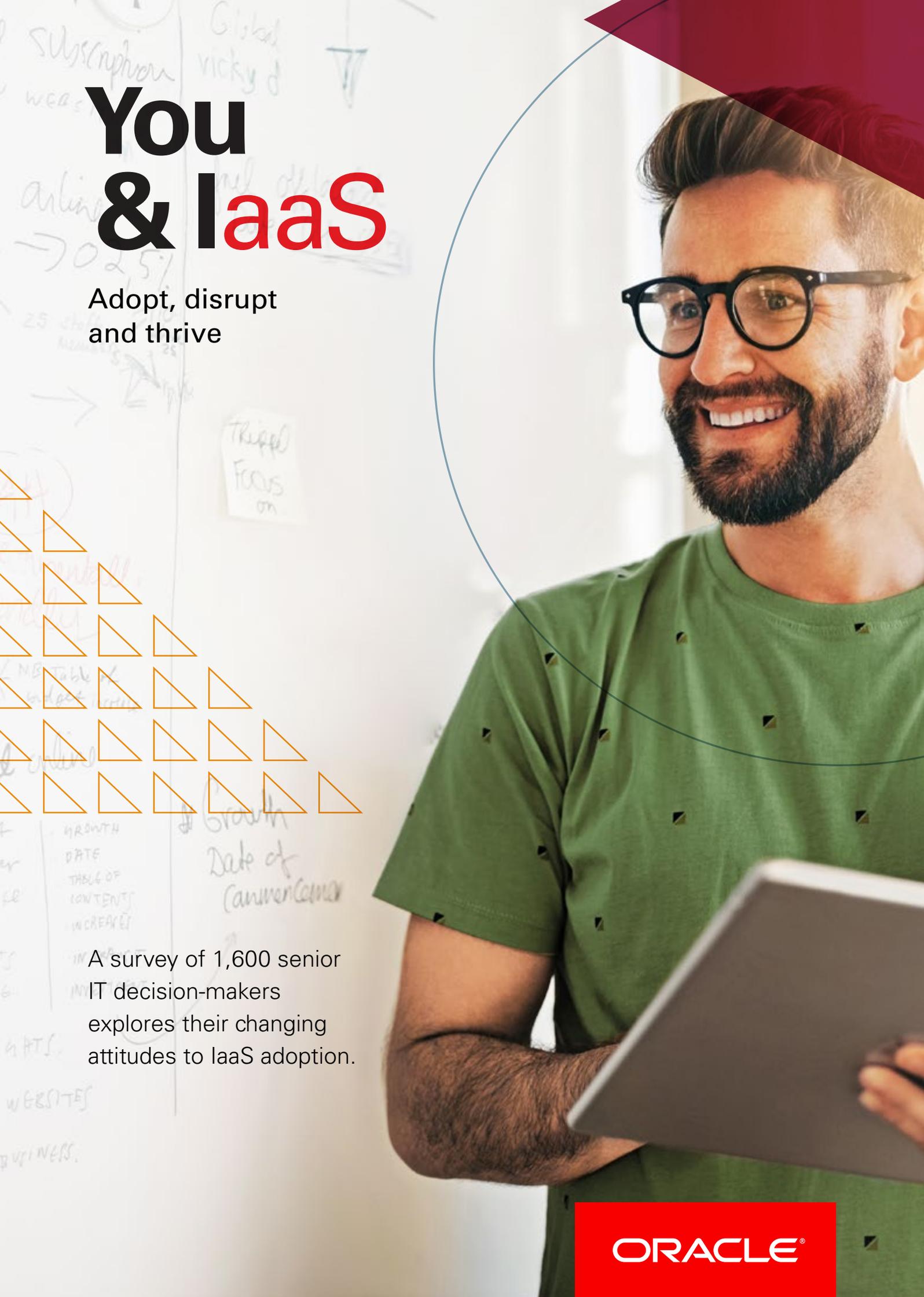


You & IaaS

Adopt, disrupt
and thrive

A survey of 1,600 senior
IT decision-makers
explores their changing
attitudes to IaaS adoption.



ORACLE®

You & IaaS

The Pulse Survey was conducted in July and August 2017 and captured the views of 1,600 senior IT decision-makers in businesses based in the UK, Germany, Italy, Saudi Arabia, Australia, Malaysia, Singapore and South Korea.



