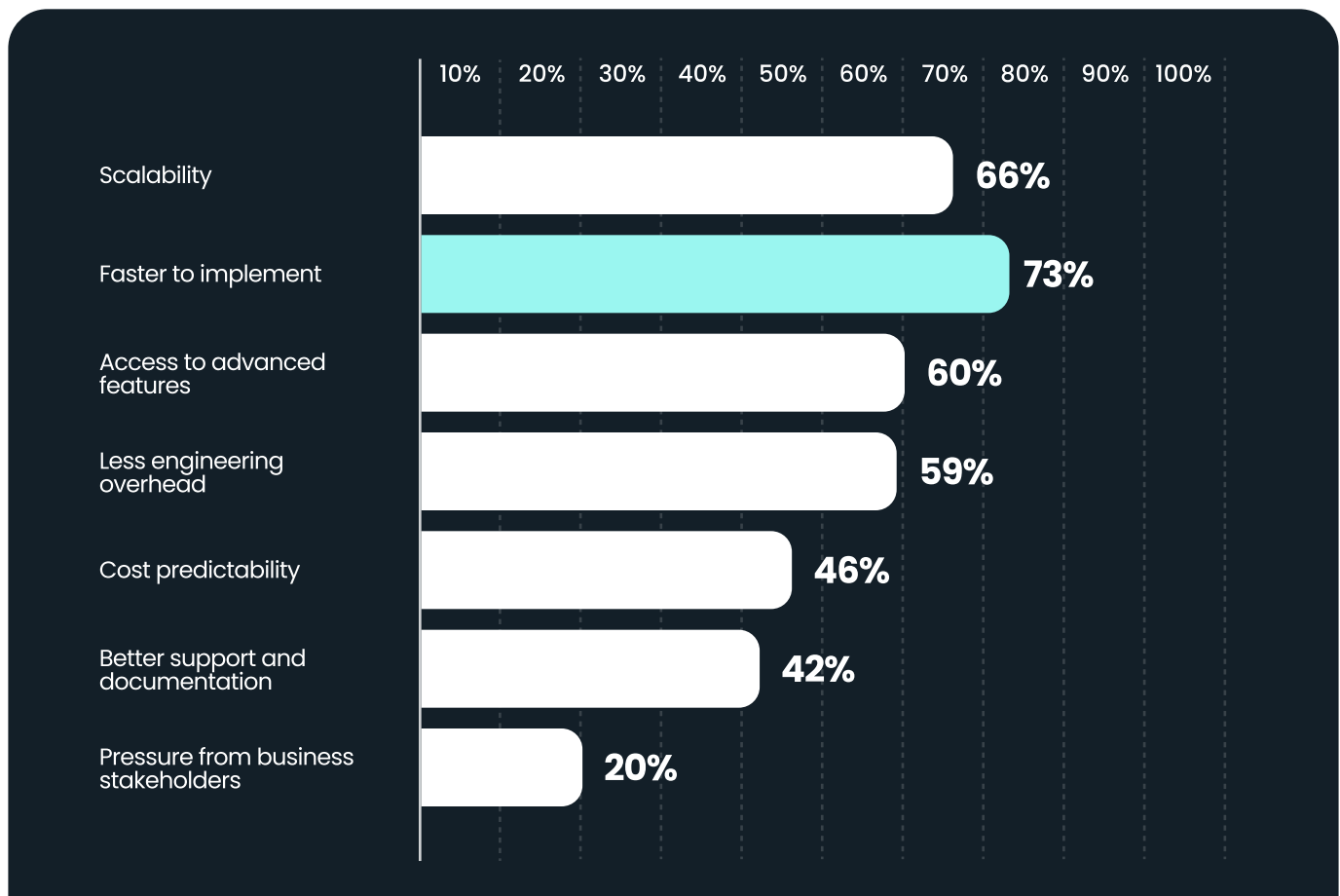


Figure 2.5: Why did your team choose to use a third-party analytics tool?



Developers agree that third-party analytics tools offer superior speed. 88% of respondents say that third-party solutions help their team move faster (Figure 2.6). This advantage means they can begin collecting product data sooner, using it to improve product features and inform critical roadmap decisions.

