



Couchbase

# ARE ORGANIZATIONS REALIZING THEIR DIGITAL REVOLUTIONS?



2018 CIO Survey Report

# Table of Contents

Executive Summary .....	3
Part 1: Is the digital revolution soaring or stalling? .....	4
Part 2: Organizations' digital progress .....	5
Part 3: What is driving digital? .....	8
Part 4: The data challenge .....	11
Part 5: Consequences .....	18
Part 6: What does success look like? .....	19
Part 7: Conclusion .....	25





# ARE ORGANIZATIONS REALIZING THEIR DIGITAL REVOLUTIONS?

**A Couchbase research report: Investigating whether data strategies are designed to encourage innovation and true transformation**

## **Executive summary**

As more industries realize the potential of digital transformation, and those organizations that have developed truly revolutionary experiences open up a clear lead over their competitors, this Couchbase report investigates enterprises' reaction to this digital revolution, including: whether the revolution is succeeding in their industry; the progress organizations have made to date; what factors and parts of the business are driving digital transformation; how organizations' use of data is helping or hindering them in meeting their ambitions; and what the consequences will be for enterprises that can't adapt.

Specifically, the report shows that digital disruption is accelerating with: 85 percent of digital decision-makers say that disruption in their industry has accelerated over the past 12 months, and 37 percent say it has accelerated "rapidly." Respondents also still agree on digital innovation's ultimate aim: to give customers and end users a truly unique experience. Indeed, a quarter of enterprises have either revolutionized the end-user experience or transformed it to become an industry leader. While the majority are still less than halfway towards meeting their digital transformation goals, meaning there is a risk they will be left behind by rapidly accelerating transformation, the findings show that businesses that can keep pace with disruption can deliver real transformation.

In the majority of organizations, digital transformation is driven by the IT department with other business functions taking a back seat. At the same time, the majority of projects are reactive in nature – responding to competitor activity or changes in legislation instead of original ideas from within the business. There are also clear risks with how organizations are approaching digital projects: 52 percent say they are so fixated on the need for digital transformation that they risk rushing into projects that won't produce the results they need.

Enterprises are still facing challenges with using data to support digital projects. Most have had digital projects fail, reduce in scope, or suffer delays because their legacy database couldn't support them, while many are reducing their ambitions or adopting new technology more slowly due to a reliance on legacy technology. This may be scaring organizations away from digital initiatives: 95 percent of respondents agree that digital transformation can seem an insurmountable task – with around two-thirds saying this is often or always the case.



On average, enterprises spent \$24.15 million on digital innovation and transformation projects in the last 12 months.

Ultimately, enterprises still fear that a failure to embrace digital transformation will result in stagnation and failure – both at an organizational and a personal level. The majority believe that enterprises will go out of business or be absorbed by a competitor in less than four years if they can't keep up with digital innovations, while teams would also face being fired if digital projects don't succeed. The next 12 months is likely to see increased pressure on digital transformation teams: 86 percent of respondents say that the next 12 months will be a critical period for businesses to either adapt to providing digital services, or accept that they are now less relevant.

Part 1: Is the digital revolution soaring or stalling?

In 2017, Couchbase established that, despite the challenges they face, enterprises are pursuing digital transformation. This is still the case in 2018, but one significant question is whether organizations are able to keep up with the pace of transformation, or whether a digital revolution is leaving them behind. Eighty-five percent of digital leaders say that disruption in their industry has accelerated over the past 12 months, with 37 percent saying it has accelerated “rapidly” (figure 1).

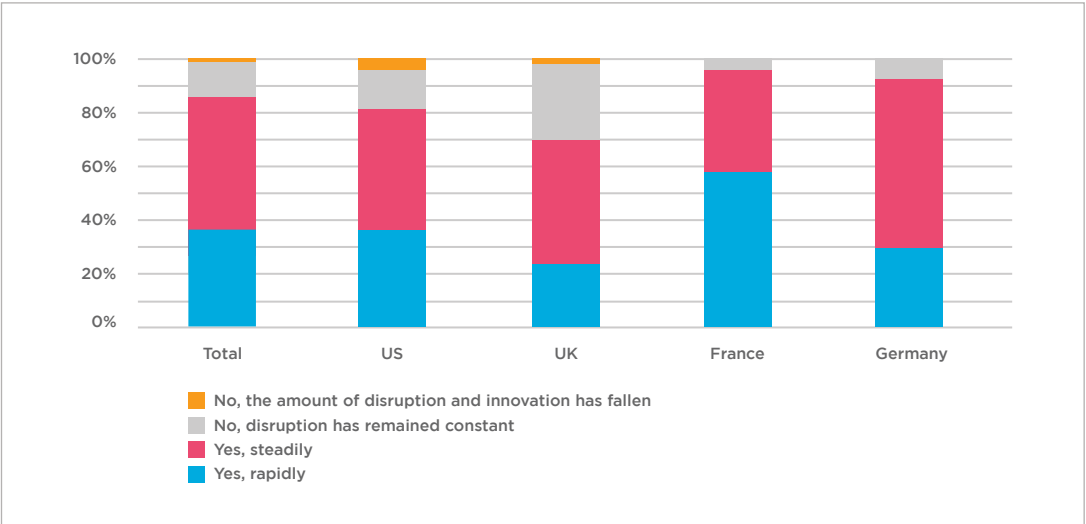


Figure 1: Do respondents believe that disruption in their industry has accelerated over the past 12 months?

This accelerated disruption is being matched with increased spending. On average, enterprises spent \$24.15 million on digital innovation and transformation projects in the last 12 months (figure 2), and plan to spend \$27.64 million in the next 12 months (figure 3) – representing a budget increase of more than 14 percent.

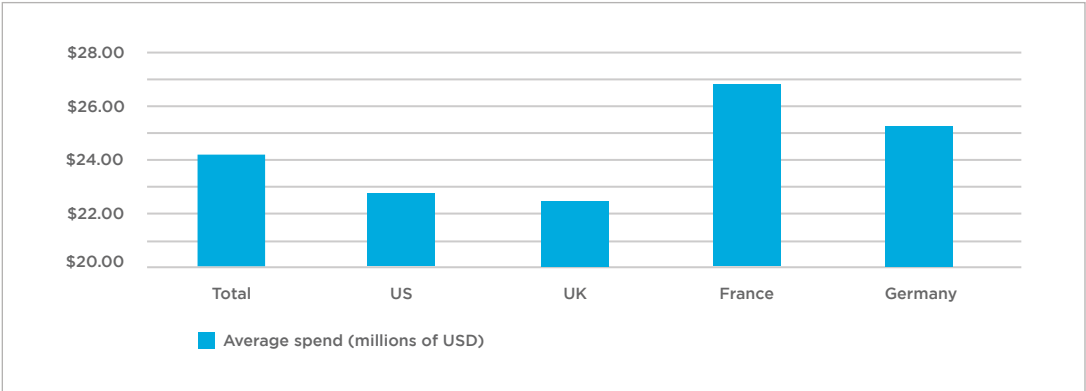


Figure 2: Average spend on digital innovation and transformation projects in the last 12 months



79 percent of respondents agree that, while the revolutionary potential of digital projects is often talked about, most of the time they only deliver incremental improvements.

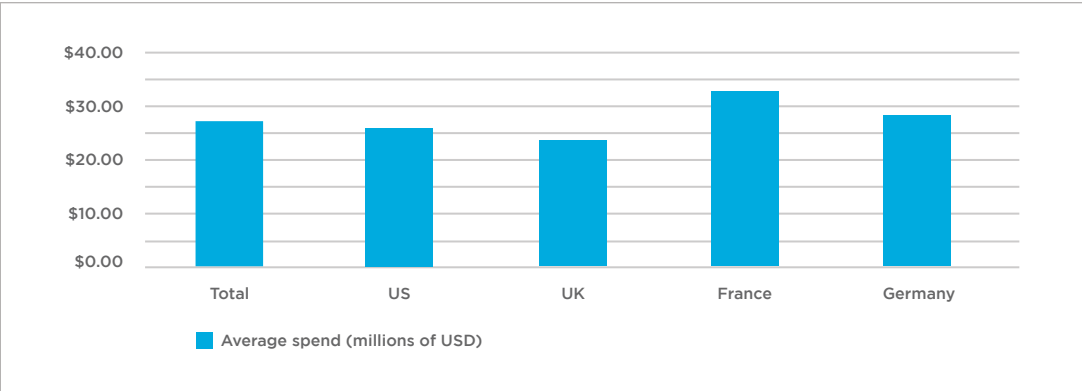


Figure 3: Average planned spend on digital innovation and transformation projects in the next 12 months

Despite accelerated disruption and growing budgets, many organizations' digital transformation goals are still far off: 53 percent say they are less than halfway to achieving their transformation goals, and 13 percent are less than one-fifth of the way to their goals (figure 4).

While this rapid disruption can seem a challenge, it is also an opportunity. With digital transformation a continuous process, rather than one with a set destination, enterprises that can keep pace with accelerating disruption can deliver revolutionary results.

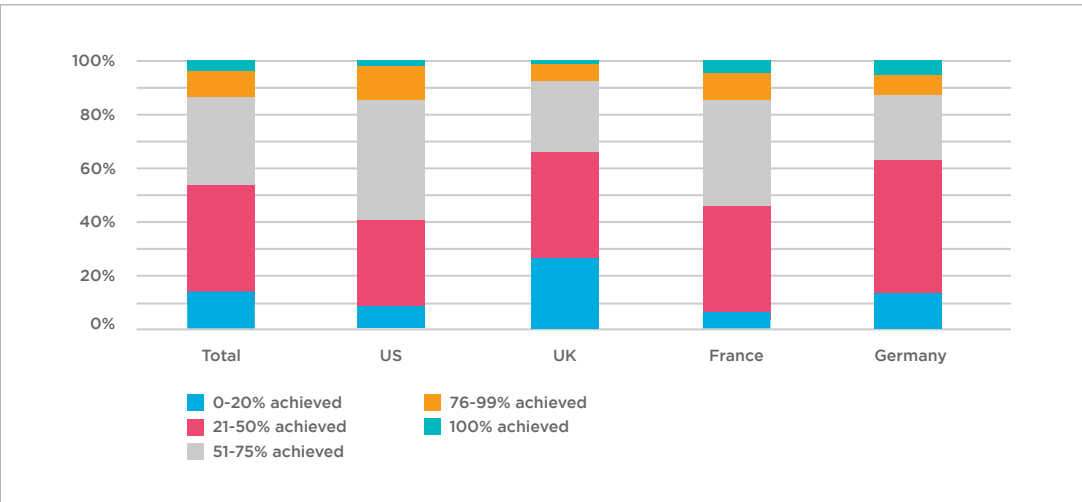


Figure 4: How far along respondents believe their organization is in meeting current digital transformation goals

Part 2: Organizations' digital progress

Digital leaders are in almost unanimous agreement that the ultimate aim of digital transformation should be to give customers and end users a truly unique experience (figure 5). However, this objective is not always reflected in reality: 79 percent of respondents agree that, while the revolutionary potential of digital projects is often talked about, most of the time they only deliver incremental improvements (figure 6).



99 percent have made at least incremental improvements (compared to 96 percent in 2017).