Chart 1: Proportion of IaaS adopters among businesses

IT departments are under constant pressure to do more with less. Now, as well as keeping the lights on, they are expected to deliver projects that create real business value. As more businesses use digital technologies to disrupt their markets, this pressure is intensifying.

Infrastructure as a service (IaaS) is evolving against this background. Initially, it caught CIOs' attention because it helped them cut costs. Today, IaaS underpins organizations' agility in the face of disruption and drives innovation-led growth.

Oracle's second IaaS Pulse Survey shows continued growth in the adoption of IaaS, as well as an increase in positive attitudes towards the technology. These are driven by the growing maturity of existing cloud deployments and the new generation of services coming to market. In the three months since the first Pulse Survey, companies have become convinced that IaaS is an integral part of a progressive IT strategy. Meanwhile, experienced IaaS users are seeing the cumulative benefit of their investments.

The research reveals a strong message: businesses are flocking to IaaS, and non-adopters will rapidly find themselves falling behind.

> **Over two-thirds see enterprise-wide IaaS as fundamental to progressive cloud strategies—up 8 percent in the past three months**

> **Seven in ten say that IaaS lets organizations be more innovative—an increase of 10 percent since the last Pulse Survey**

> **The impact of the IaaS skills shortage is growing**

> **Security is the biggest issue for businesses migrating to IaaS**

1. The IaaS edge: new opportunities for productivity and innovation

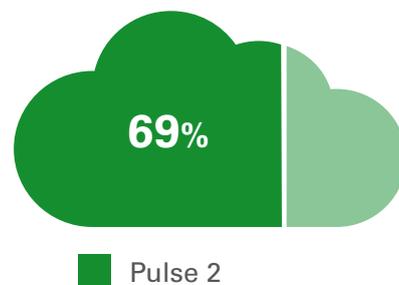
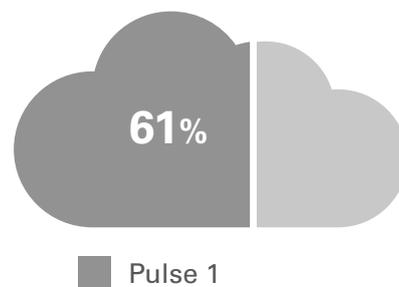
IaaS is quickly becoming the default choice for enterprise cloud environments.

Businesses choosing to deploy IaaS are in the clear majority and their numbers are still continuing to grow: the first Oracle Pulse Survey found that 86 percent of businesses had adopted IaaS; today, that figure is 94 percent. Growth has been particularly strong in Europe: adoption has risen by 17 percentage points in both the UK and Germany.

Over two-thirds (69 percent) of those surveyed say they believe that any progressive cloud strategy should now include enterprise-wide IaaS—a rise of eight percentage points in just three months.

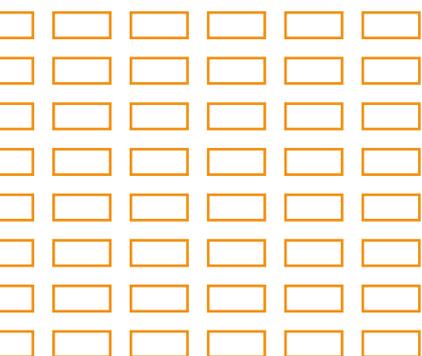
Over two-thirds (69 percent) of those surveyed say they believe that any progressive cloud strategy should now include enterprise-wide IaaS.

Chart 2: Proportion who say that enterprise-wide IaaS is a crucial part of a progressive cloud strategy



Any progressive cloud strategy should now include enterprise-wide IaaS

In the early days of IaaS, businesses adopted it as a competitive differentiator: cloud services provided businesses with an edge over competitors that used on-premise technology, by giving them faster time to value and cutting costs. Now, businesses are using IaaS for different reasons: they are adopting it to keep up with the bulk of companies that have already moved their infrastructure to the cloud. Two-thirds of companies surveyed (66 percent) say that businesses not investing in IaaS will increasingly find themselves struggling to keep pace with those that are.