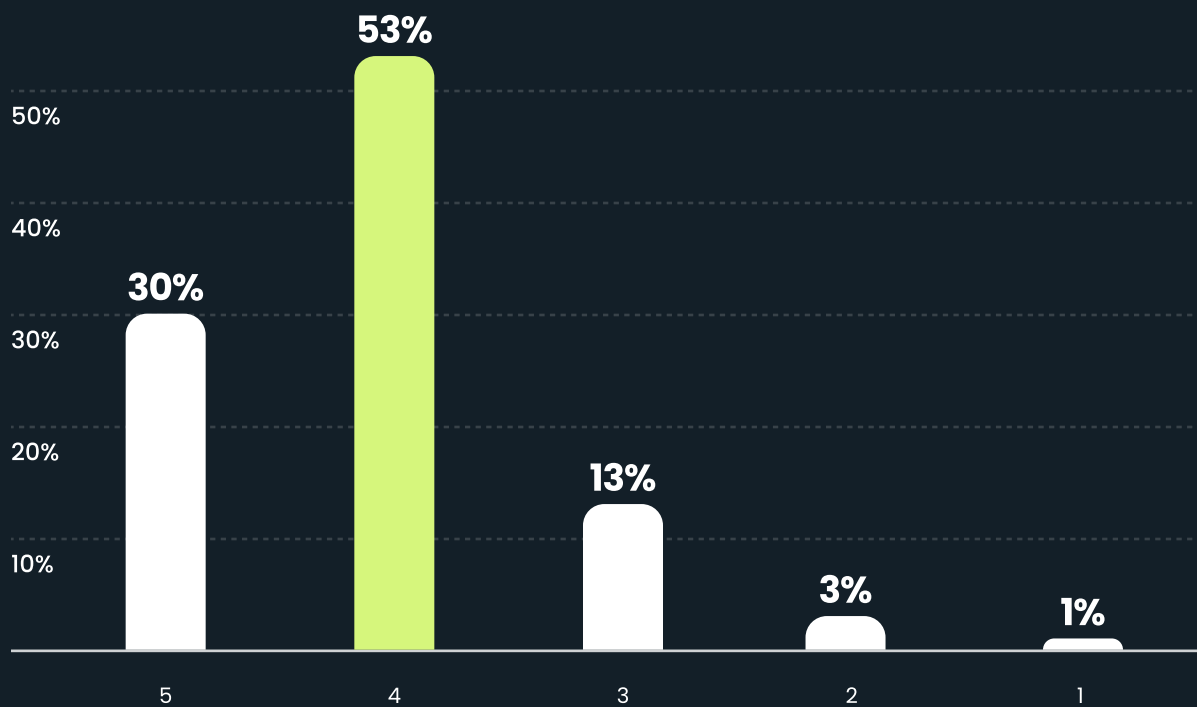
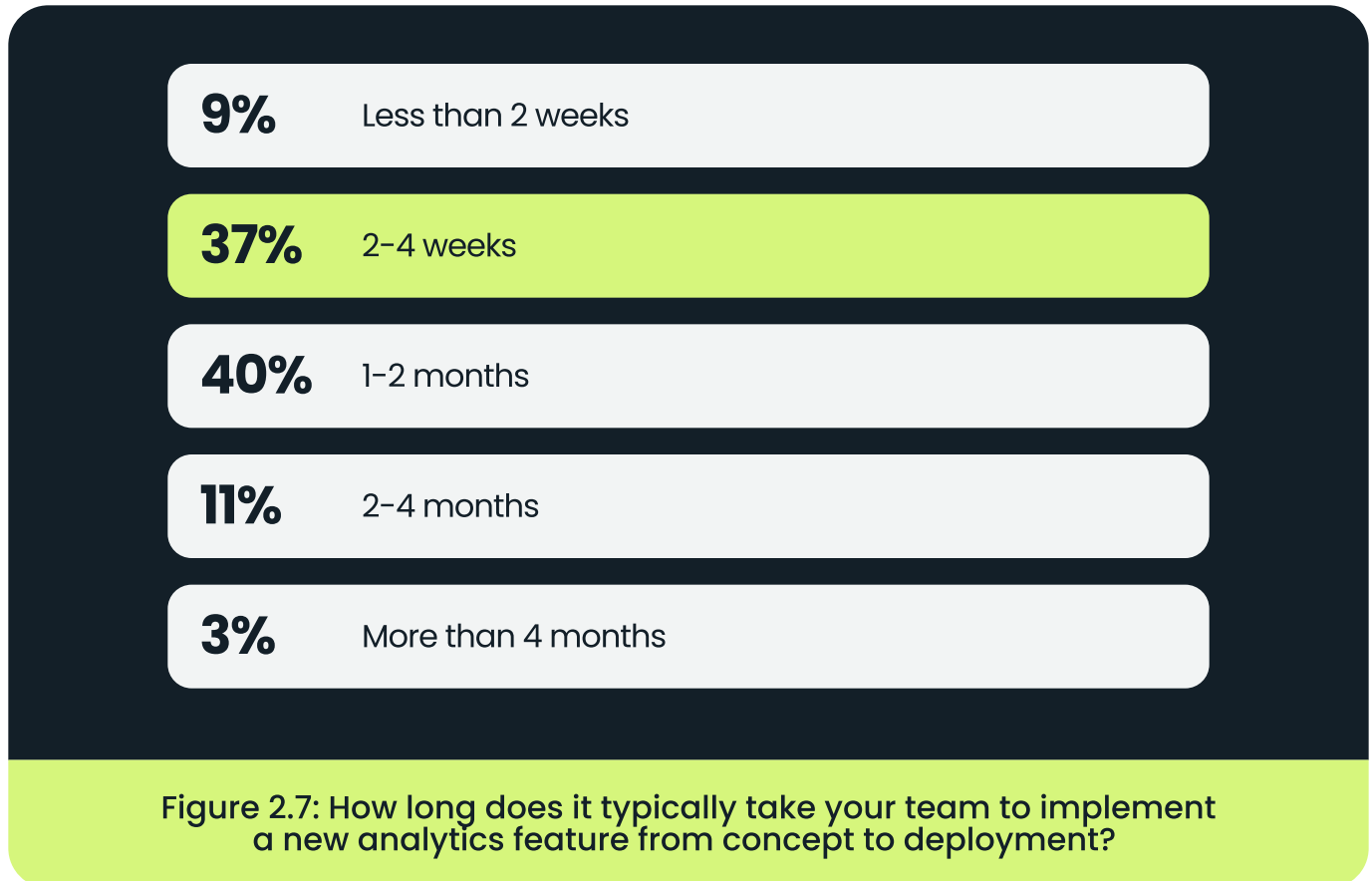


Figure 2.6: To what extent do you agree: "Using a third-party analytics tool allows us to move faster"?



For many developer teams, increasing speed is crucial. More than three-quarters (77%) of respondents say they typically take two weeks to two months to implement a new analytics feature from concept to deployment. 40% report taking one to two months, while 37% take two to four weeks (Figure 2.7).



However, slow speed may stem from the complexity of the analytics implementation. Among those with the fastest implementations, only 37% use a mix of solutions. Of those with the slowest implementations, 60% use a mix of solutions.



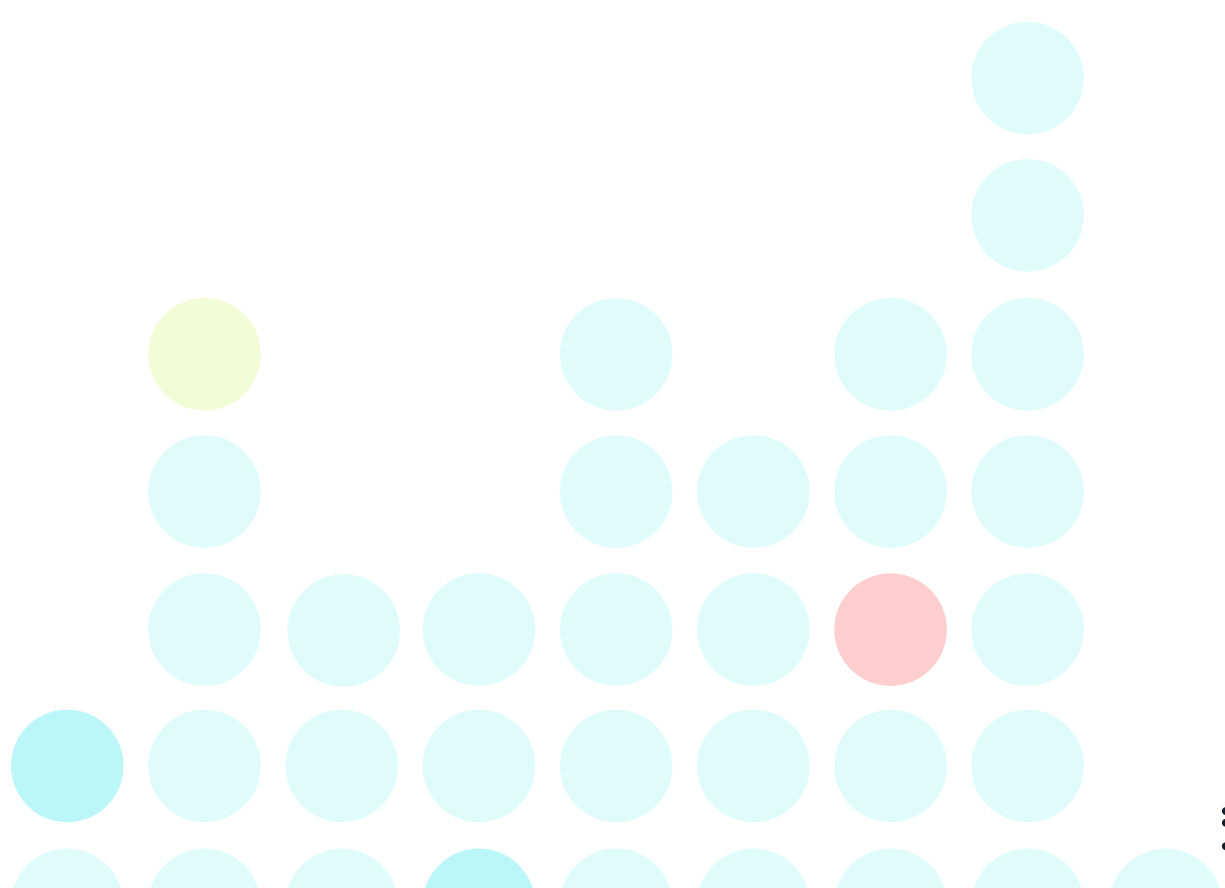
Teams may gain the ability to move faster with less complex analytics implementations—such as a single embedded analytics solution that meets developers’ needs for speed, control, and customization.