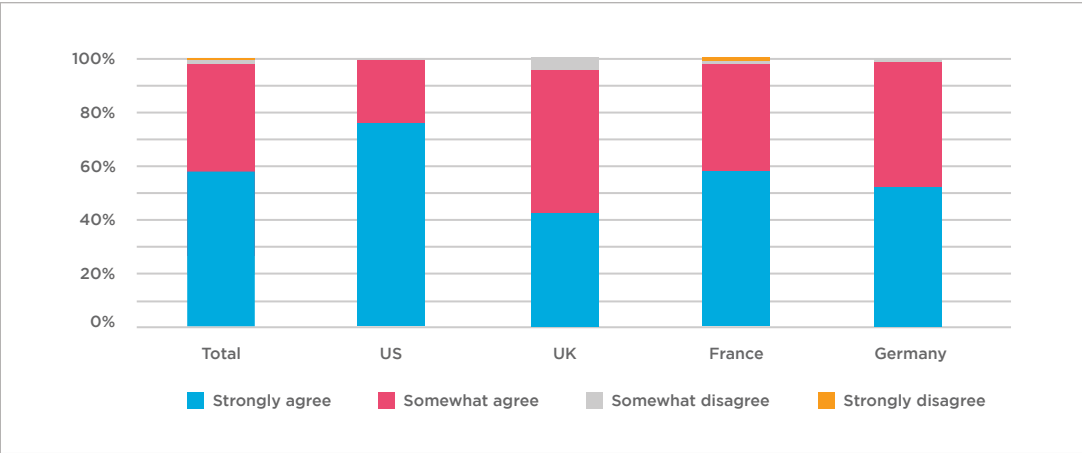


Figure 5: Do respondents agree that the ultimate aim of digital transformation should be to give customers and end users a truly unique experience?

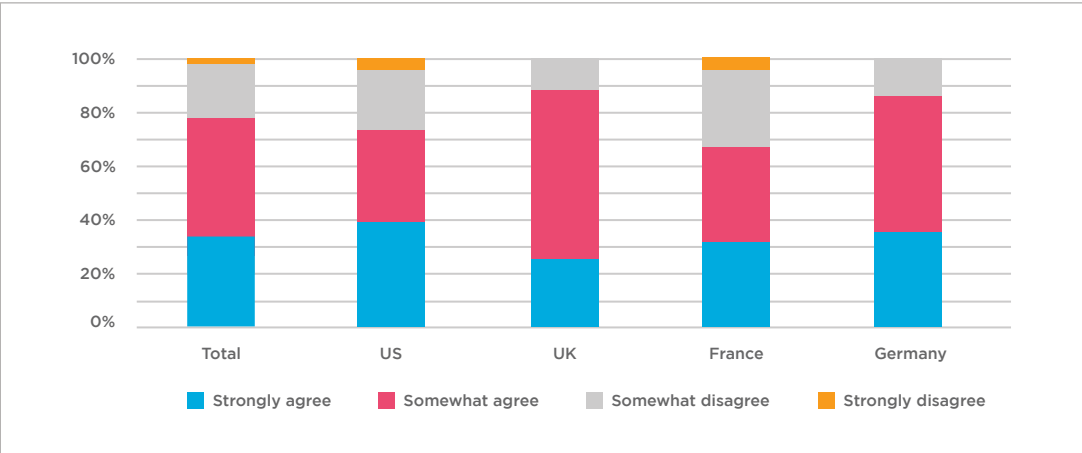


Figure 6: Do respondents agree that while the revolutionary potential of digital experiences is often talked about, most of the time they only deliver incremental improvements?

Despite this, enterprises are making more progress in transforming the end-user experience than they were in 2017: 99 percent have made at least incremental improvements (compared to 96 percent in 2017), and 25 percent have either transformed the experience to become an industry leader or completely revolutionized the experience to the extent it's unique in their industry (compared to 15 percent in 2017) (figure 7).



There is less attention paid to areas that also benefit the Massively Interactive Enterprise, such as worker-facing experiences (47 percent) and machine-to-machine services (37 percent).

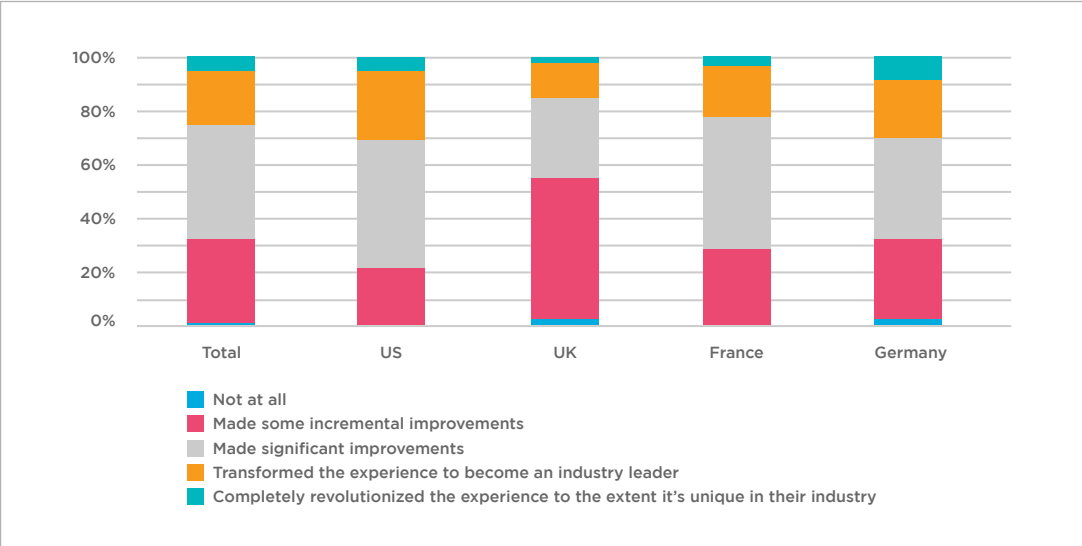


Figure 7: To what extent have organizations been able to transform the end-user experience through digital innovation projects in the past year?

One question raised with digital transformation is where organizations should focus their efforts. We are entering the era of the Massively Interactive Enterprise, where digital experiences can transform every part of a business – from customer experience to business functions such as sales and marketing, HR, and finance, and even logistics and manufacturing. Currently, respondents are focusing their digital transformation efforts on customer-facing experiences (66 percent) and business processes such as logistics (62 percent). There is less attention paid to areas that also benefit the Massively Interactive Enterprise, such as worker-facing experiences (47 percent) and machine-to-machine services (37 percent) (figure 8).

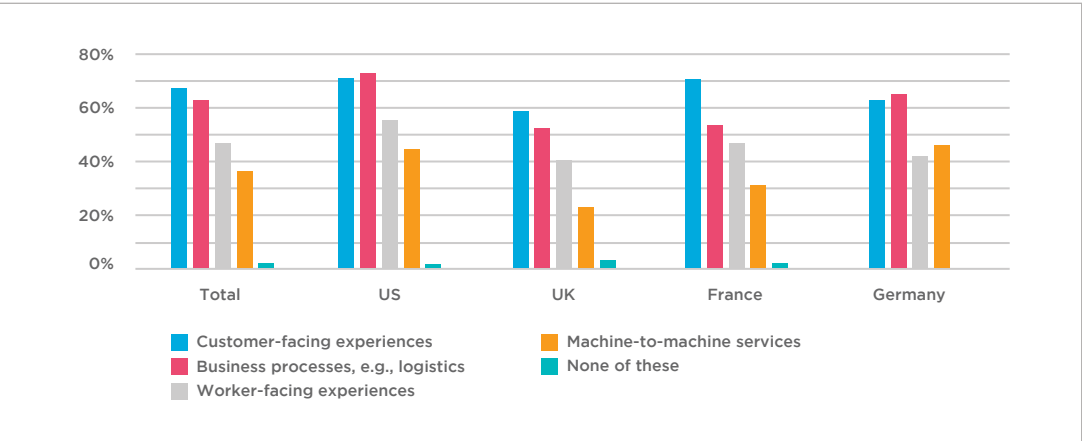


Figure 8: Where in the organization are respondents focusing their efforts on digital transformation projects?



In 2018, efficient working practices have dropped noticeably: the most-reported benefit is improved customer experience (56 percent of respondents), followed by more efficient working processes (53 percent) and increased worker productivity (49 percent).

There is also a small shift in the benefits enterprises see from digital transformation projects. In 2017, the most-reported benefit was more efficient working processes, identified by 62 percent of respondents, followed by improved customer experience (56 percent) and increased worker productivity (44 percent). In 2018, efficient working practices have dropped noticeably: the most-reported benefit is improved customer experience (56 percent), followed by more efficient working processes (53 percent) and increased worker productivity (49 percent) (*figure 9*).

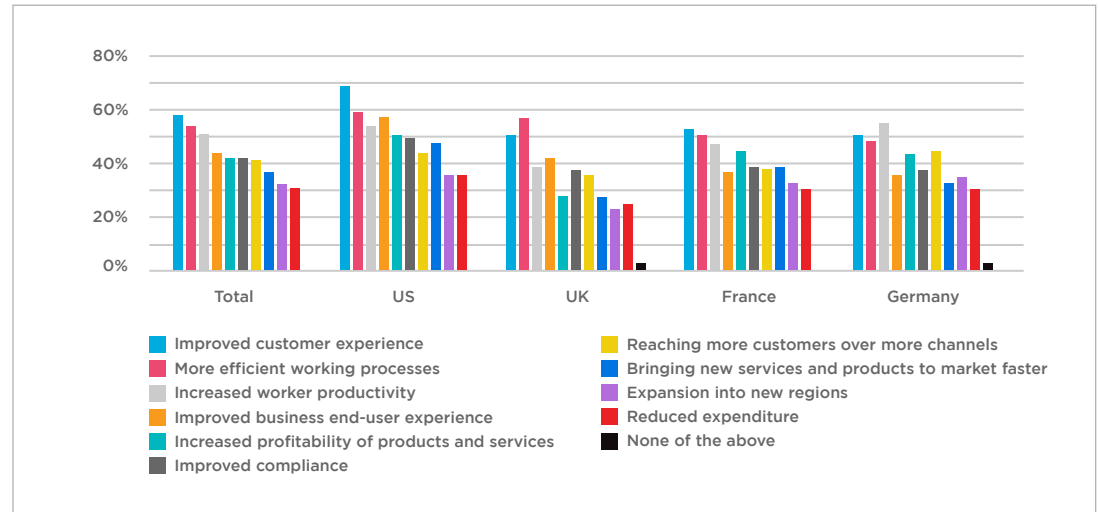


Figure 9: Benefits respondents can tangibly show their organization has realized from digital projects in the last 12 months

For the Massively Interactive Enterprise, recognizing that there is opportunity for transformation across the business, as opposed to focusing on the most obvious digital projects, has the potential to deliver the greatest benefits across the entire organization. This in turn will increase the chances of the enterprise delivering on the ultimate aim of digital transformation, thus joining that 25 percent of truly transformational organizations.

### Part 3: What is driving digital?

Digital transformation is increasingly a strategic concern for an organization. The potential to completely transform the business and revolutionize the experience of customers and workers means that all business functions should have a hand in suggesting and supporting digital projects. There is also the question of why an enterprise is pursuing digital transformation. There is a good chance that a project created through an original idea within the business will have greater potential to deliver a revolutionary, unique service than one created in response to competitors' own advances.

In the majority of surveyed organizations, the IT function drives digital transformation the most: 76 percent of respondents, when asked which area of the business had driven digital transformation the most over the past five years, ranked IT first, second, or third. The next most influential area was business executives – such as the CEO or board – which was ranked first, second, or third by 47 percent. Other business functions were some way behind these, suggesting that transformation is still driven by a narrow range of business areas in most cases (*figure 10*).



The most-cited driver was responding to advances made by competitors, chosen by 35 percent of digital leaders.