Adding value

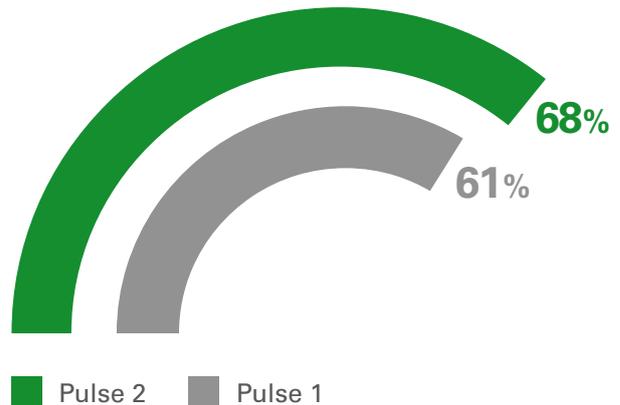
Among the companies that have adopted IaaS, a significant proportion are experiencing business-wide benefits in addition to those mainly felt by the IT department.

Of those surveyed, over half (56 percent) report increased productivity after adopting IaaS—the most commonly reported benefit.

These productivity gains are particularly felt in the IT department, where staff are finding that they are freed from managing IT infrastructure. Nearly half of (46 percent) companies using IaaS report that the technology gives these staff more time or scope to concentrate on projects that add business value.

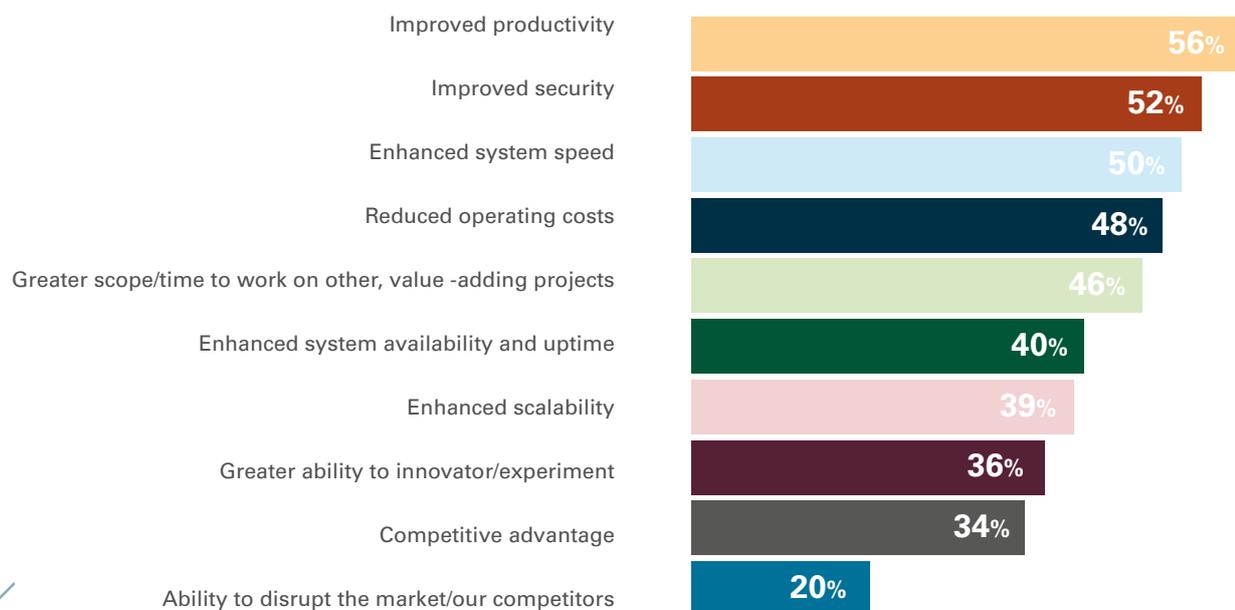
As well as enabling staff to concentrate on higher-value work, IaaS continues to help IT departments cut costs: 68 percent of businesses say that using IaaS has significantly reduced their ongoing maintenance. While the same proportion say that IaaS has cut their time to deployment for new products and services.

Chart 3: IaaS and enhanced agility



“Moving to IaaS has significantly cut our time to deployment”

Chart 4: Proportion of users who have experienced the following benefits



Beyond this, IaaS is helping the bottom line elsewhere: 34 percent of businesses say that IaaS has brought them competitive advantage, while 36 percent have achieved greater ability to innovate.