“We place higher value on control and flexibility than on pure speed. In clinical data management, deploying analytics without proper validation creates compliance risks that outweigh any short-term gains. With our AI-driven embedded analytics platform, we have the flexibility to design semantic layers, enforce role-based access, and customize dashboards to align with sponsor requirements. The true differentiator is that the platform enables both rapid embedding and deep customization within a single product.”



**Francois van Vuuren**

Director, Clinical Data Systems & DM Programming at Bioforum



# The hybrid analytics solution

While developer teams report being comfortable with their analytics implementations, their churn rates suggest the opposite. The majority have either already replaced one type of analytics tool with another or are thinking about doing so.

This high turnover rate suggests that developers are dissatisfied with both custom-built and traditional third-party analytics implementations. Rather than choosing one or the other, opting for a hybrid solution that they can embed and customize may better meet their needs.

“When developers use a composable SDK to access and embed pre-defined analytics assets directly into the host application, they gain full control. They’re no longer limited by a rigid iframe. Instead, they can take the core analytics components and customize their look and feel, integrate them with the rest of the application’s UI, and control their behavior and interactions. This hybrid, code-first approach allows for maximum flexibility, as the product manager and analyst can iterate on the insights while the developer focuses on creating a stunning, native user experience.”



**Steve Lewis**

Senior Product Manager at Sisense



86% of respondents say they're content with their current analytics implementation. Yet while 27% are extremely satisfied, 59% say they're somewhat satisfied—suggesting that there's room for improvement (Figure 3.1).

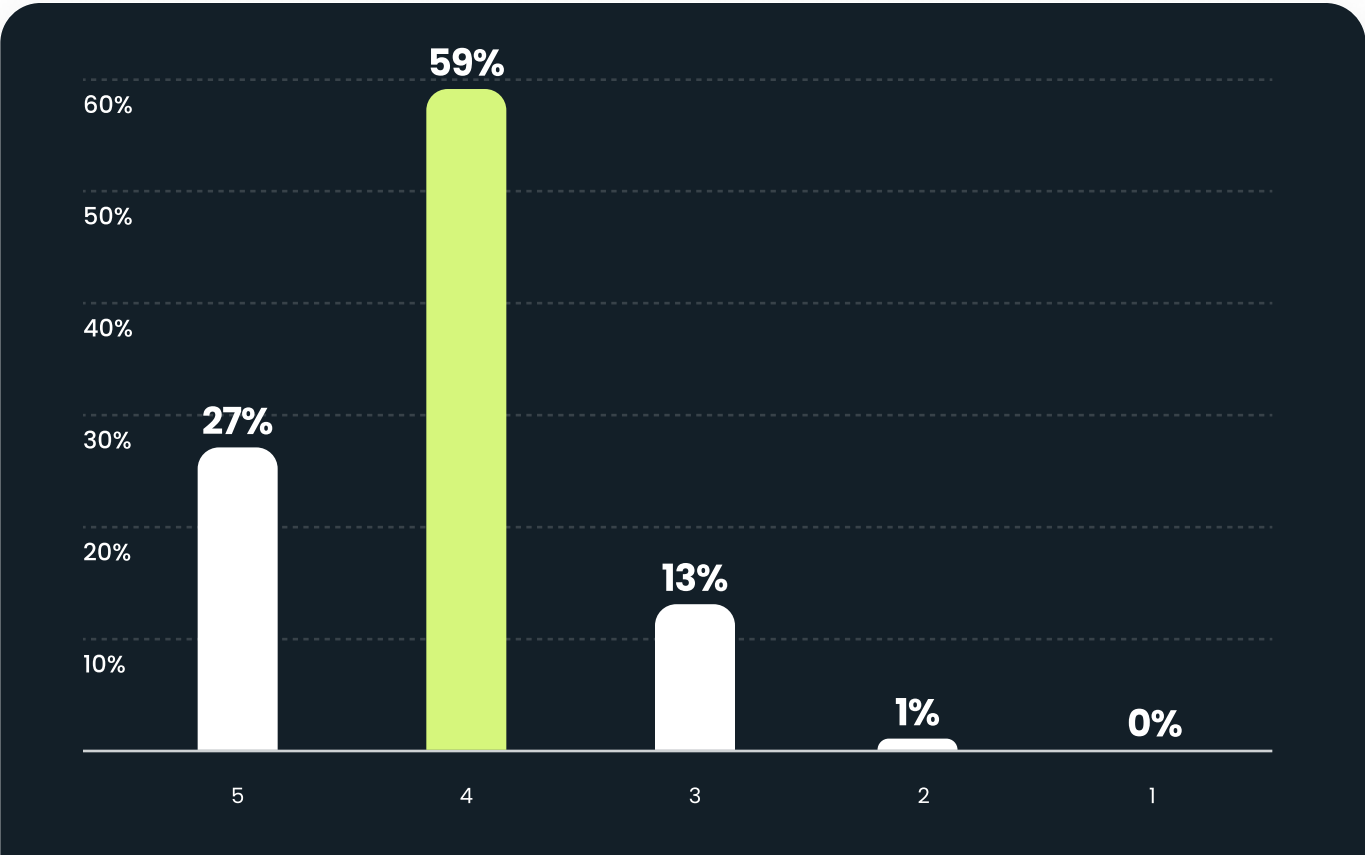


Figure 3.1: How satisfied are you with your current analytics implementation?



No matter what developers are doing today, they aren't happy with it. 82% of respondents have replaced their third-party analytics tool with an in-house solution or vice versa—or they're currently considering doing so. 70% say they've already made the switch from third-party to homegrown or vice versa (Figure 3.2). Universally, there's an opportunity to think about better ways to embed analytics into products and user experiences.

