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# Connect and Extend Applications

Your Platform for smarter integration.



Insights from an independent global survey of 730 senior IT professionals showing that the right PaaS provider is the foundation for digital transformation.

Longitude

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# Introduction: The Foundation for Digital Transformation

Genuine digital transformation forever alters the way a business uses data and serves its customers. The survey analysis by Longitude Research shows that cloud is an enabler of these benefits: six in ten companies are already managing and storing data in the cloud, and another 35 percent plan to make the move in the next one to three years.

Integration will be key to this transition. It marries new cloud-based systems with existing on-premises systems in order to build the foundations for digital transformation.

“Digital transformation is having a huge impact on the integration space,” says Kamil Litman, VP software engineering, GE Digital. “Think about how the enterprise IT landscape has changed in recent years. We used to run monolithic ERPs [enterprise resource planning] on our single mainframe systems that handled end-to-end business processing.

“Nowadays, there are multiple best-of-breeds—and somebody needs to connect them. And this is where integrations come in ... optimizing the flow of information from engineering to supply chain, from supply chain to manufacturing, from manufacturing to services.”

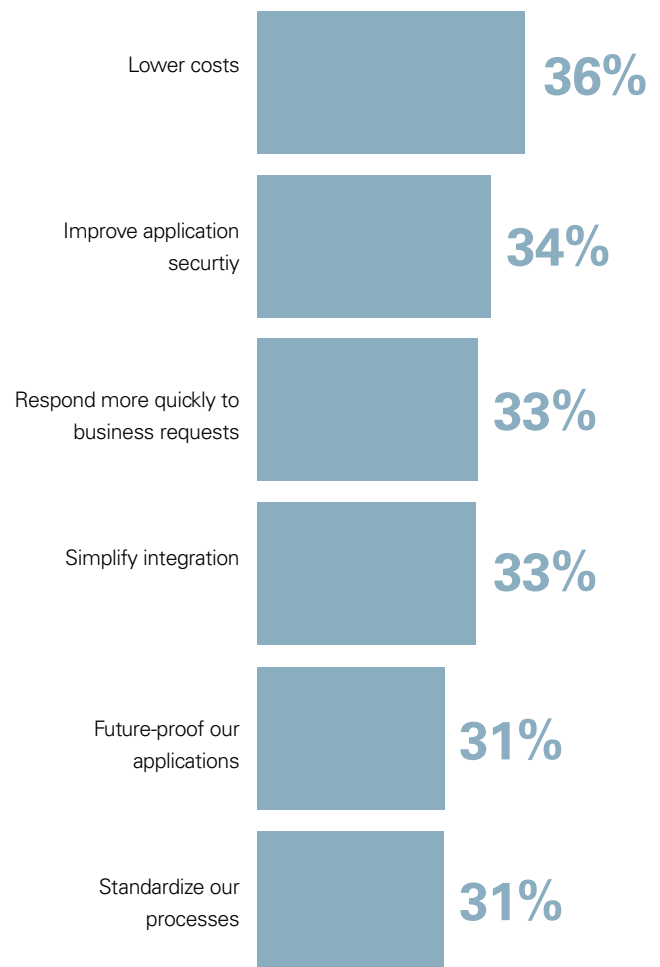
Integration’s significance is clearly understood by companies in the research, with many prioritizing it as a way to lower costs across the board.

Cloud-mature organizations, meanwhile, are focusing on using integration performance gains to enable digital transformation. These include being able to respond more quickly to business requests and connect software as a service (SaaS) with on-premises applications.

For companies in fast-moving industries, integration is seen as a vital way to future-proof their applications portfolio.

Whatever the priority, how effective is integration in the cloud at meeting it? And how have businesses that have a lot of data in the cloud achieved their integration goals? We will explore these questions here.

## Motivations for integration (total\*)



\*All the respondents in the sample who were qualified to answer this question.