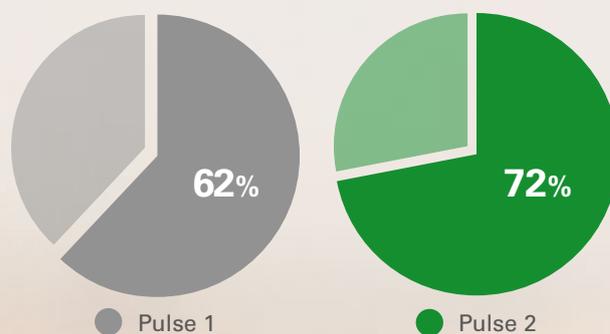
72 percent agree that IaaS makes it easier for organizations to innovate—a rise of 10 percentage points since the last Pulse Survey.

Enabling innovation

The rise of digital transformation projects means that IT departments are now tasked more than ever with helping to drive the business forward, becoming a profit center, and enabling disruption.

As a result, IT departments are now judged on their innovation, and it is a persistent theme throughout the survey: 72 percent agree that IaaS makes it easier for organizations to innovate—a rise of 10 percentage points since the last Pulse Survey. One in five says that adopting IaaS has made it easier for them to disrupt the market.

Chart 5: Proportion who agree that IaaS makes it easier to innovate



IaaS makes it easier for businesses to innovate

Growing with the business

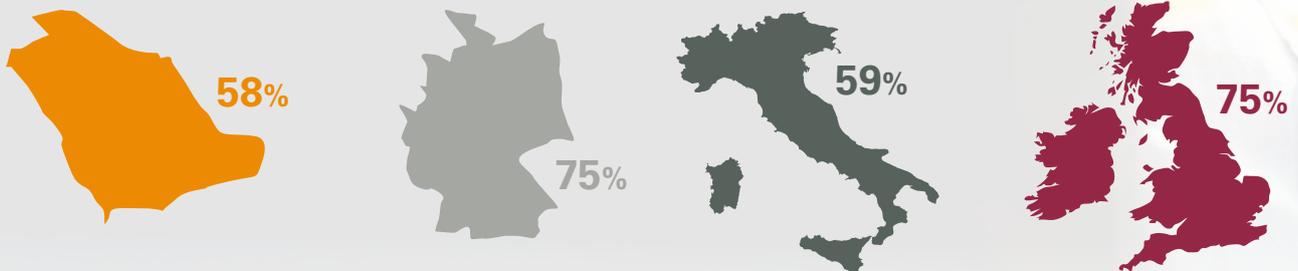
The longer businesses have had their IaaS deployment in place, the more likely they are to be enjoying greater benefits.

Just 26 percent of recent adopters (those who began adopting IaaS within the past year) say that it has given them greater ability to innovate, but that figure rises to 44 percent of experienced users. Similarly, 29 percent of recent adopters say that IaaS has given them a competitive advantage, compared with 40 percent of experienced users.

EMEA is positive—and the UK and Germany stand out

Most businesses surveyed across the four EMEA countries agree: any progressive cloud strategy should now contain enterprise-wide IaaS, including three-quarters of those in both the UK and Germany.

Chart 6: Across EMEA, businesses are convinced of the utility of IaaS



Any progressive cloud strategy should now include enterprise-wide IaaS

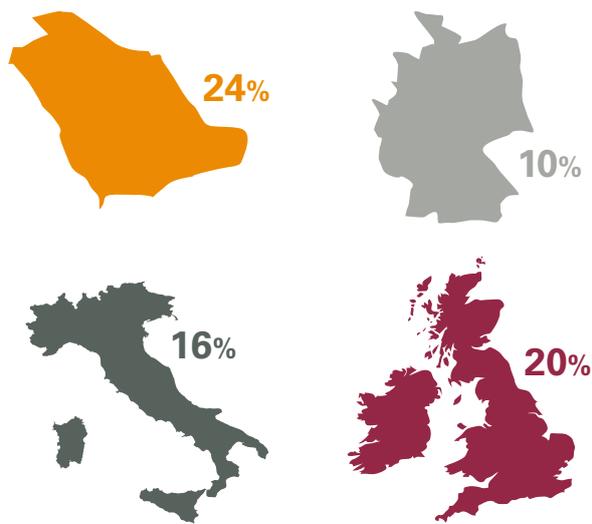
● Saudi Arabia ● Germany ● Italy ● UK

UK and German organizations are feeling the business benefits of IaaS most strongly. Improved security was reported by 53 percent of UK enterprises and 56 percent of their German counterparts, while 38 percent of those in the UK experience enhanced system availability and uptime, along with 43 percent of those in Germany—the highest figures in the region.