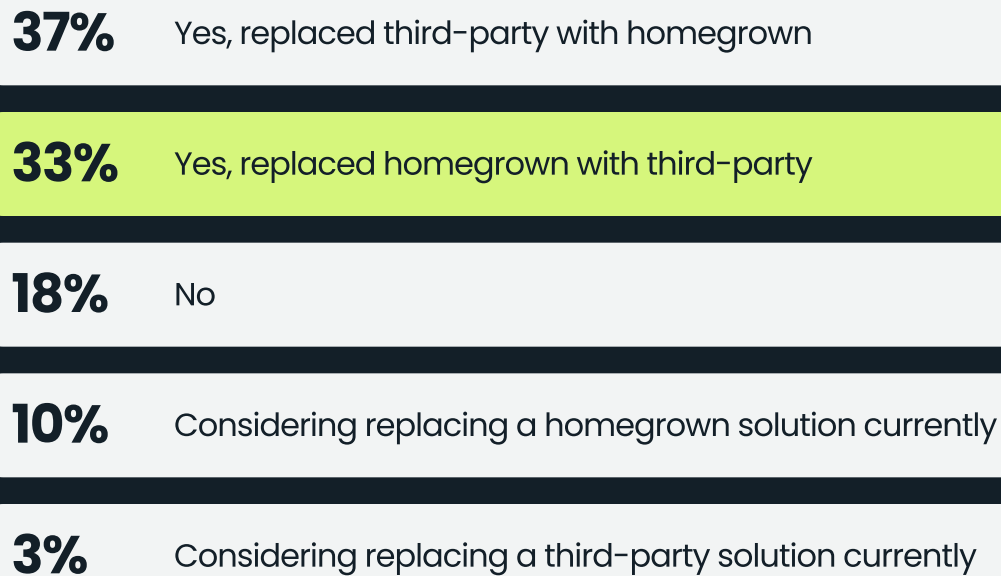


Figure 3.2: Have you ever tried replacing a third-party analytics tool with a homegrown solution (or vice versa)?



Developers' wide-ranging analytics platform preferences reveal that many haven't yet found the ideal solution. Teams are almost equally divided between three approaches to analytics, suggesting that each team or product demands a different set of capabilities.

"In our particular arena, control and flexibility are often paramount to shipping quickly. However, we try to find a balance between the two by utilizing open-source and mature low-code / no-code frameworks. The driver for this decision is often the specific analytical need. In the industry of aerospace exploration, many of the engineering and analytical functions require tailored solutions which don't fit an extant 'playbook' in the way that fintech or sales industries might."



**Devin Vyain**

Data Solutions Architect at Barrios





While 32% of respondents say they'd prefer to buy a prebuilt third-party solution, 30% say they'd rather build analytics in-house. An additional 32% indicate that they'd prefer to buy a solution that enables them to build in-house faster (Figure 3.3).

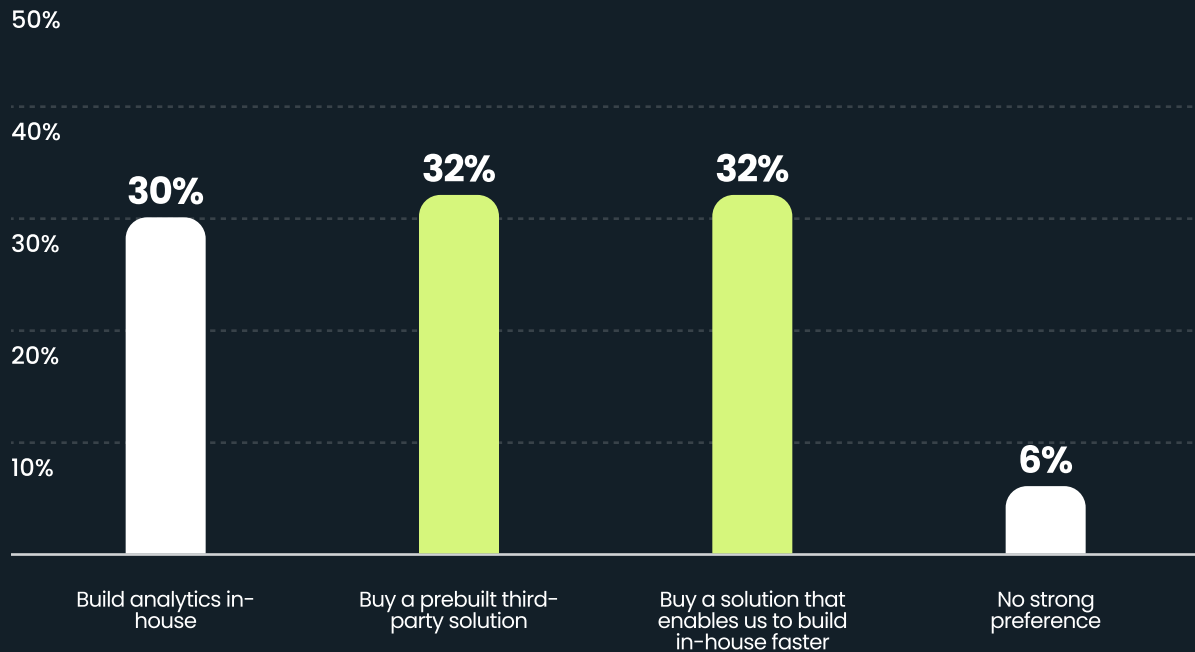


Figure 3.3: If you had to choose, which approach would your team prefer?

With embedded analytics, developer teams can leverage the best of both worlds: using a composable SDK to embed a third-party solution into products and applications. This allows developers to customize with no-code tools, making it feel like their own product. As a result, embedded analytics can address the need for both speed and control in a single, streamlined solution.



“A hybrid solution is appealing if it offers two things: pre-built accelerators to shorten build times and the ability to extend and validate those accelerators to meet regulatory standards. A purely third-party solution often lacks the industry-specific features we need, while a fully custom build is too resource-intensive. A hybrid approach that gives us quick wins out-of-the-box but also allows customization, GIT integration, and validation hooks is definitive. If we had to choose, we’d always prefer a hybrid because it avoids the trade-off: we don’t have to settle for rigid third-party dashboards or sink resources into building a full custom engine.”



### Francois van Vuuren

Director, Clinical Data Systems & DM Programming at Bioforum

Interest in this kind of hybrid option is high. The majority (58%) of respondents say they would definitely consider a hybrid solution that lets them build and embed analytics into their product quickly without starting from scratch (Figure 3.4).



Figure 3.4: Would you consider a hybrid solution that lets you build and embed analytics into your app or product quickly without starting from scratch?



For many developer teams, a hybrid solution may be the optimal approach for implementing analytics. 93% of respondents agree that the ideal embedded analytics solution gives developers both speed and flexibility (Figure 3.5).