# Defining Integration's Benefits

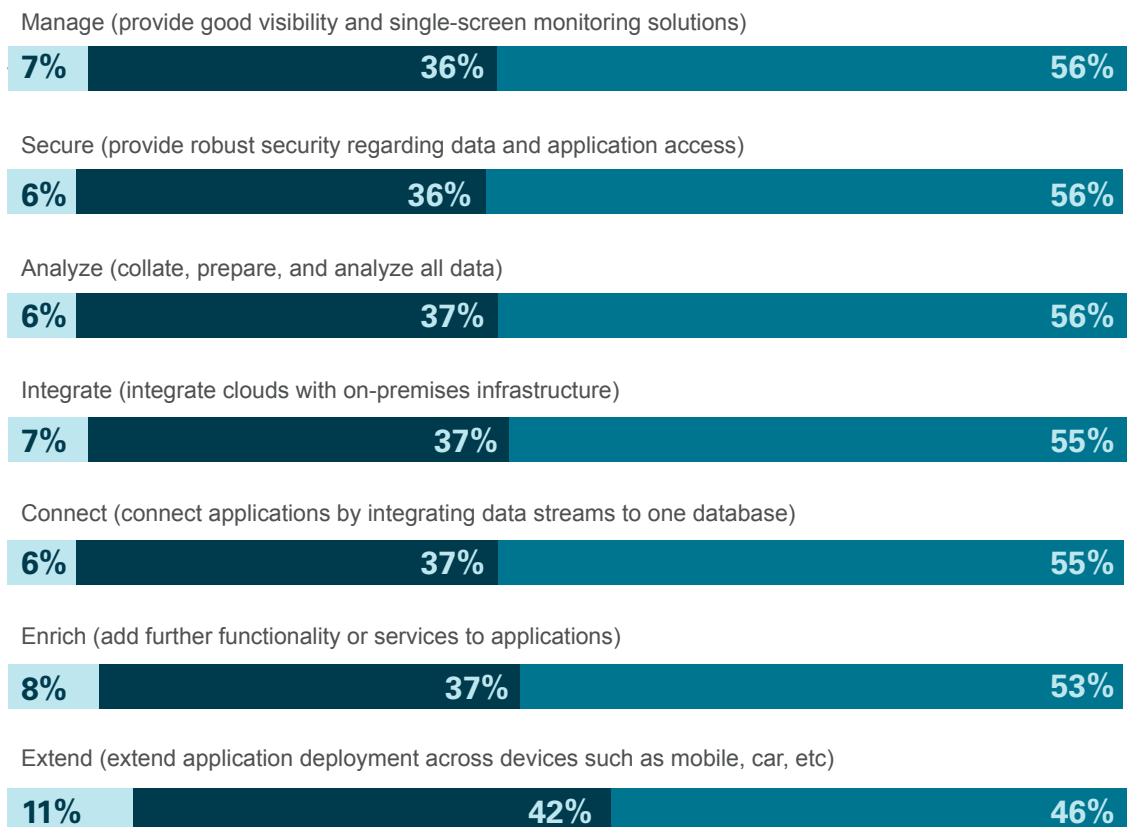
In the past, cloud integration—moving data between legacy systems and SaaS—was laborious.

Time-consuming and requiring the expertise of developers, the process made it a struggle to map data between applications, and there were serious knowledge gaps in specific message structures and data models. This has been exacerbated by the proliferation of new, niche SaaS applications that function as islands of information – isolated from each other and from on-premises applications.

The research reveals that companies are overcoming many of these barriers by adopting PaaS, which offers effective low-code automation and integration processes. For those that have driven integration via a PaaS solution, the benefits have been substantial.

More than half of the businesses say they are seeing improvements in critical integration areas: Connecting applications, databases, datastreams, and analytics; integrating cloud applications with on-premises infrastructure; and adding further functionality or services to applications.

## Cloud integration impact (total\*)



●  
Worsened

●  
Little/no impact

●  
Improved

Please rate the extent to which you think using PaaS will impact / has impacted your application development in each of the following areas. Respondents selected their answer on a seven-point scale.

\*All the respondents in the sample who were qualified to answer this question.