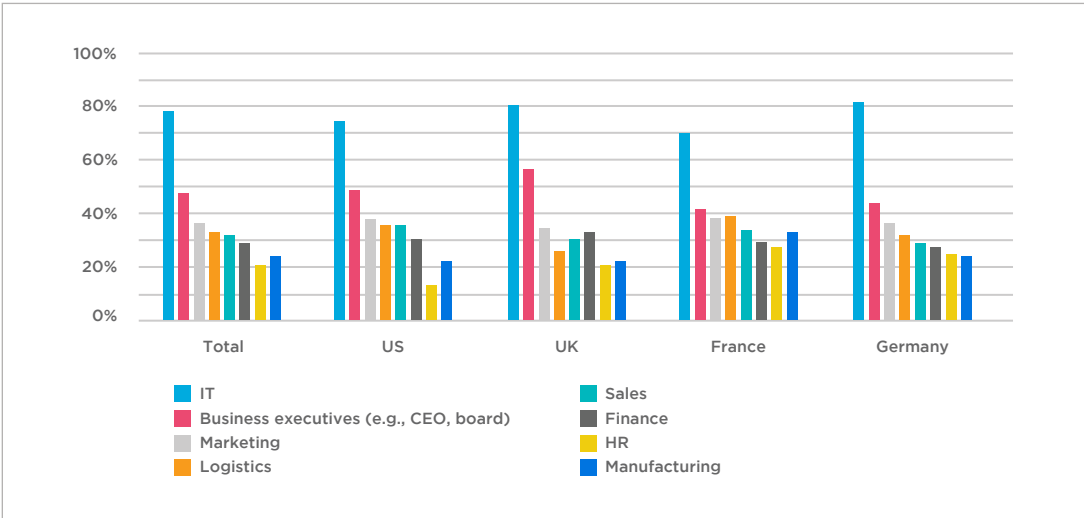


Figure 10: Which areas of organizations have driven digital transformation the most in the last five years?

Asked to identify the primary driver for digital transformation in their organization in the past five years, respondents' answers were more varied. The most-cited driver was responding to advances made by competitors, chosen by 35 percent of digital leaders. After this came responding to changes in regulation (23 percent). An original idea from the business was identified by 20 percent – just ahead of pressure from customers for new services (19 percent) (figure 11).

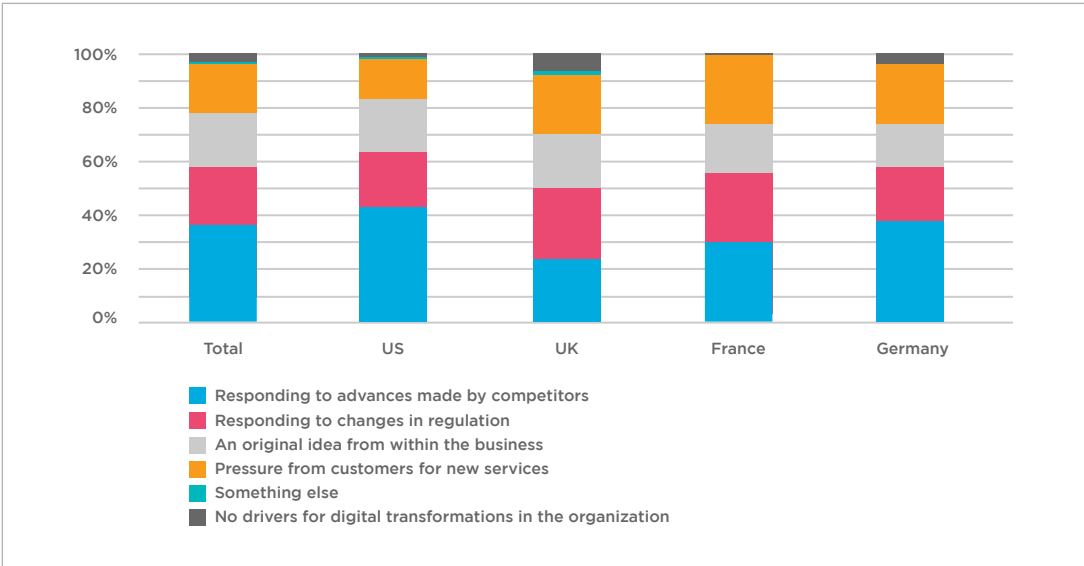


Figure 11: What has been the primary driver behind organizations' digital transformation in the last five years?

One potential reason organizations are not pursuing more unique, revolutionary transformation projects is that teams aren't given the freedom and resources to pursue their own, ideally more creative, digital projects. However, 60 percent of digital leaders say their organization supports teams or individuals taking time to pursue new, potentially revolutionary digital transformation projects on their own initiative – and indeed, that workers are actively encouraged to pursue projects. A further 34 percent say workers are free to pursue their own projects as long as time allows (figure 12).



The greatest risk in digital transformation is that organizations develop a fixation on digital transformation for its own sake: deciding that in an environment of accelerating disruption, any transformation is better than no transformation.

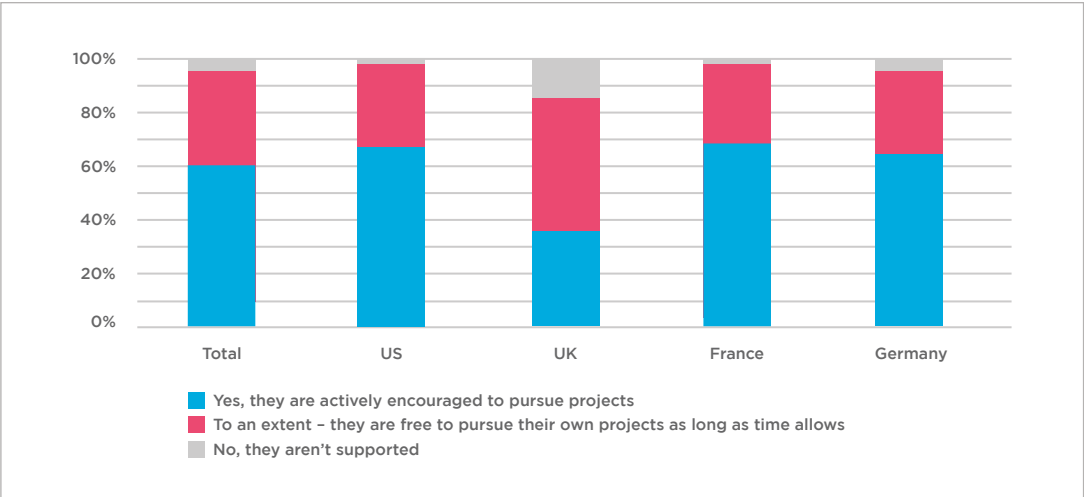


Figure 12: Do organizations support teams or individuals taking time to pursue new projects on their own initiative?

The greatest risk in digital transformation is that organizations develop a fixation on digital transformation for its own sake: deciding that in an environment of accelerating disruption, any transformation is better than no transformation. This can create poorly planned projects that don't produce the expected benefits, or potentially even harm the organization. Fifty-two percent of digital leaders say that their organization is so fixated on the need for digital transformation that they risk rushing into projects that won't produce the results they need (figure 13).

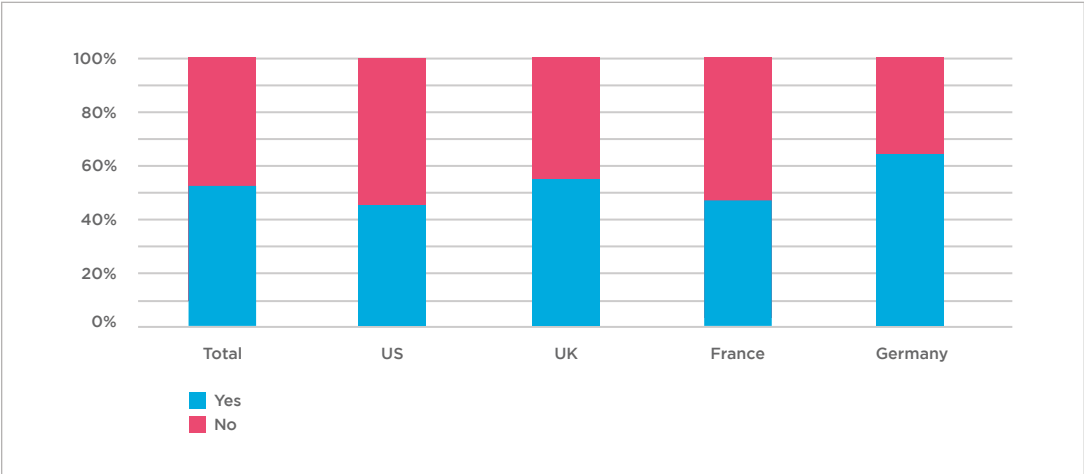


Figure 13: Are respondents' organizations so fixated on the need for digital transformation that they risk rushing into projects that won't produce the results they need?

Businesses that allow digital transformation to be driven by any part of the organization are more likely to find the seeds of a transformative, or even revolutionary, experience – whether that is for a customer, a factory worker, or even an Internet of Things (IoT) device. They also have a greater chance of avoiding the risk of feeling pressured into pursuing a potentially wasteful project, thanks to having a much larger source of ideas to draw from. At the same time, the benefits projects create are likely to shift to ones the business maybe didn't even realize it needed. While IT is likely to always be a significant stakeholder in digital projects, it shouldn't be seen as the function with sole – or even the greatest – responsibility for driving new ideas.



86 percent of digital leaders say their ambitions to use data for new digital services are being held back.

Part 4: The data challenge

Technology plays a major part in any digital transformation: providing a channel to create new services, and sometimes presenting an obstacle that has to be overcome. As technologies such as virtual and augmented reality, artificial intelligence, IoT, and edge computing become more common, enterprises need to ensure they can use data to support new services that can take full advantage.

Restricted ambitions

Eighty-six percent of digital leaders say their ambitions to use data for new digital services are being held back. The most common factor cited was the complexity of using multiple technologies, mentioned by 43 percent of respondents. Other common answers included a reliance on legacy database technology (37 percent); a lack of resources (36 percent); a lack of skills (33 percent); and a lack of skills (33 percent) (figure 14).

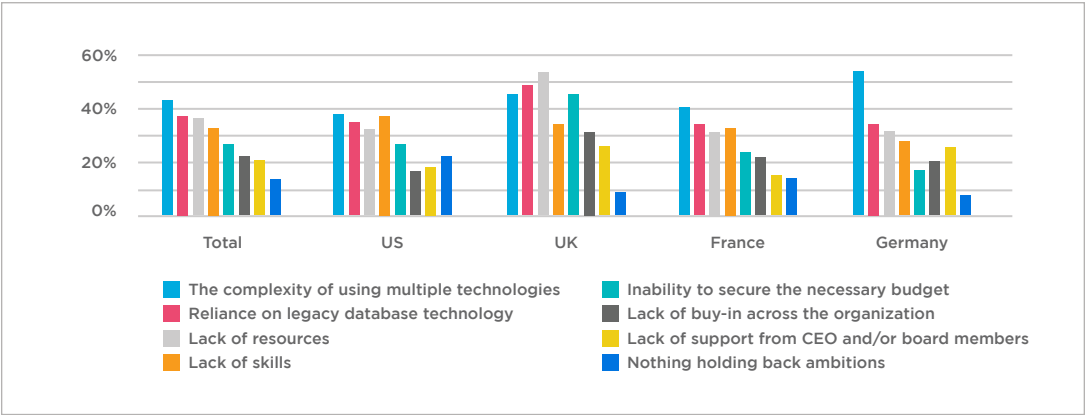


Figure 14: Factors holding back organizations' ambitions to use data for new digital services

Partly because of these challenges, a number of organizations believe that it will take several years to begin using new technologies. Thirty-two percent of respondents believe it will take them more than five years to begin using artificial intelligence; 24 percent believe the same for virtual reality; 22 percent for augmented reality; 21 percent for edge computing; 18 percent for blockchain; and 7 percent for mobile, which is the most well-entrenched technology (figure 15).