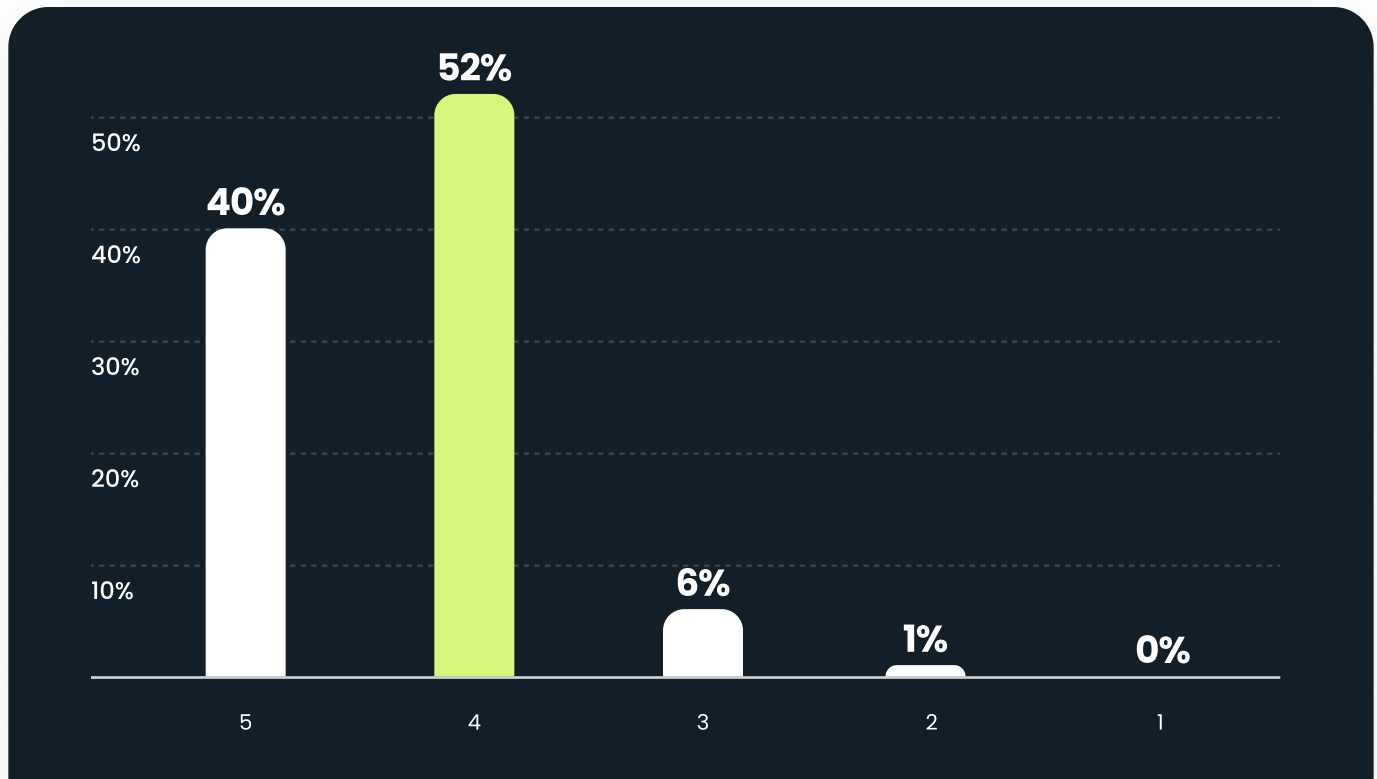


Figure 3.5: How strongly do you agree: “The ideal embedded analytics solution gives developers both speed and flexibility.”?

“The ability to rapidly prototype, work with a broad variety of industry standard platforms, manage complicated authentication rules, and access extensibility options for customization are the main factors that would lead to adoption of a hybrid, embed-first analytics platform.”



**Devin Vyain**

Data Solutions Architect at Barrios



This indicates that developers are seeking a solution that offers faster time-to-value yet still allows for both customization and integrations. An embedded analytics platform lets teams capture the benefits of both solutions, giving developers a practical solution for making strategic decisions while building the ideal custom analytics solution for their product or application.

“An analytics platform that combines no-code and pro-code approaches allows organizations more flexibility in how they allocate their resources for building their analytics experiences. Whether they have more capacity via data engineers, product managers, analysts, or developers, the hybrid solution meets these personas where they’re most comfortable doing their work, while making sure other personas can collaborate or follow up on it. This way, developers can focus their efforts on where they’re needed most, reducing the need for compromise by keeping the entire team happy.”



**Moti Granovsky**

Director, Product Management at Sisense



# Conclusion

This survey reveals the tradeoffs that developers make and the perceptions they have as they invest in building in-house or implementing third-party tools. While teams often laud in-house tools for the control and customization they offer and commend third-party platforms for the speed and performance they provide, the reality is in the balance.

Teams that have the longest implementation timelines tend to have more complex analytics implementations. Many use a mix of platforms that may be more time-consuming to maintain and more challenging to integrate.

The solution to moving faster while retaining customization and control centers on embedded analytics. With this type of solution, teams can build and embed analytics quickly while still leveraging creativity, developing a competitive edge, and incorporating time-saving AI features.

“Today's most effective teams are using a more strategic approach that combines the speed of a platform with the control of a custom build. It's a hybrid model where developers and analytics professionals work together using a single, unified platform. Data analysts and product managers can use an embedded analytics platform's visual, no-code UI to explore and secure data, build queries, and design the core charts and dashboards. This ensures the data is accurate and the insights are relevant to business questions. It also dramatically speeds up the initial creation process by removing the need for a developer to write code just to define a chart.”



**Steve Lewis**

Senior Product Manager at Sisense



# Methodology and demographics

Sisense commissioned an independent market survey from UserEvidence of 412 professionals involved in building analytics into a software application or adding analytics into their product or solution. The research sample was vendor-neutral and did not target Sisense or UserEvidence customers, although they were not excluded from participating.

Respondents' roles were primarily split between technical product managers (29%), engineering managers and team leads (25%) software engineers (23%), and CTOs and VPs of engineering (15%) (Figure 0.1).