# Focusing on Platform as a Service

The research shows that PaaS is the most viable way to connect existing on-premises applications with cloud apps and services—whether they are focused on enterprise resource planning, customer experience, human capital management, or other key operational areas.

## Integration automated.

Leading PaaS platforms can consolidate complex toolsets, differing applications, and disparate platforms into a single fully integrated solution.

Key to this is the range of prebuilt connectors, integration flows, and templates that jumpstart the connection of existing apps, devices or databases in the cloud whether they are modern or legacy sales, marketing, human capital management, or finance systems.

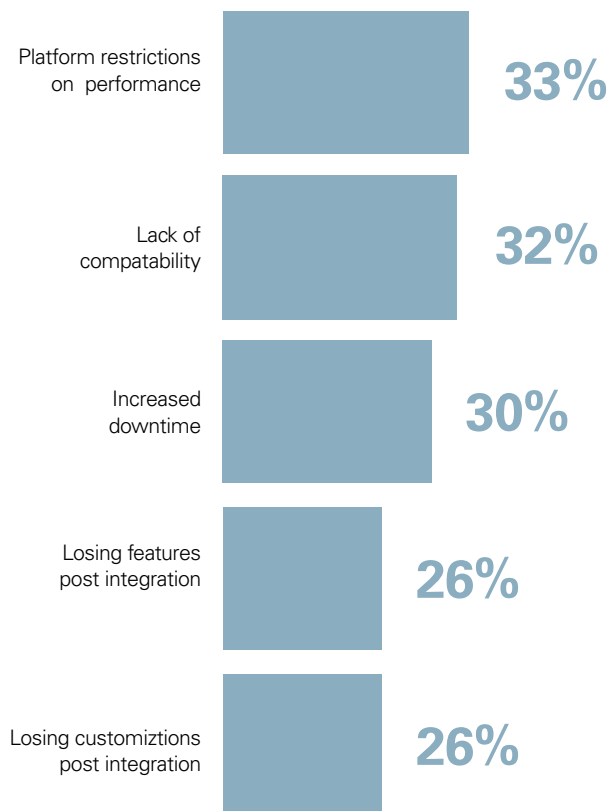
Better still, advanced PaaS solutions offer a point-and-click environment. This allows for cloud and on-premises application integration without having to have deep knowledge of the underlying technical details of specific apps or platforms. It means that companies can exploit prebuilt integration assets as soon as they move into the cloud.

These powerful features are underpinned by robotic process automation and cognitive operations. The solutions use artificial intelligence and machine learning to provide automated guidance and more engaging—even predictive—experiences for users.

## Customization optimized.

One concern for companies is the potential loss of customized processes that have been developed specifically for them. They worry that moving to the cloud will lose them key functionality and waste the significant time, resources and budget that were spent on the customization.



**Key PaaS challenges (total\*)**

This echoes the concerns that accompanied SaaS during its early days. Companies believed that their suites of applications were too customized for SaaS to replicate and that moving into the cloud would limit them to those feature sets offered by the SaaS solution.

Customizations—whether of SaaS or on premises—do cause disruption during application upgrade cycles and maintenance, and this is exacerbated by limited cross-application process orchestration and data flows. Companies need a 360-degree view of information and integrated data.

SaaS is helping by simplifying business processes and requirements and creating more value: there is less downtime, faster upgrades, and greater reliability—all at a lower cost.

The research suggests that the same will be true for businesses integrating their applications with the cloud via PaaS. Instead of reduced features and tools, it is having the opposite effect, liberating businesses from outdated, overengineered customized solutions and replacing them with systems that offer greater efficiency and flexibility.

Those companies that feel tied to customized legacy systems can also consider a hybrid strategy. This keeps customized legacy systems on-premises, with new features and toolsets available in the public cloud. For these companies, this is the best of both worlds.

PaaS platforms should be feature-rich, with providers constantly innovating to ensure that new features and abilities are rolled out regularly. They can also be expected to introduce new processes based on customer feedback, which means that issues—such as cloud-mature companies' concerns about losing key features post integration—are addressed and resolved directly.