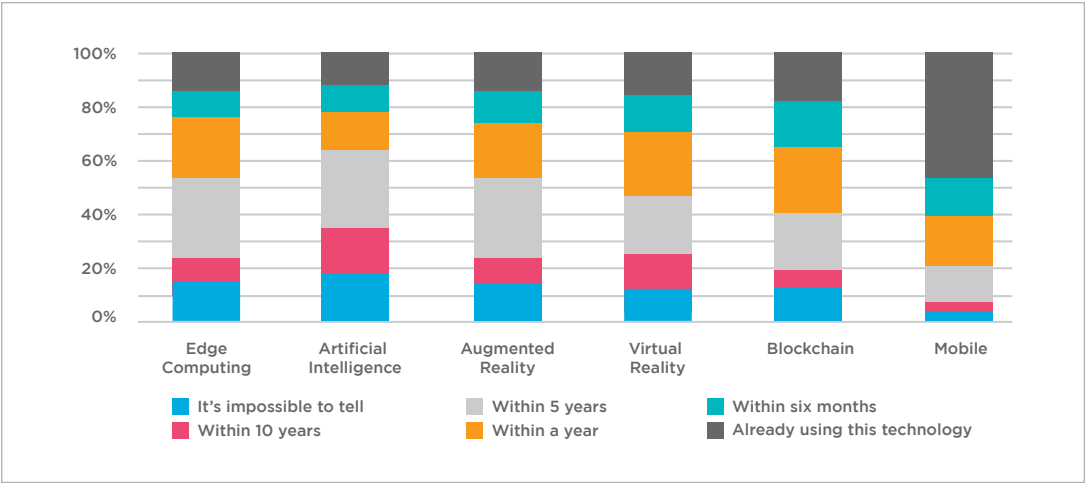


Figure 15: Expected timescale for using technologies: Total



87 percent of organizations have to scale back their ambitions for new applications so that they will work with IoT or mobile devices.

Even when organizations can use a technology, there is no guarantee that they will be able to use it to its full extent. For instance, 87 percent of organizations have to scale back their ambitions for new applications so that they will work with IoT or mobile devices. As a result, potentially revolutionary services cannot meet their full potential due to limitations such as the amount of data a mobile device can process, or the need for an always-on connection (figure 16).

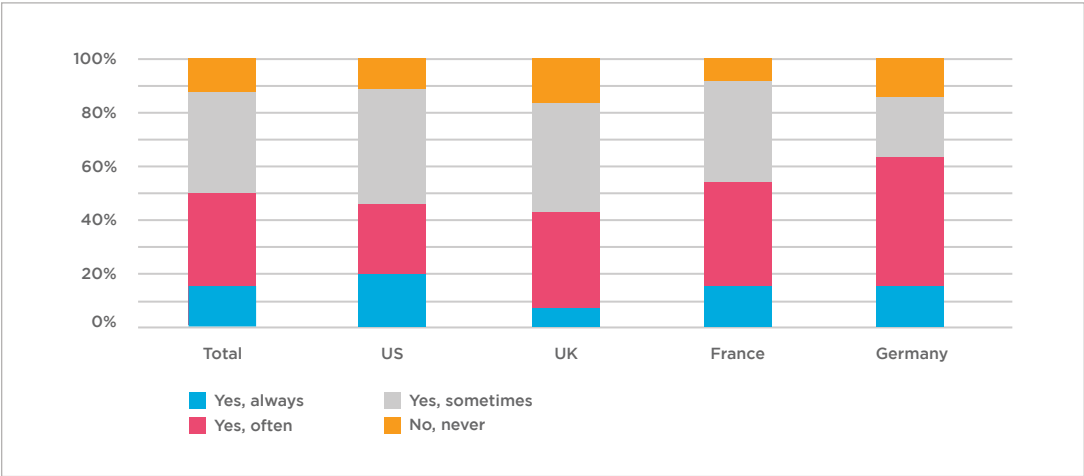


Figure 16: Do respondents have to scale back ambitions for new applications and services to ensure they will work with IoT or mobile devices?

Another example of how technology can frustrate digital teams is the inability to use data in real time. This is critical to many modern digital services; for instance, in providing a live personalized service to shoppers, or calculating optimum performance for a manufacturing line. Yet the number of organizations that can use data in real time has dropped dramatically from 41 percent in 2017 to 29 percent in 2018. Indeed, 43 percent of organizations operate based on data that is more than six hours old (figure 17).

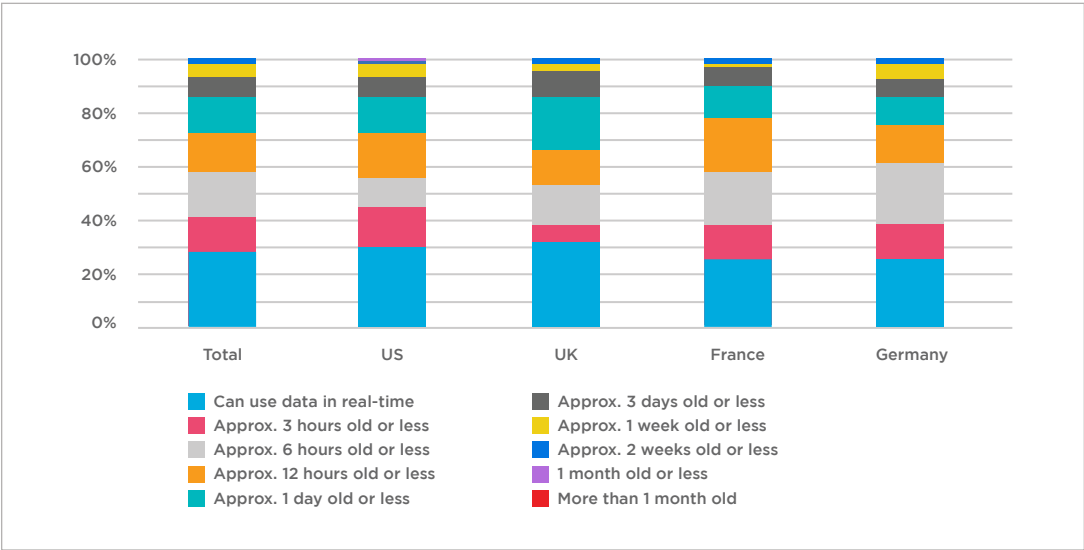


Figure 17: Most recent customer data respondents' databases can use



74 percent of respondents say their organizations are adopting new database technology more slowly than they should because they rely heavily on their legacy databases.

Fighting the database

Organizations often identify their database as a barrier to successful digital projects – in particular, a reliance on legacy databases that, while perfectly suited for legacy tasks, cannot support more modern demands such as the ability to process masses of potentially unstructured data in real time.

Eighty-eight percent of digital leaders have had a digital project fail (50 percent), reduce in scope (25 percent), or suffer significant delays (13 percent) because their legacy database technology couldn't support their needs. This has changed little from 84 percent who reported similarly in 2017 – suggesting that this will remain an ongoing issue (figure 18).



Figure 18: Respondents who have had a digital project fail because their legacy database technology couldn't support it

Ideally, organizations should be able to steadily modernize their database infrastructure either by adopting new technology alongside their legacy database to support new functionality, or by upgrading and replacing legacy technology itself. However, 74 percent of respondents say their organizations are adopting new database technology more slowly than they should because they rely heavily on their legacy databases (figure 19). If organizations cannot address this reliance, they are at serious risk of falling further and further behind more agile competitors.



66 percent of respondents feel that they are using more databases than they should – with 18 percent stating that they're finding it hard to cope.

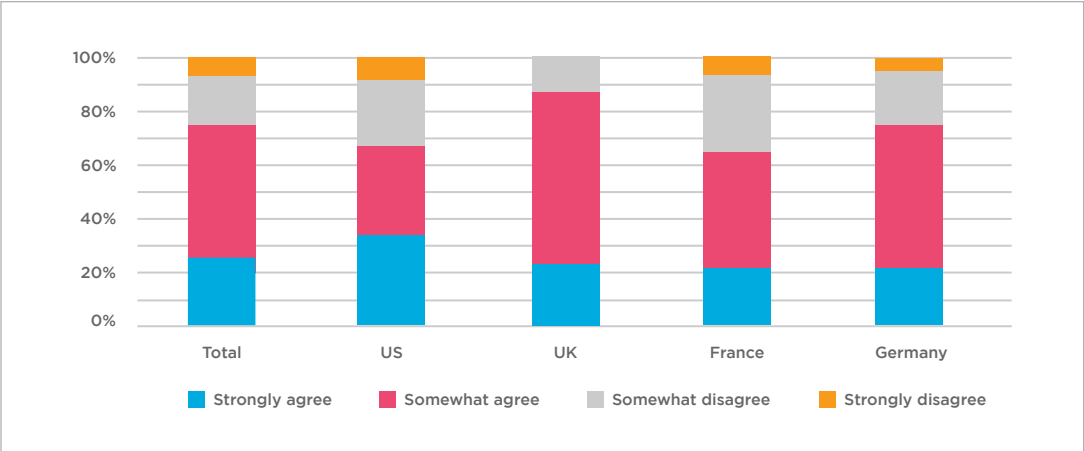


Figure 19: Respondents who believe their organization is adopting new database technology more slowly than it should because it relies heavily on legacy databases

The database estate

As organizations update their database estate to support new applications, there is a risk that they will introduce database sprawl – an infrastructure where an increasing number of databases creates management issues for IT teams who have to support a wide range of technologies.

Currently, many organizations’ database estates are set up in a way that makes database sprawl more likely – and so increases the chance of management headaches. Thirty-six percent of respondents’ enterprises use multiple databases for each of their applications, meaning these organizations will see an exponential increase in infrastructure complexity for each application they add (figure 20).

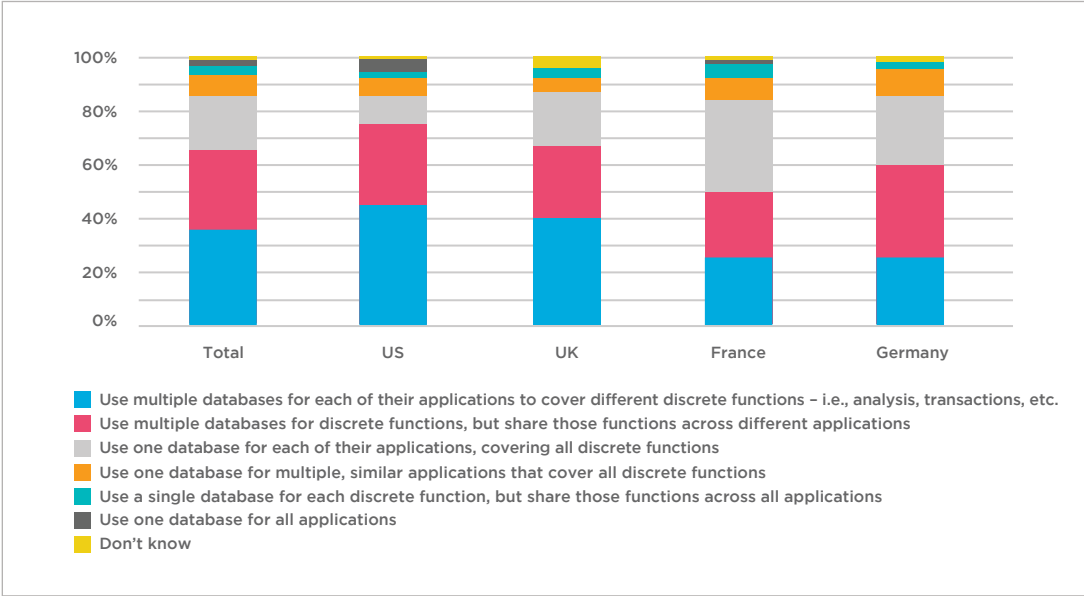


Figure 20: Setup of respondents’ database infrastructure



The most common method used is on-premises, with 60 percent of respondents using it for at least a proportion of their estate.

Digital leaders recognize that database sprawl is an issue. Sixty-six percent of respondents feel that they are using more databases than they should – with 18 percent stating that they’re finding it hard to cope. A further 25 percent state that it would still be good to consolidate more (figure 21). Indeed, 70 percent of respondents would prefer that their organization used a single data platform that performs all the functions needed to engage with customers, employees, and business processes – and 8 percent already do so (figure 22).