The majority of EMEA organizations also agree that migration to IaaS is no more challenging than any other server changeover, and that the technology can compete with on-premises infrastructure on crucial criteria: customization, scalability, speed and availability.

It is in Saudi Arabia that businesses are more likely to favor their in-house systems. Nearly a third (30 percent), for example, feel that the scalability of IaaS falls behind that of on-premises solutions, compared with 15 percent or less of businesses in the UK, Italy and Germany. And about a quarter say that IaaS cannot match the customization offered by their on-premises systems, compared with just 10 percent of German organizations.

Chart 7: How thoughts on customization differ across EMEA



IaaS platforms can't match the customization we have with our on-premises systems

● Saudi Arabia ● Germany ● Italy ● UK

However, like their peers elsewhere in EMEA, companies in Saudi Arabia, clearly recognize the benefits of adopting IaaS: 61 percent believe that moving to IaaS has significantly cut their ongoing maintenance costs, and 60 percent say that businesses not investing in IaaS will increasingly struggle to keep pace with businesses that are.

2. Overcoming security and skills challenges

While approaches to data security will often be linked to which IaaS provider a company uses, less than one-third of businesses view it as a major issue: only 32 percent cite it as one of their top three challenges when rolling out IaaS.

Data security was also a significant issue for businesses in the earlier Pulse Survey, and the number of companies citing it as their top challenge has risen by six percentage points. It is possible that recent high-profile security breaches, such as the WannaCry and Petya/NotPetya ransomware attacks, as well as the impending GDPR deadline, have raised awareness and increased concerns.

Yet businesses are likely to find that the benefits of moving to IaaS outweigh the challenges—particularly when it comes to security. More than half (52 percent) report improved security after they adopted IaaS, while 63 percent agree that IaaS services provide best practice security for enterprise architecture.

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The skills gap

As IaaS adoption grows and the technology matures, the availability of staff with specialist skills is being outstripped by demand. More than a quarter (28 percent) of companies say that IT skills shortages have been one of their top issues in rolling out IaaS—up from 21 percent three months ago.

In fact, in that time the skills gap has risen from being the third most problematic issue around IaaS to the second.

Bringing the outside in

In what is likely to be a symptom of the skills shortages, a notable proportion of businesses feel that they could have benefited from more outside expertise with IaaS deployments.

Asked what they would do differently if they were to begin their IaaS deployment afresh, businesses most commonly agree they would 'work with external advisors to better understand the technology' (33 percent).

Companies' willingness to engage with third parties on IaaS underscores the significance of such deployments to the businesses. That they would be prepared to spend more on rolling out IaaS suggests they believe its potential value to be considerable. The use of external advisors may also reflect businesses' interest in having independent insight into the range of service providers and tools currently on the market, as well as the functionality that will be available in future.