Continuous innovation in the cloud, partnered with these broader, more comprehensive PaaS platforms, can help companies with different levels of cloud maturity—from those with significant on-premises infrastructure, through those with hybrid strategies and all the way to cloud-mature companies at the other end of the spectrum. According to the research: 56 percent of companies say that their ability to prepare, and analyze data has improved as a result of PaaS.

\*All the respondents in the sample who were qualified to answer this question.

## Case Study: Calix

### The opportunity.

Leading broadband systems and software provider Calix wanted to automate its manual processes in order to cut time to market and increase productivity.

It operates in a highly competitive global market, and in order to compete against companies twice its size it had to increase its speed and agility; the way to do this was by integrating its highly heterogeneous technology infrastructure.

### How the cloud has helped.

Calix is using the Oracle Integration Cloud for hybrid application integration, process automation, and SaaS applications. This has transformed the company's capacity to connect and extend its SaaS and on-premises applications—including Oracle E-Business Suite and third-party SaaS applications.

The firm is using pre-built templates from Oracle Integration Cloud to speed up its time to business value by connecting and extending SaaS and on-premises applications six times faster.

### The results.

Calix successfully integrated multiple SaaS and on-premises business systems from Oracle, Adobe, Salesforce, and Workday using a common platform. This has simplified the company's IT training and support, accelerated its time to market, and improved its governance.

**"It helps us to connect with all the different applications seamlessly. It's really helping us to deploy these processes rapidly to the business"**

Ravi Gade  
Applications IT Director  
Calix

In addition to the sixfold acceleration in time to business, Calix's business application access for new employees is now 90 percent faster, and low- and no-code process automation and pre-built integrations have increased the productivity of its digitized business operations by 50 to 80 percent.

Source: <https://www.oracle.com/corporate/pressrelease/calix-oracle-cloud-platform-021516.html>

## Business controlled.

The research reveals that, far from stripping the C-suite of control, cloud integration is giving companies more control on two key fronts.

First, advanced PaaS platforms not only offer dramatically simplified integration solutions to underpin processes and procedures, they also allow companies to leverage the data that integration produces. For instance, cloud-based data visualization and business intelligence services are helping managers to identify and share emerging trends and strategic insights via intuitive dashboards.

Second, to drive business agility and continuous innovation, some PaaS providers are focusing on process automation tied closely to integration. This enables companies to accelerate time to value by eliminating laborious manual process where possible, keep track of progress against service-level agreements, and make process improvements

## Apps accelerated.

The research shows that companies' priorities for app migration into the cloud focus on big data and customer mobile apps, with both requiring modern and scalable app-development architecture.

In the past, the app-development process was relatively simple—a single programming language supported by a single application server, which was in turn integrated with a single database.

This has evolved beyond recognition, with multiple languages used at the front- and back-ends, and different types of database, resulting in considerable fragmentation. And with architecture built on top of different deployment platforms, it adds up to a highly complex infrastructure that can only be serviced by qualified personnel.

A PaaS platform helps to manage this. It offers complete lifecycle management through dedicated application programming interface (API) portals that simplify development while improving the performance of application services. Such portals also enable developers to create, manage and exchange APIs securely with each other and third parties.

This unified, streamlined platform is designed to meet the demands of developers and managers who require 360-degree visibility.



# Conclusion: One PaaS Platform to Rule the Cloud

The majority of companies are clear about the benefits they'll experience by making the transition into the cloud, so adoption of integrated PaaS solutions will continue to grow in the future.

Companies need to ensure they employ the right PaaS provider—one that can offer suitable levels of integration, support and pricing flexibility, and is capable of providing their foundation for digital transformation.

PaaS services have a growing range of new and innovative integrated features. These could be customizable to each company's specific needs, offering more efficiency and cost savings than any traditional IT infrastructure.

Indeed, the research suggests that businesses that continue to expand their SaaS without a strong PaaS foundation to connect and extend their business will find themselves struggling to keep up with new business initiatives. Digital transformation will come first to those who embrace PaaS now.

For further information,  
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