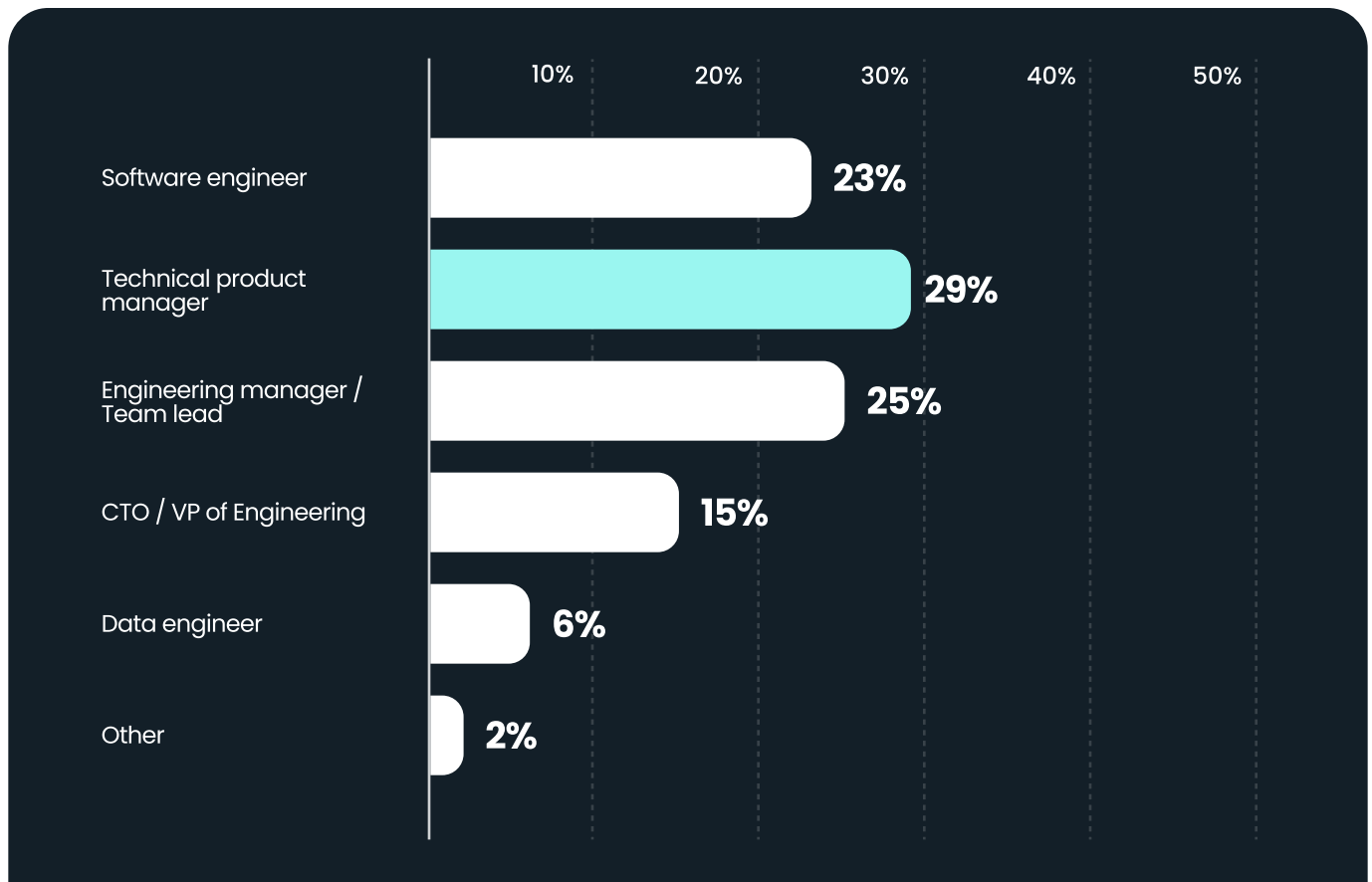
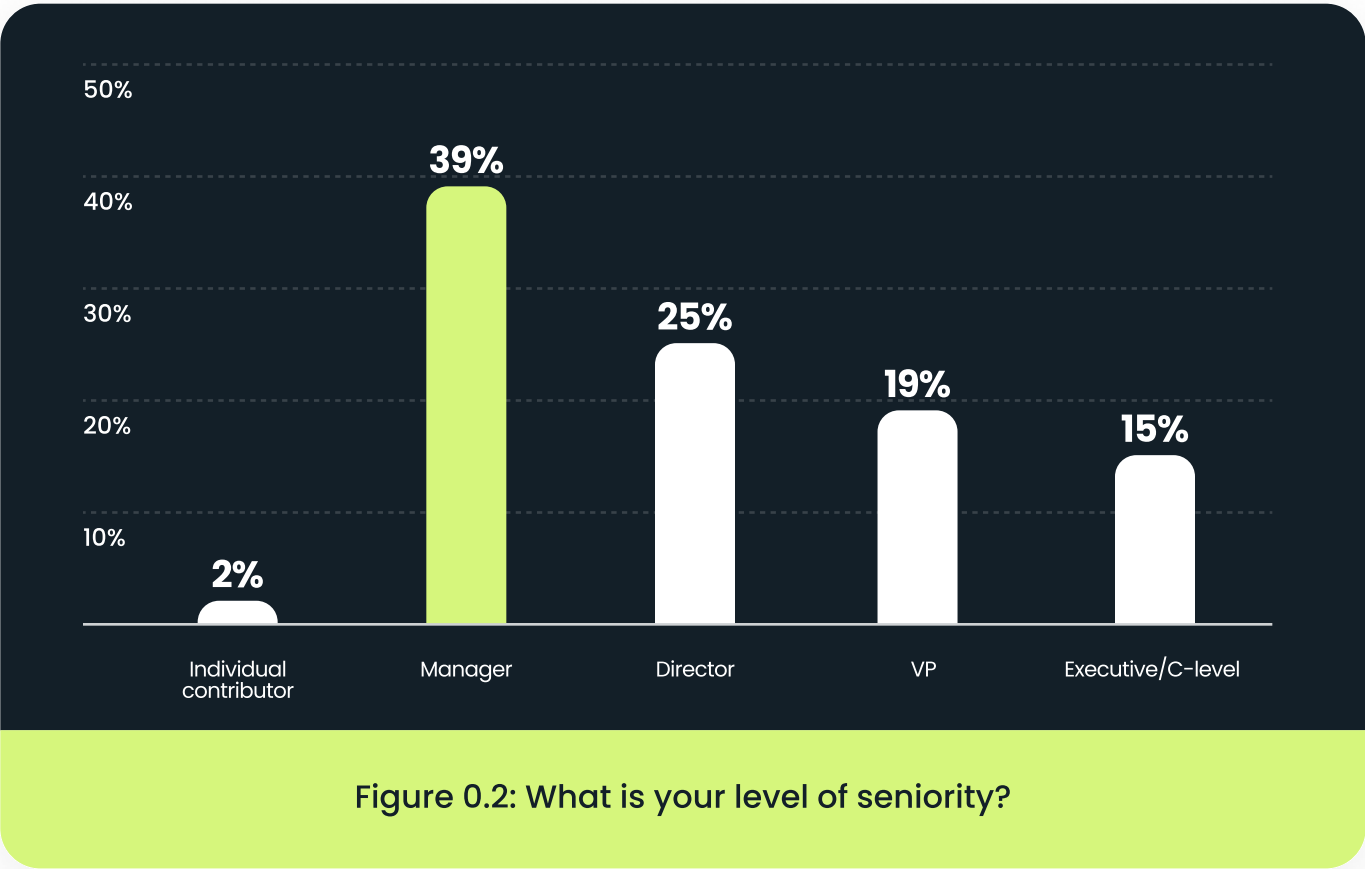