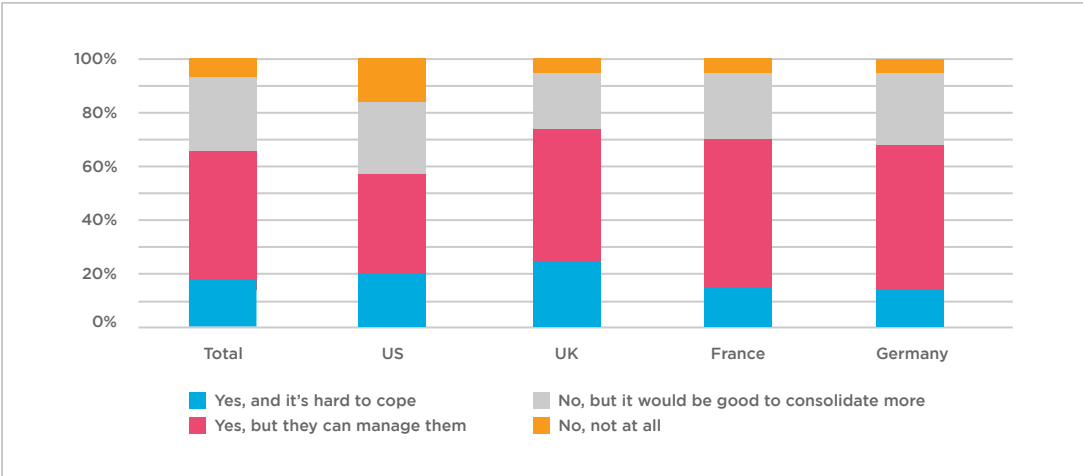


Figure 21: Do respondents feel their organization is using more databases than it should?

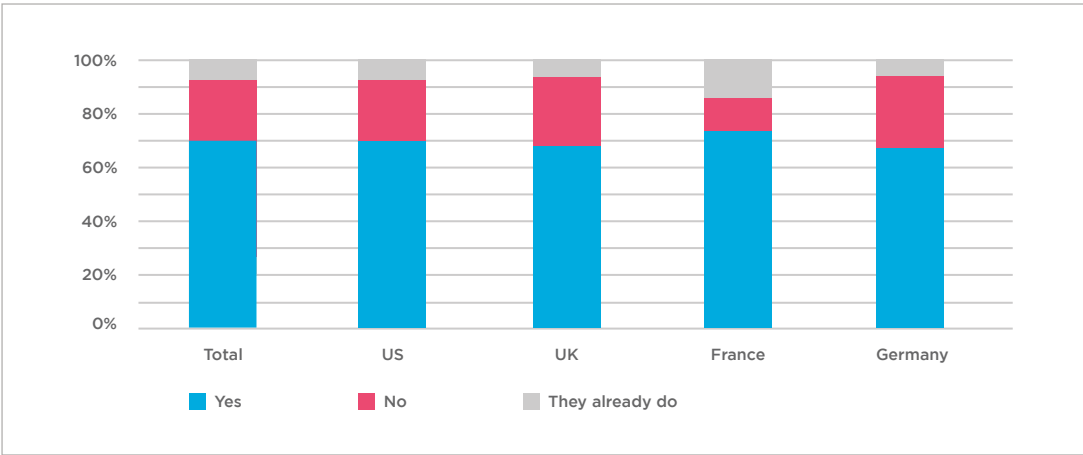


Figure 22: Respondents preferring that their organization used a single data platform that performs all the functions needed to engage with customers, employees, and business processes

There is also the question of how enterprises provision their databases. The most common method used is on premises, with 60 percent of respondents using it for at least a proportion of their estate. Forty-eight percent use private cloud, and others use a single public cloud infrastructure, such as AWS (32 percent), multiple public cloud infrastructures (32 percent), or multiple Database-as-a-service providers (31 percent) (figure 23).



95 percent of respondents agree that, thanks to factors such as these, digital transformation can seem an insurmountable task – with 64 percent saying this is often or always the case.

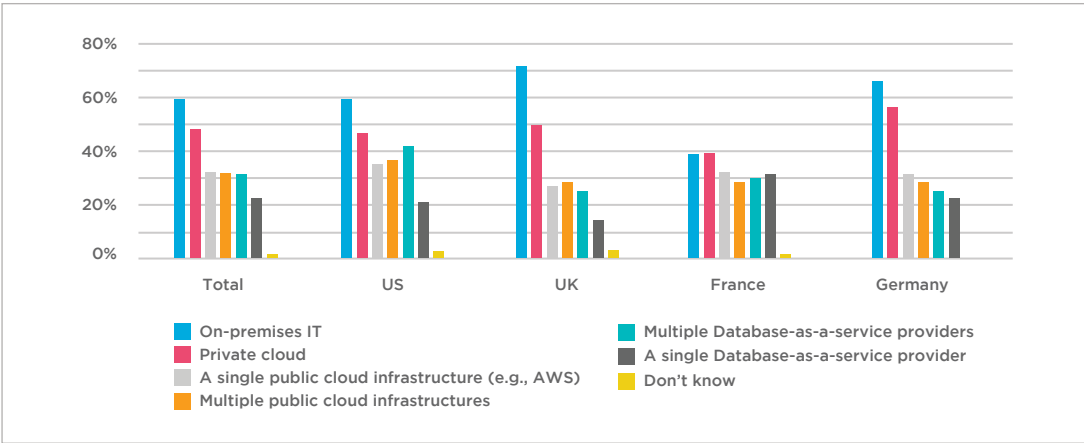


Figure 23: Methods organizations use to provision databases

### Securing the database

New regulations such as the European Union’s General Data Protection Regulation (GDPR), coupled with a number of high-profile security breaches – whether caused by flaws in the database, or user error – have made organizations much more aware of the need to secure their database estate, in order to protect customer and business data and their own reputations.

Eighty-three percent of digital leaders say they are under increased pressure to secure their organization’s database – 30 percent because of GDPR, 20 percent because of publicized breaches, and 25 percent because of both (figure 24).

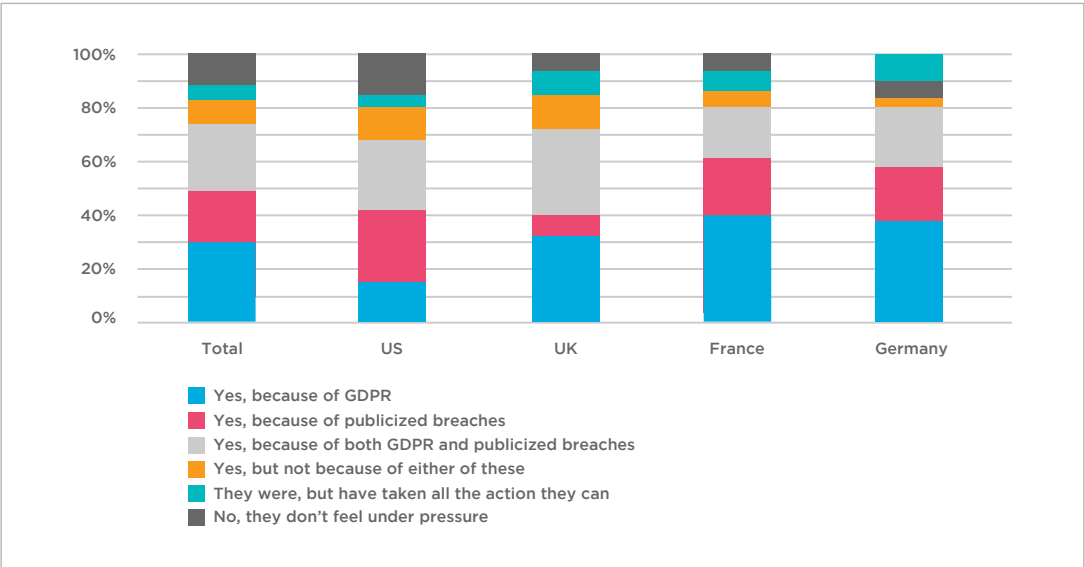


Figure 24: Respondents feeling under increased pressure to secure their organization's database

Indeed, in more than three quarters of enterprises (79 percent), making applications and processes secure by default is given more significance and attention than making sure that developing and using the application is as easy as possible (figure 25). This does not mean that digital leaders will have to sacrifice their ambitions for new applications and experiences across the organization, but it does mean that development may be more complex and time-consuming than intended, and needs to be factored into any plans.



64 percent of respondents believe that organizations will go out of business or be absorbed by a competitor in less than 4 years if they can't keep up with digital innovations.

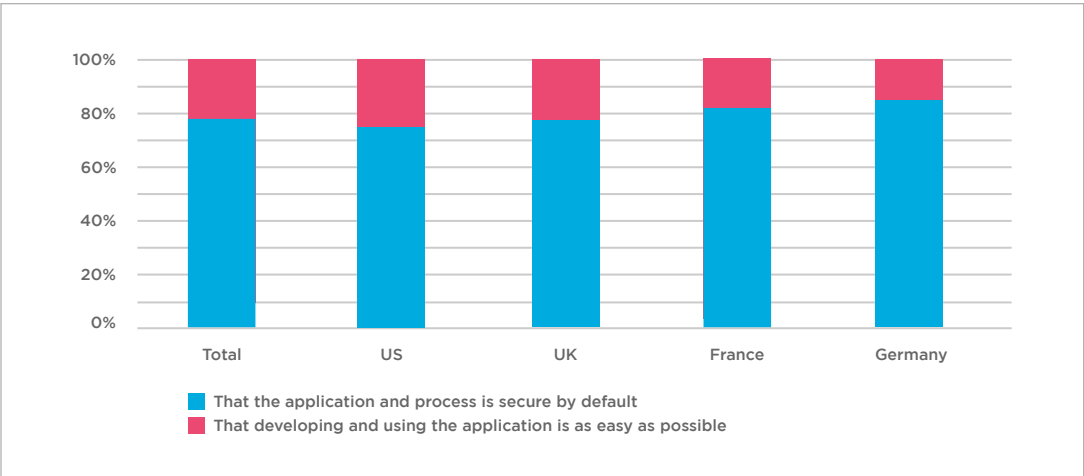


Figure 25: Which of security and usability is given greater significance when developing new applications?

Security is only one factor that can make digital transformation seem daunting. Other factors such as a lack of clarity on capabilities and goals, a lack of a defined endpoint, and often a huge number of tasks to complete in a limited time to make a project succeed, can also dissuade organizations from pursuing projects. Given these factors, 95 percent of respondents agree that digital transformation can seem an insurmountable task – with 64 percent saying this is often or always the case (figure 26).

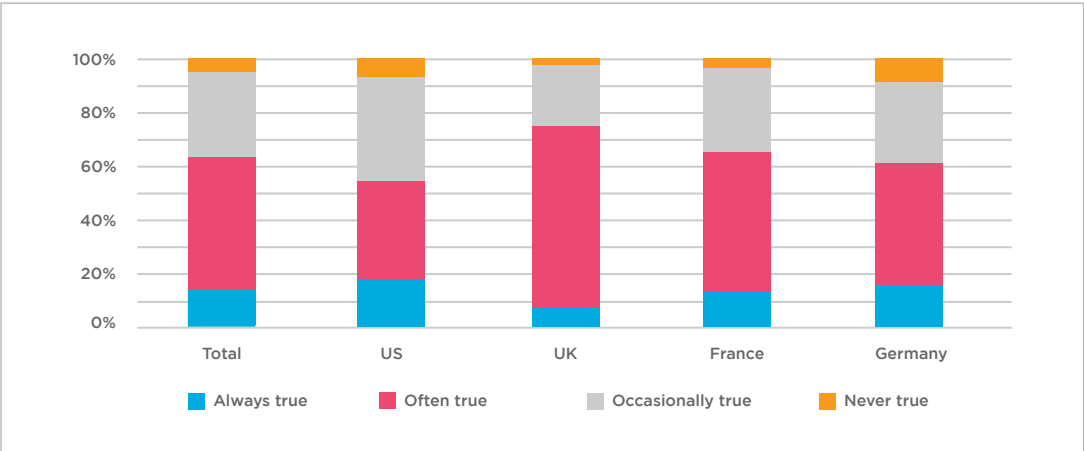


Figure 26: Respondents who believe that digital transformation can seem an insurmountable task

Solving the data challenge

The data challenge should be solvable for enterprises – the risk they face is from the increasing pressure being put on them to transform at speed. To begin with, organizations need to recognize that transformation is not a single destination – it is a continuous process that must be underpinned with the right infrastructure. With this understanding, enterprises can begin to ensure that their database infrastructure is designed to support continuous transformation, and at the speed the environment now demands.