Chart 8: What respondents would do differently

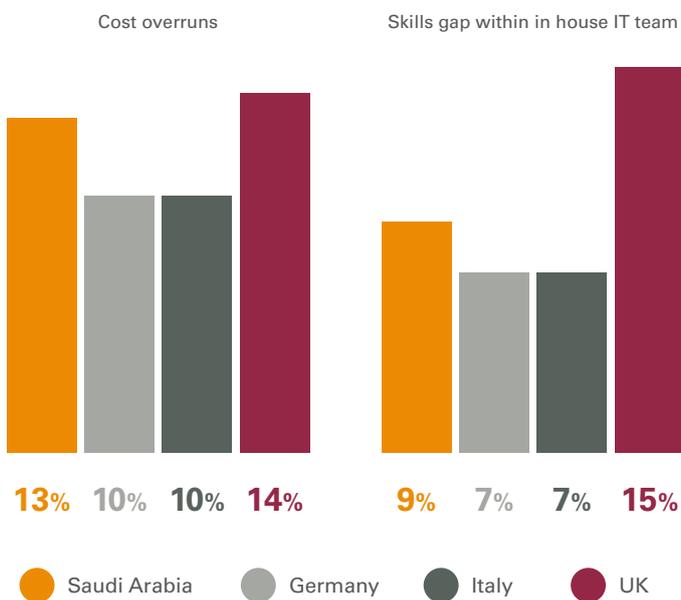


Overcoming stumbling blocks

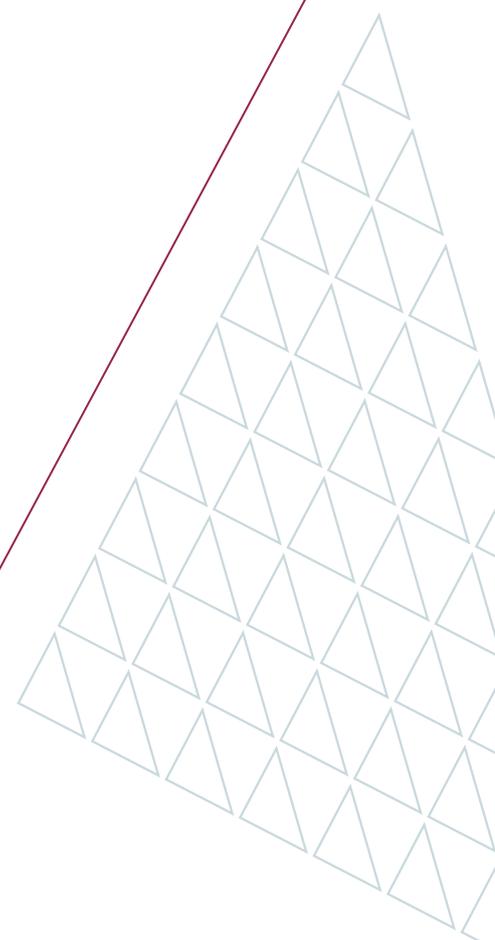
Among EMEA businesses, we see differences in where they feel IaaS problems are most likely to be found: some say they lie with the user; others with the supplier.

Larger percentages of UK businesses cite in-house problems as being among their greatest challenges when they adopt IaaS. For example, 15 percent say that a skills gap in the company has been their biggest issue, while 14 percent cite cost overruns. In Germany and Italy, those figures are 7 percent and 10 percent, respectively. As in the UK, the biggest challenge experienced in Saudi Arabia has been cost overruns (13 percent).

Chart 9: Adoption challenges in EMEA



For German businesses, on the other hand, vendors are more likely to cause IaaS issues than they are in the UK: 9 percent say that the lack of maturity of vendors' IaaS deployment offerings has caused their greatest problems, compared with three percent in the UK. Meanwhile, 9 percent say they've had difficulties with vendor lock-in, against 2 percent in Italy.



Next step: automation

IT departments have been using IaaS as a way to free staff from the repetitive work of maintaining hardware and updating software, but they could be missing a trick when it comes to the IaaS adoption process itself.

Nearly a quarter of businesses (22 percent) say that if they were to start their IaaS deployment from scratch, they would use automated migration tools. Oracle's Ravello, for instance, enables organizations to seamlessly migrate their existing data center workloads to cloud platforms without the need for any costly or risky modifications.

For most IaaS adopters, the migration process was smoother than they anticipated: 58 percent found the migration easier than expected and over half (54 percent) say that migration to IaaS is no more challenging than any other server changeover, and can be far easier. These numbers are likely to grow as automated migration tools, which help ease deployments, become more prevalent.



Conclusion: The next generation of benefits

The rapid pace of change in attitudes to IaaS underlines how quickly it has become a key part of enterprise IT. Even in the past three months, adoption levels and positive attitudes toward IaaS have grown.

IaaS was originally seen as a way to reduce overall spend and shift budgets from capital expenditure to operating expenditure, and there is no doubt that it has done both. But it is striking how businesses have grown to appreciate the wider benefits of IaaS—from greater productivity to freeing staff from routine maintenance in order to work on more value-adding projects.

Now, with IaaS deployments becoming suitably mature, early adopters are beginning to see a whole new tier of benefits: they have become more able to disrupt the market and drive innovation. And with boards greenlighting more and more digital transformation projects, the near future is likely to see IaaS becoming an essential part of CIOs' toolkits.

Yet even those with the most IaaS experience cannot afford to sit back: as the Pulse Survey shows, the pace of change is constant. Those that fall behind in their use of IaaS risk falling behind their rivals, too. New cloud tools are continually entering the market, offering those that adopt them the chance to put their businesses ahead of the competition once again.

Find out more

Read our [dummies guide to IaaS](#) and get started on your cloud journey

Discover [how you & IaaS can save you money when you move to the cloud](#)

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