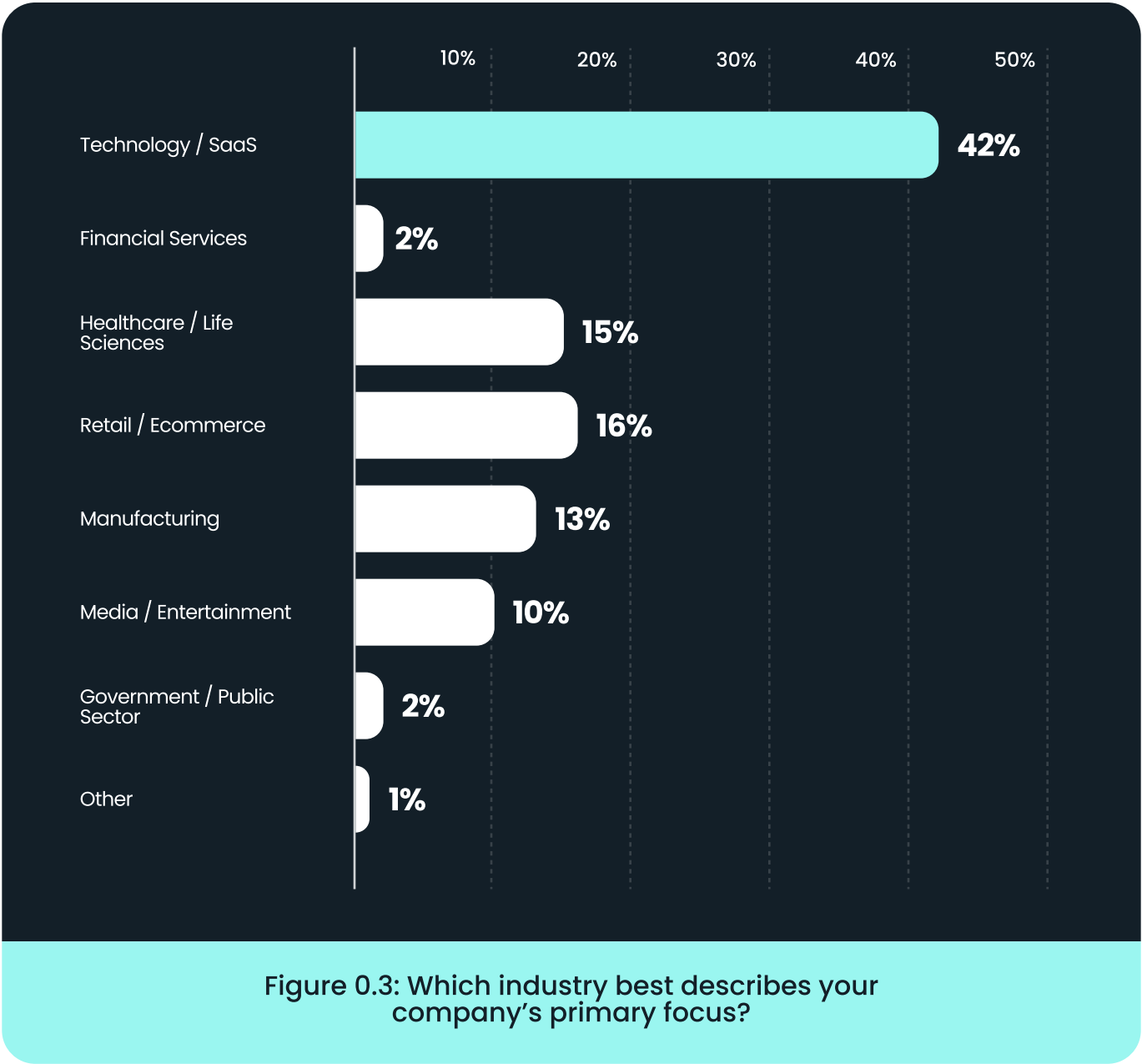
Figure 0.1: Which of the following best describes your current role?



Only 2% of respondents were individual contributors. The majority held manager (39%), director (25%), VP (19%), and C-level (15%) roles (Figure 0.2).

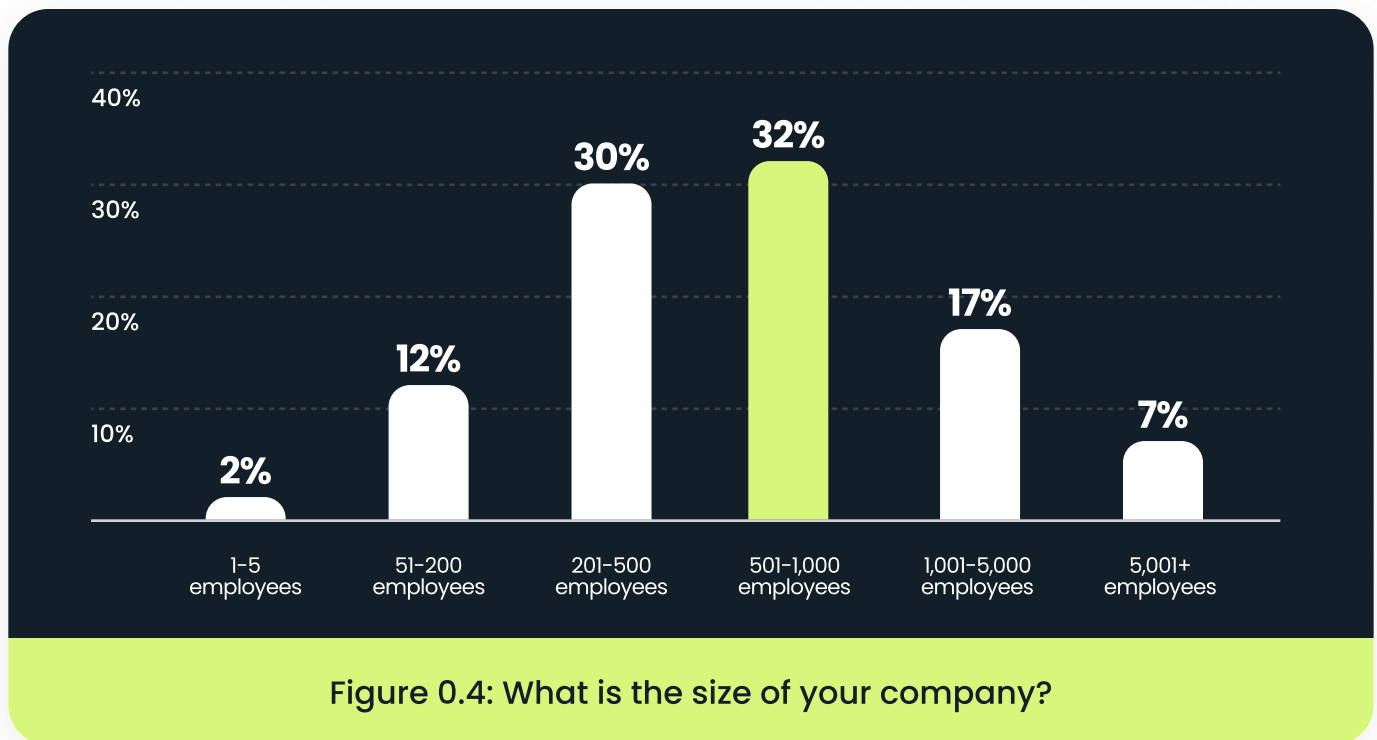


Respondents represented seven industries: technology / SaaS (42%), retail / ecommerce (16%), healthcare / life sciences (15%), manufacturing (13%), media / entertainment (10%), financial services (2%), and government / public sector (2%) (Figure 0.3).