In order to transform at speed, businesses need a data architecture that is agile enough to facilitate sudden changes in direction, can perform at scale, and is secure. This doesn't mean immediately retiring legacy architecture, which is likely to still be suited



86 percent say that the next 12 months will be a critical period for businesses to either adapt to providing digital services, or accept that their business is now less relevant.

to specific applications, like performing transactions. But it does mean ensuring that there is a data architecture in place that can support more modern applications, where end-user engagement demands that the application can access, search, analyze, and process thousands, or even millions, of items of data before the end user ever reaches the transaction stage.

Part 5: Consequences

Despite the view of digital transformation as an insurmountable task, digital leaders still agree that businesses have to pursue it. Indeed, the average predicted lifespan for organizations that cannot meet digital demands has shrunk since 2017 – from 4 years and 11 months to 4 years and 5 months (figure 27). At the same time, 64 percent of respondents believe that organizations will go out of business or be absorbed by a competitor in less than 4 years if they can’t keep up with digital innovations (figure 28).

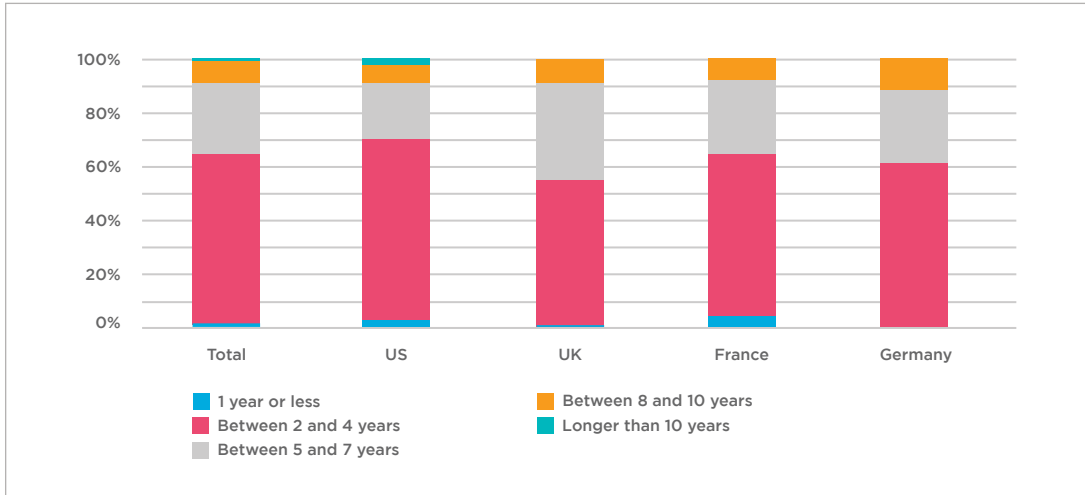


Figure 27: Length of time respondents believe a business that can't keep up with digital innovation in their industry can survive before going out of business or being absorbed by a competitor

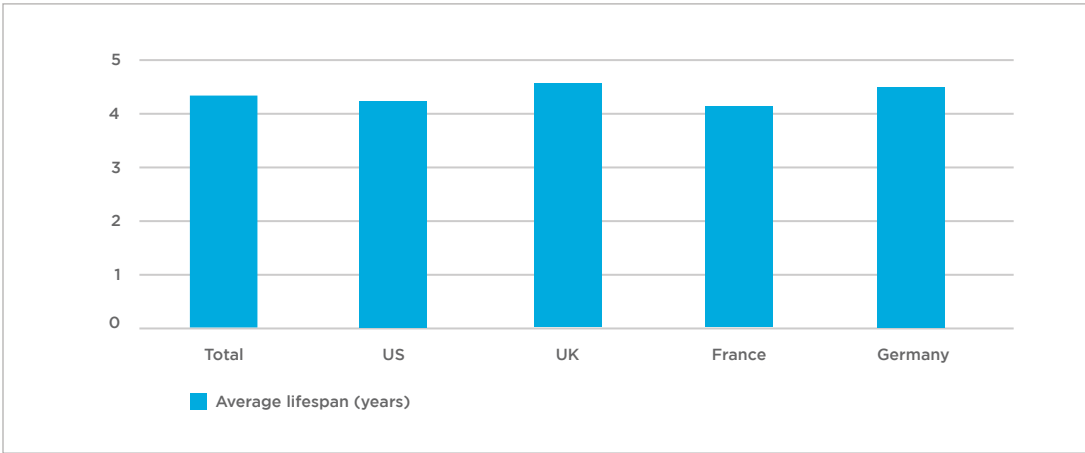


Figure 28: Average lifespan for businesses that can't keep up in their industry

Respondents also agree that pressure on digital teams is likely to increase in the next year: 86 percent say that the next 12 months will be a critical period for businesses to either adapt to providing digital services, or accept that their business is now less relevant (figure 29).



92 percent of respondents say they would be fired, or suffer other consequences, as a result of a digital project either failing or suffering other setbacks – up from 85 percent in 2017.

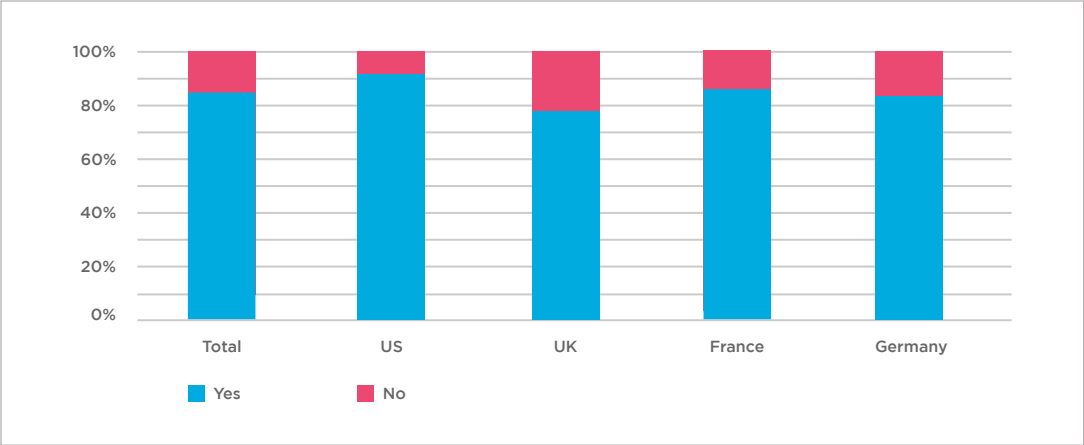


Figure 29: Respondents who believe the next 12 months will be a critical period for businesses to either adapt to providing digital services or accept that the business is now less relevant

Digital leaders are also well aware that, should a digital project fail, their teams will feel the consequences. Ninety-two percent of respondents say they would be fired, or suffer other consequences, as a result of a digital project either failing or suffering other setbacks – up from 85 percent in 2017 (figure 30).

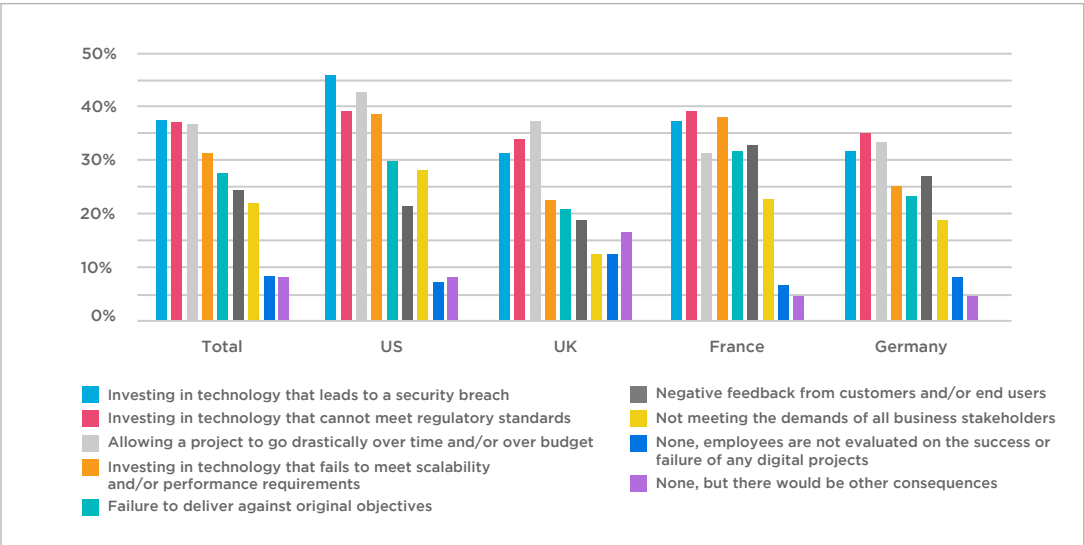


Figure 30: “Fireable” offenses identified by respondents when implementing a digital project

All of this is likely to add to the pressure on digital teams and make them feel even more pressured into rushing into digital projects that may not produce the necessary benefits. Yet at the same time, the consequences of failure can leave teams paralyzed – as they cannot guarantee success. Organizations need to study those enterprises that have succeeded in digital transformation to see how they drive projects, and what technology they use in the process.

Part 6: What does success look like?

As we have seen, some organizations are already making great strides in their digital transformation efforts. Six percent say they have completely revolutionized the end-user experience to the extent it’s unique in their industry. So what do these revolutionary organizations look like?



92 percent believe that disruption in their industry has accelerated over the last 12 months – 73 percent rapidly.

Revolutionaries know the challenges organizations face

Ninety-two percent believe that disruption in their industry has accelerated over the last 12 months with 73 percent citing "rapidly." Fifty-four percent believe that digital transformation can always seem an insurmountable task. And 92 percent believe the next 12 months will be a critical period for businesses to either adapt to providing digital services or accept they are now less relevant (figure 31).

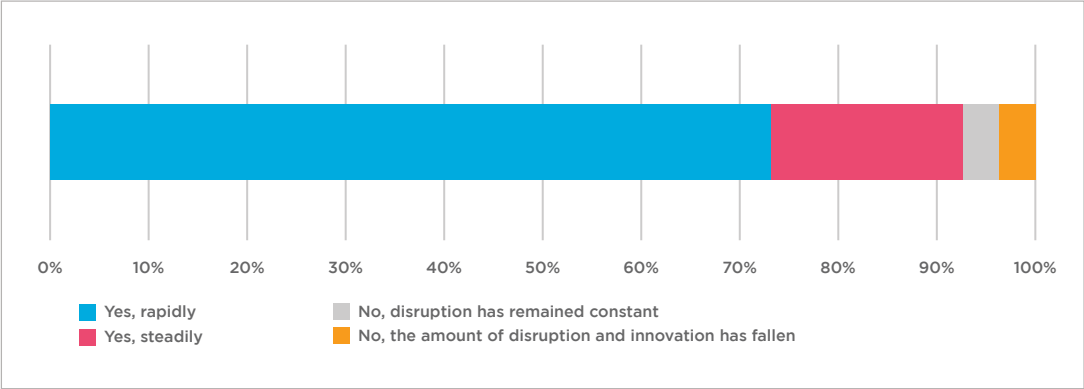


Figure 31: The challenges revolutionaries believe organizations face  
a. Pace of disruption

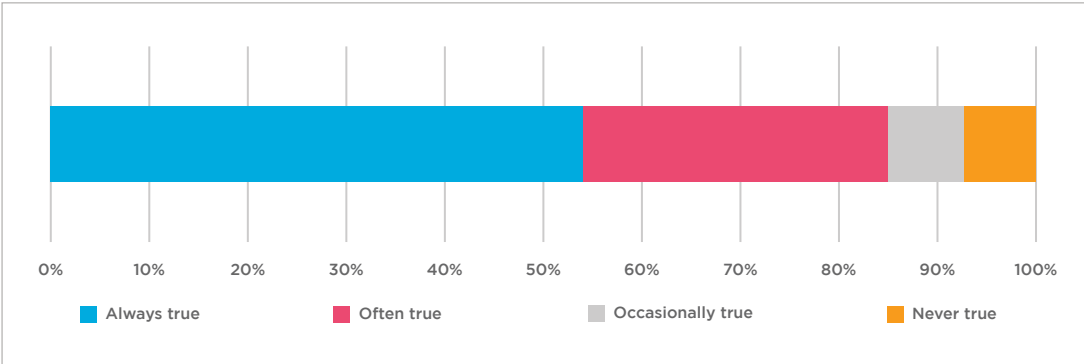


Figure 31: The challenges revolutionaries believe organizations face  
b. Can digital transformation seem an insurmountable task?

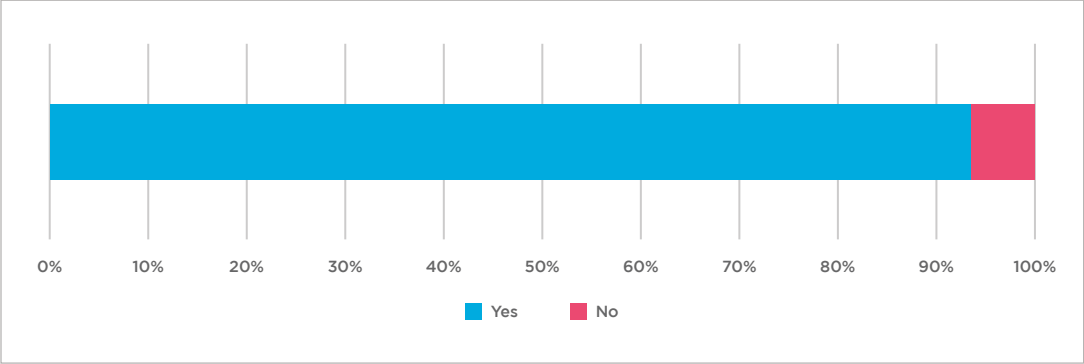


Figure 31: The challenges revolutionaries believe organizations face  
c. Will the next 12 months be a critical period for businesses?

This makes it clear that successful organizations have little or no illusions about how challenging digital transformation can be. However, they also take the time to understand, and so overcome, these challenges.



Improvements don't need to come at such a huge cost – those respondents reporting significant improvements from their digital projects spent an average of \$20 million in the last 12 months.

Revolutionaries invest heavily in digital

These organizations spent an average of \$60 million on digital innovation and transformation projects in the last 12 months – nearly 2.5 times the overall average – with 27 percent spending more than \$100 million. They also plan to spend an average of \$61 million in the next 12 months (figure 32).

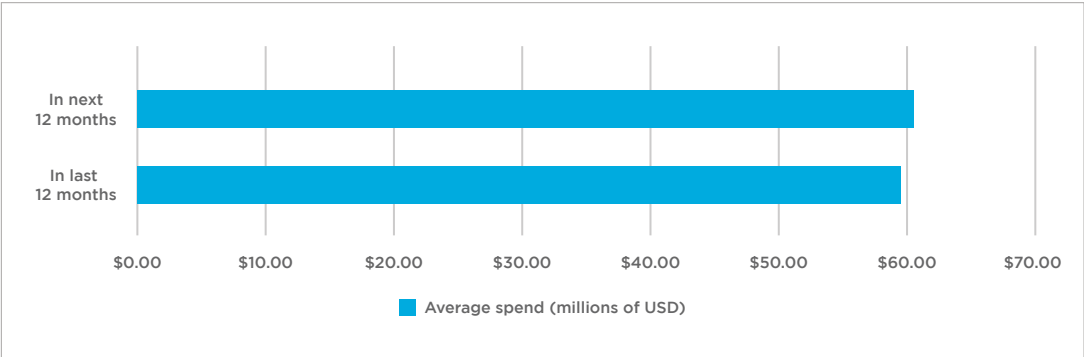


Figure 32: Historic and planned investment in digital transformation

Enterprises looking to truly revolutionize their digital experience need to be clear that revolution requires investment. However, improvements don't need to come at such a huge cost – those respondents reporting significant improvements from their digital projects spent an average of \$20 million in the last 12 months.

Revolutionaries recognize multiple benefits from digital

While other organizations report improved customer experience as the main benefit, these revolutionary organizations have realized increased worker productivity (65 percent), improved business end-user experience (65 percent), improved compliance (69 percent), and expansion into new regions (62 percent) (figure 33). Similarly, they are focusing their efforts on digital transformation projects across the organization: from business processes (85 percent) to customer-facing experiences and machine-to-machine services (both 81 percent) to worker-facing experiences (69 percent) (figure 34).

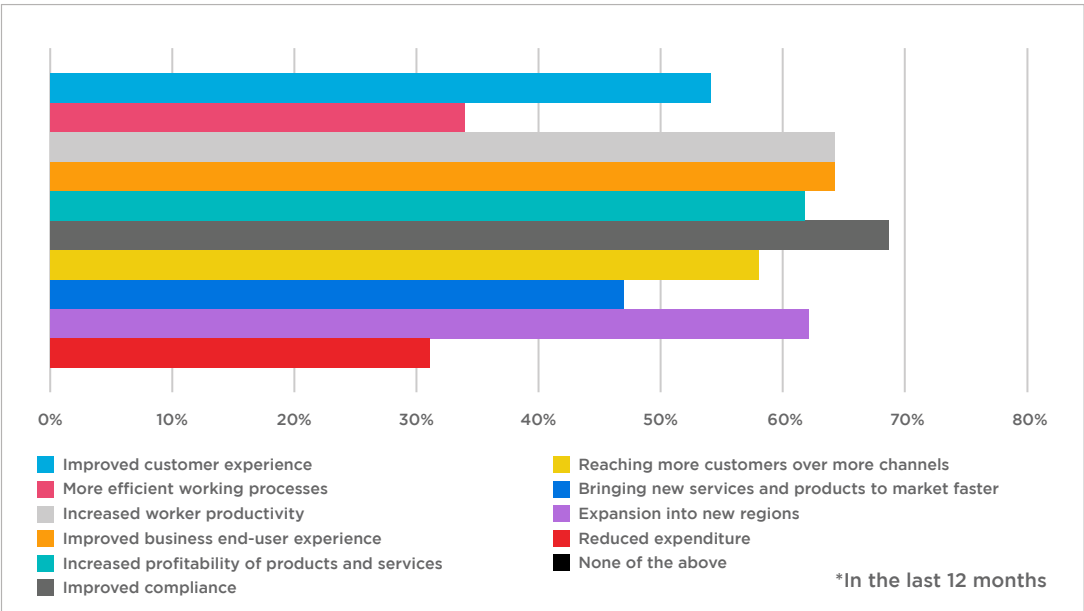


Figure 33: Benefits realized by revolutionary organizations



These organizations spent an average of \$60 million on digital innovation and transformation projects in the last 12 months.

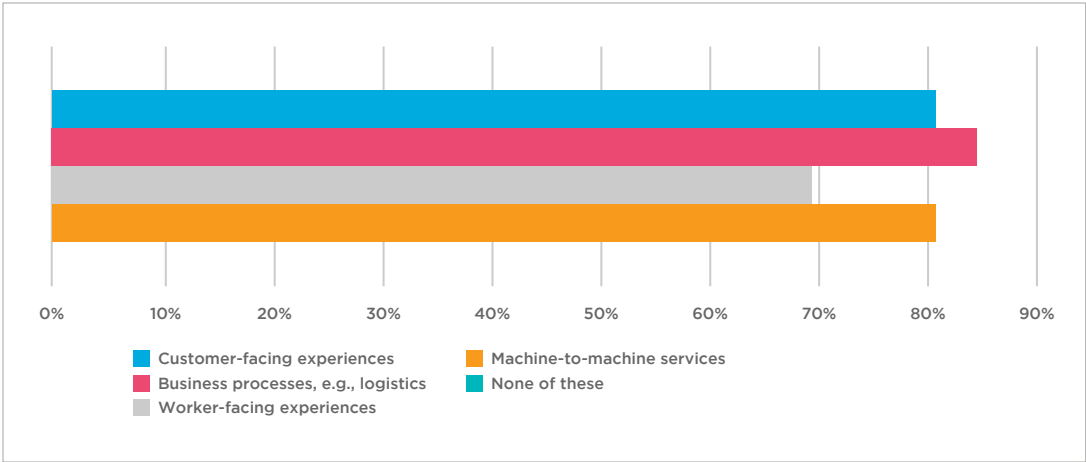


Figure 34: Focuses of digital transformation projects

In part, these organizations are succeeding because they recognize the potential that digital transformation brings to all areas of the business. Instead of being fixated in specific areas, they have been able to spot an opportunity for revolutionary transformation, and take it.

Different business areas drive digital strategy

IT is still the primary driver of digital projects in these organizations, ranked in the top three by 58 percent of these organizations. However, its lead is much less significant than in most – business executives, sales, and finance are all close behind, with all placed in the top three drivers by 46 percent of respondents (figure 35).

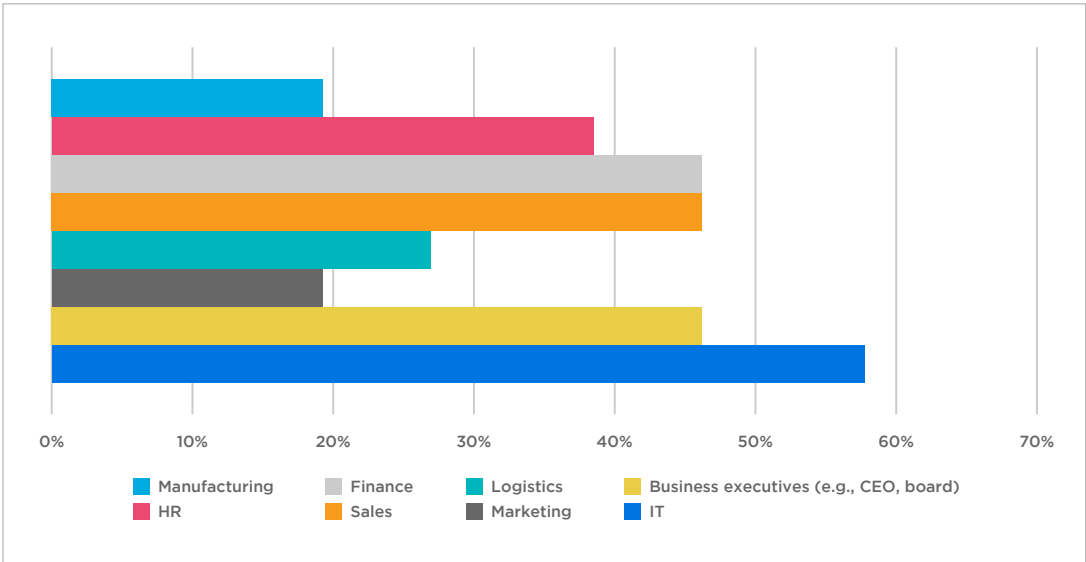


Figure 35: Parts of the business driving digital projects

Again, these businesses are succeeding partly because they recognize the contribution that the entire enterprise can make to digital strategy, and listen widely for ideas on how to improve services and capabilities.



81 percent say that their organization is so fixated on the need for digital transformation that it risks rushing into projects that won't produce the results they need.