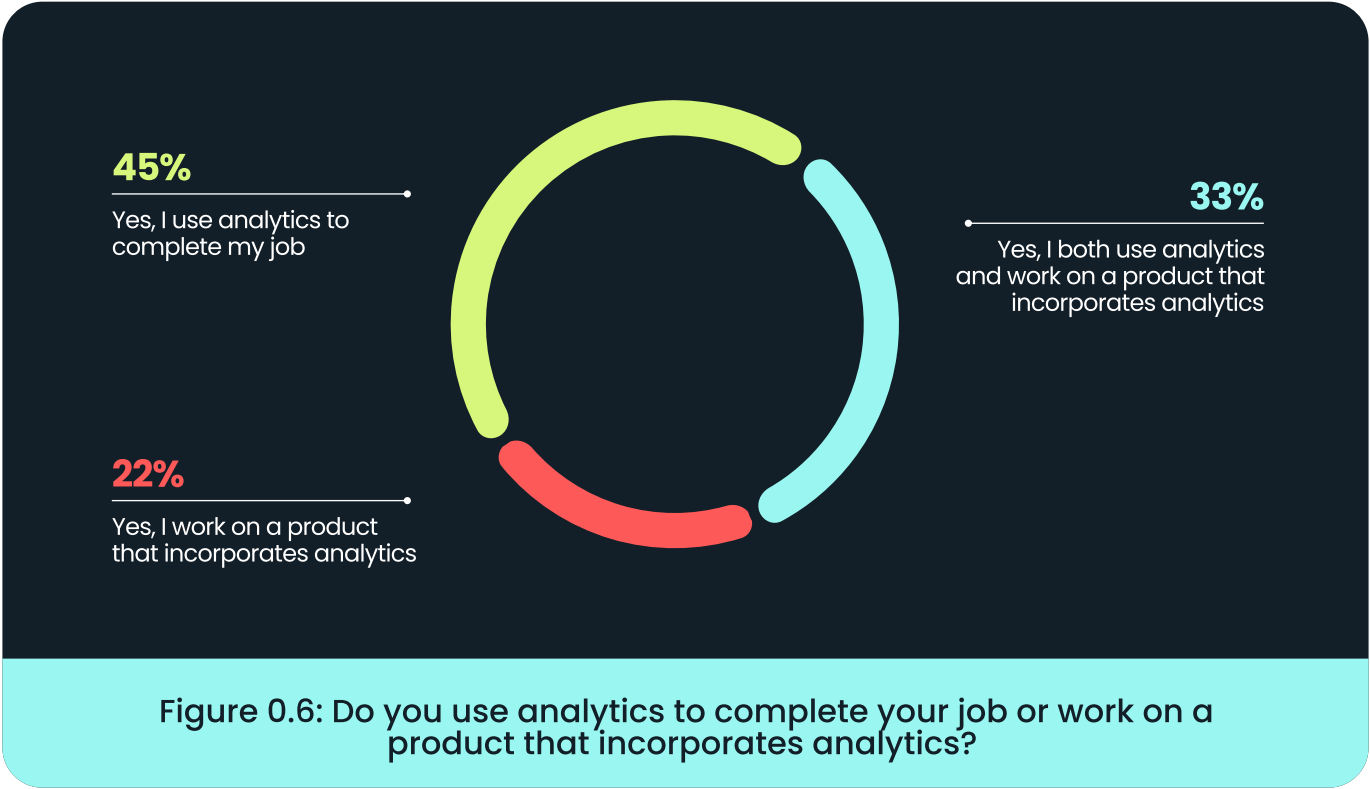
Respondents' company sizes varied from one to more than 5,000 employees. The largest cohorts were 501-1,000 employees (32%), 201-500 employees (30%), and 1,001-5,000 employees (17%) (Figure 0.4).



Over half (51%) of respondents reported that their product involves both internal and external applications. 31% said their product is a customer-facing product or platform, while 17% said their product is an internal application (Figure 0.5).



When asked whether they use analytics to complete their job or work on a product that incorporates analytics, most reported using analytics to complete their job (45%) (Figure 0.6).



# About UserEvidence

UserEvidence is a software company and independent research partner that helps B2B technology companies produce original research content from practitioners in their industry. All research completed by UserEvidence is verified and authentic according to their research principles: Identity verification, significance and representation, quality and independence, and transparency. All UserEvidence research is based on real user feedback without interference, bias, or spin from our clients.

## UserEvidence research principles

These principles guide all research efforts at UserEvidence—whether working with a vendor’s users for our Customer Evidence offering, or industry practitioners in a specific field for our Research Content offering. The goal of these principles is to give buyers trust and confidence that you are viewing authentic and verified research based on real user feedback, without interference, bias, and spin from the vendor.

### **1** Identity verification

In every study we conduct, UserEvidence independently verifies that a participant in our research study is a real user of a vendor (in the case of Customer Evidence) or an industry practitioner (in the case of Research Content). We use a variety of human and algorithmic verification mechanisms, including corporate email domain verification (i.e., so a vendor can’t just create 17 Gmail addresses that all give positive reviews), and pattern-based bot and AI deflection.



## 2 Significance and representation

UserEvidence believes trust is built by showing an honest and complete representation of the success (or lack thereof) of users. We pursue statistical significance in our research, and substantiate our findings with a large and representative set of user responses to create more confidence in our analysis. We aim to canvas a diverse swatch of users across industries, seniorities, personas—to provide the whole picture of usage, and allow buyers to find relevant data from other users in their segment, not just a handful of vendor-curated happy customers.

## 3 Quality and independence

UserEvidence is committed to producing quality and independent research at all times. This starts at the beginning of the research process with survey and questionnaire design to drive accurate and substantive responses. We aim to reduce bias in our study design, and use large sample sizes of respondents where possible. While UserEvidence is compensated by the vendor for conducting the research, trust is our business and our priority, and we do not allow vendors to change, influence, or misrepresent the results (even if they are unfavorable) at any time.

## 4 Transparency

We believe research should not be done in a black box. For transparency, all UserEvidence research includes the statistical N (number of respondents), and buyers can explore the underlying blinded (de-identified) raw data and responses associated with any statistic, chart, or study. UserEvidence provides clear citation guidelines for clients when leveraging research that includes guidelines on sharing research methodology and sample size.



# About Sisense

Sisense is the leading AI-first analytics platform as a service (AnPaaS) that democratizes data access, empowering developers, app builders, and business users to embed actionable insights into their products and workflows. Our developer-forward approach enables enterprises of all sizes to transform complex data into accessible, actionable experiences.

With a complete suite of no-, low-, and pro-code tools, Sisense simplifies data preparation, uncovers deep insights, and seamlessly embeds analytics into applications, catering to both technical and non-technical users. The Sisense flexible analytics platform, composed of Fusion Embed, Sisense Cloud, and Compose SDK, enables customers like Seismic, USA Swimming, and Air Canada to infuse actionable insights into their customer experiences.

Founded in Israel in 2004, Sisense maintains ISO 27701 privacy and ISO 27001 information security management certifications. For more information, visit [www.sisense.com](https://www.sisense.com).

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