Revolutionaries are still under pressure to transform

The most common motive for digital transformation is still responding to competitors' advances, reported by 42 percent of these organizations. In comparison, original ideas from within the business spur 27 percent of projects (figure 36). There is also potentially even greater pressure on them: 81 percent say that their organization is so fixated on the need for digital transformation that it risks rushing into projects that won't produce the results they need (figure 37).

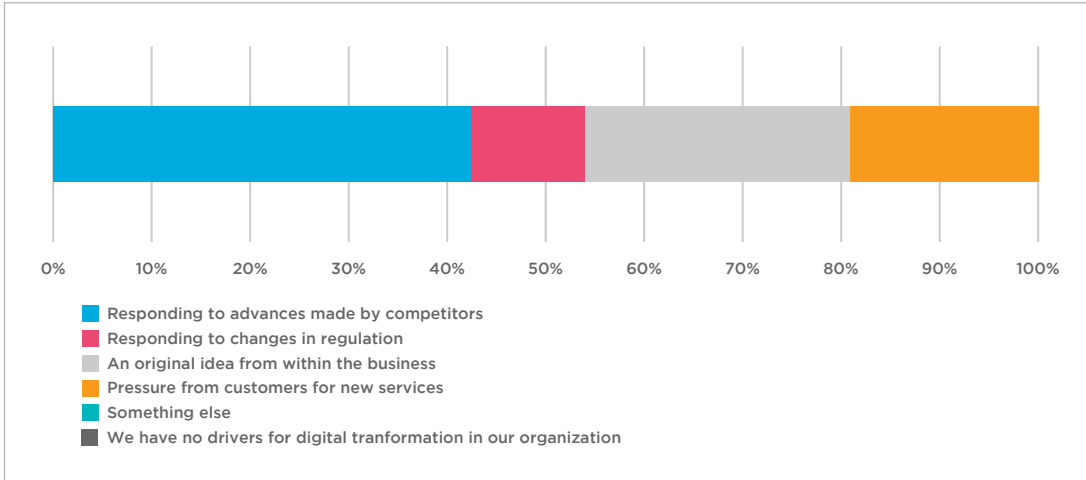


Figure 36: Primary drivers for digital transformation

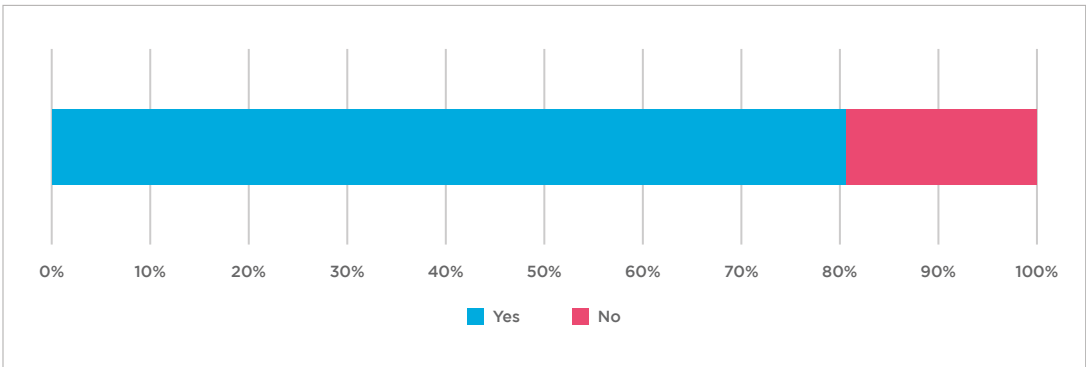


Figure 37: Respondents identifying fixation on digital transformation that raises risk of rushing into unproductive projects

One of the great differences between a successful organization and others is likely to be how they respond to this pressure. By recognizing the risks that rushing into projects presents, enterprises can ensure they react accordingly and take the time to understand the best course of action.

Revolutionaries still encounter technology limitations

They may invest more, but successful organizations still run up against the limitations of technology. Ninety-two percent have had a project fail, be delayed, or be reduced in scope because their legacy database technology couldn't support it – 69 percent reporting failure after significant investment of time and resources (figure 38). Ninety-two percent also have to scale back their ambitions for new applications to ensure they will work with mobile or IoT devices (figure 39). Similarly, this is likely to be due to a reliance on legacy technology: 85 percent are adopting new database technology more slowly than they should because they rely heavily on their legacy databases (figure 40), while 89 percent say their organization is using more databases than it should (figure 41).



89 percent say their organization is using more databases than it should.

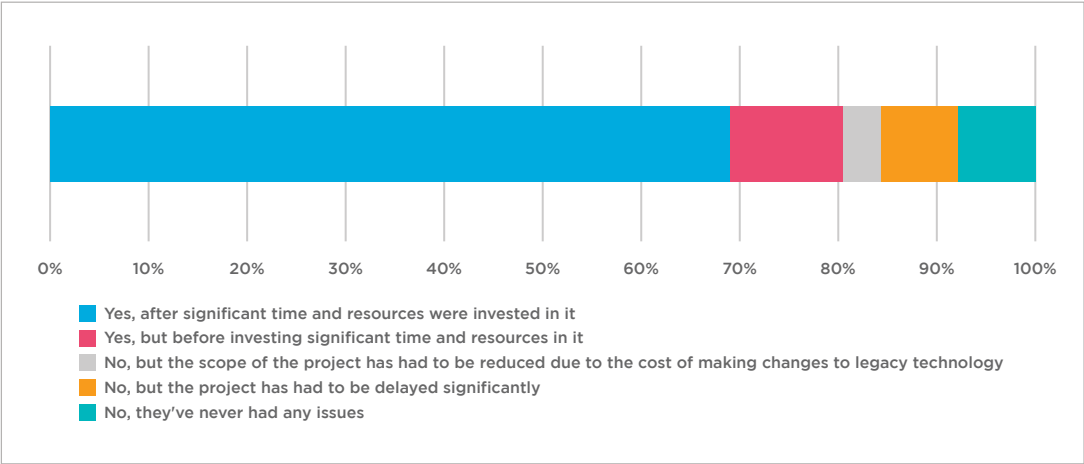


Figure 38: Respondents identifying digital project failure due to legacy database technology

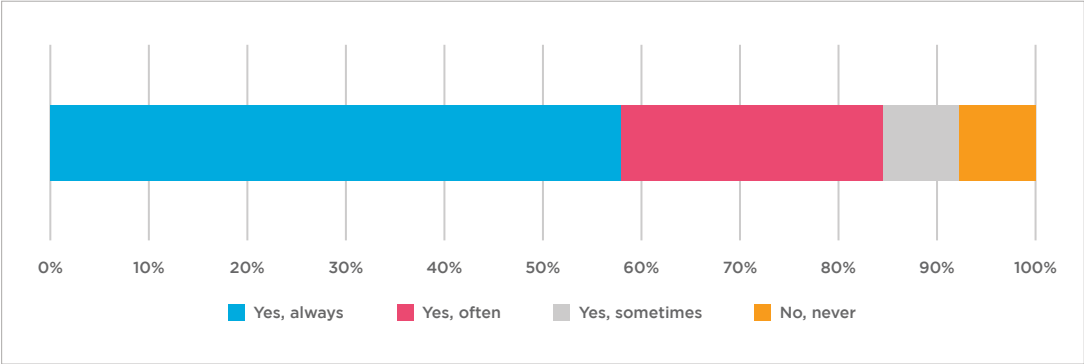


Figure 39: Respondents that have had to scale back mobile or IoT ambitions

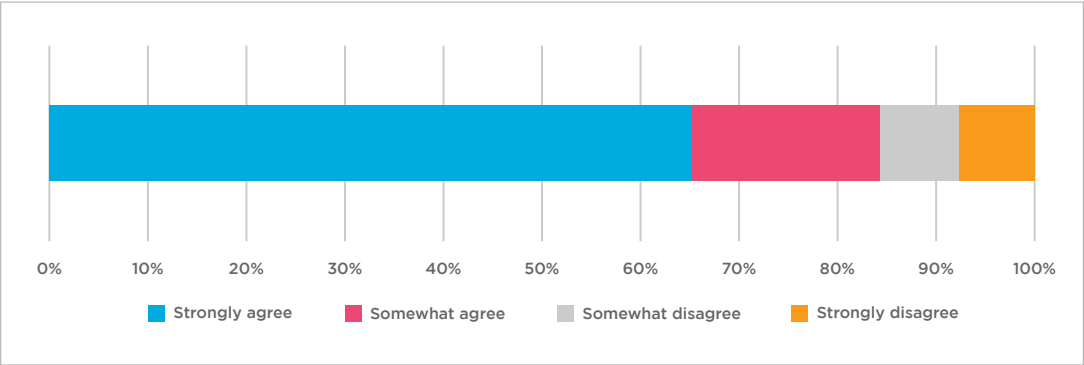


Figure 40: Respondents adopting new database technology more slowly than they should

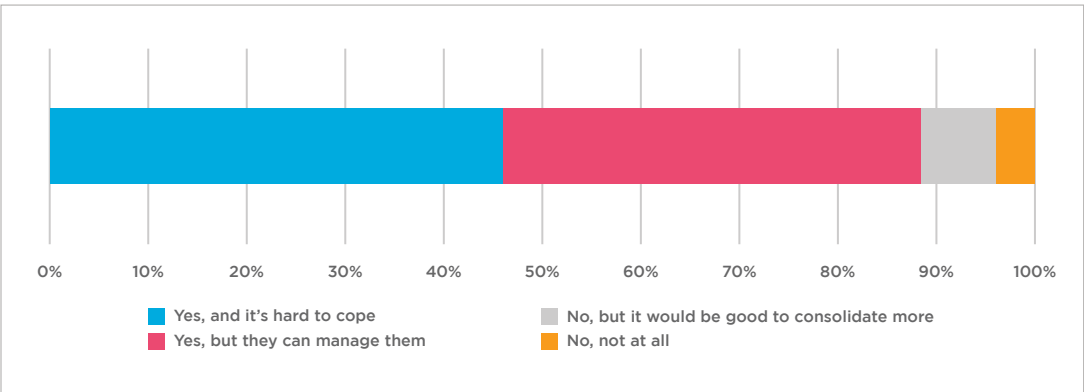


Figure 41: Respondents saying their organization uses more databases than it should



## Methodology

The report is based on an online survey conducted in June and July 2018 by Vanson Bourne, an independent market research organization, of 450 heads of digital transformation, such as CIOs, CDOs and CTOs, in organizations with 1,000 employees or more in the US, UK, France and Germany.

A significant difference for these organizations is likely to be that their ambitions are so high that they will feel more constricted by technical limitations – even as they exceed the achievements of their competitors. After all, if an organization is continually developing revolutionary applications, its ambition will be to do even more, not to rest on its laurels.

## Part 7: Conclusion

Enterprises are entering a critical period; the way in which they approach digital transformation over the next 12 months could easily decide whether they survive or thrive. However, this is creating significant pressure on digital teams: if digital transformation is entirely reactive, and based on poorly understood pressures instead of what the business actually needs, the result will be, at best, wasted investment. At worst, enterprises could find themselves chasing their tails and missing the opportunity to develop digital experiences that make them competitive.

To avoid this, organizations need to ensure that they understand the challenges they face; that they are exploring the entire business to decide where to focus their transformation efforts; and that technology is not holding back their digital ambitions. By doing this, they will be well-positioned to join the truly transformational 25 percent.



---

## About Couchbase

Couchbase's mission is to be the data platform that revolutionizes digital innovation. To make this possible, Couchbase created the world's first Engagement Database to help deliver ever-richer and ever-more-personalized customer and employee experiences. Built with the most powerful NoSQL technology, the Couchbase Data Platform was architected on top of an open source foundation for the massively interactive enterprise. Our geo-distributed Engagement Database provides unmatched developer agility and manageability, as well as unparalleled performance at any scale, from any cloud to the edge.