

# Connected intelligence for high performance

Inside the minds of finance and  
operations data leaders

ORACLE



# Data everywhere

**The amount of data that finance and operations departments are collecting from a litany of sources across the function continues to grow. And in line with this, the difficulty leaders have in deriving value from their data is similarly increasing. This is a trend that is forecast by many to get worse.**

Data is the lifeblood of any successful business today – not only does it help you make decisions that shape the future of the business, it is essential in serving the modern customers who expect a hyper-personalised experience. You can't have intelligence without data, and if you can't handle your data, it will smother your business while your competitors go on to thrive.

Good data management enables hyperconnectivity across the business.

This heightened business connectivity requires the seamless convergence of business through data, systems and people. Our research demonstrates gaps in capability (between data leaders and data laggards) where the data, the technology, and the human elements have not entirely aligned. This is where the value of intelligence and autonomous capability lies – not just 'self-driving' but 'self-adapting' to the needs of changing environments, conditions and, crucially, the requirements of people.

A hyperconnected business is where people are freed up to do more, to work at higher speeds, and be able to adapt and change in the moment. This is where people empowerment is at its most valuable and where there are no real limits to growth, adaptability, and value creation.

And that brings us to the other focus for business leaders in 2020 – the need to innovate. Departments need to challenge themselves to do things differently and upset the norm – that way the whole company can truly compete, in a market where everyone is trying to be the next big disrupter in their industry. The key to this will be to embrace transformational technology and the benefits it offers.

The first step of getting a grip on your data might seem insurmountable, but the resulting journey is worth it.

**Read on to find out why, and what could be on offer if you disrupt yourself.**

## Key findings

- 1 Around **three quarters of data leaders** in finance departments are highly **confident in the security of the data** that their organisation holds, compared to **just under half of data laggards**
- 2 **76% of data leaders** in finance departments say that they **are completely able to manage the amount of data** generated by finance reports, compared to **just 13% of data laggards**
- 3 **With most finance leaders believing the deluge of data will get worse – those with connected systems will come out on top** – 40% say finance data is completely manageable now, but due to drop to 28% in three years' time
- 4 **Are hyperconnected insights receiving the attention they deserve?** Around three quarters of finance respondents say measuring success is a priority, but only just over a third have completed innovations in this area
- 5 **And those that do invest in 360° insights will get the advantage in the digital age** – those that have experienced significant growth are 1.5x more likely to have completed initiatives around measuring success than those with marginal growth
- 6 **Those that invest in improving insights using technology achieve their goals and drive business growth**
- 7 The more **significant the role disruptive innovation** plays in a business, the more **innovation projects are likely to make it to market**
- 8 **Businesses need a better handle on the full range of metrics to be in control** – business leaders rated productivity (54%), customer satisfaction (53%) and revenue (53%) as KPIs to measure innovation
- 9 **The issue is that data is siloed across manufacturing in most organisations** – just over a third of manufacturers have used Industry 4.0 technology to remove data siloes from across their value chain
- 10 **Intelligence simply isn't flowing through product life cycles leaving decision-making at risk**, with less than half of product development teams believing they're efficient at passing data between steps of a product life cycle
- 11 **Critically many are not even able to take customers' feedback into account** – just 45% have integrated supplier and distributor data

# 6<sup>x</sup>

Finance data leaders are six times more likely to be confident in **managing data** than data laggards

# 30%

have completed innovation around better measuring success despite it being a priority

# 25%

Organisations that **have experienced significant growth** are 25% more likely to have completed initiatives around measuring success

## Methodology

The results presented in this report are based on three separate mobile-only, 23-question global surveys conducted between September 2018 and January 2019. These surveys targeted manager, director, vice-president or C-Level executives with influence in the decision-making process of cloud solutions, platforms, and infrastructure or department-specific software. Respondents worked within organisations generating revenues between less than £1 million to more than £500 million, with 100 to 50,000 employees.

### Maturity model methodology

Each respondent was scored based on the maturity of their answers to three questions on the topics of internal protocols around data use, teaching people to use data responsibly, and the methods they use to share critical data. Higher scores were given to the answers that are closest to best practice. This resulted in a spread of responses across the scale. The top 10% of the total respondents are classified as 'data leaders' and the bottom 10% are 'data laggards'. The IT department is over-represented in the leaders group, whereas other departments are under-represented.

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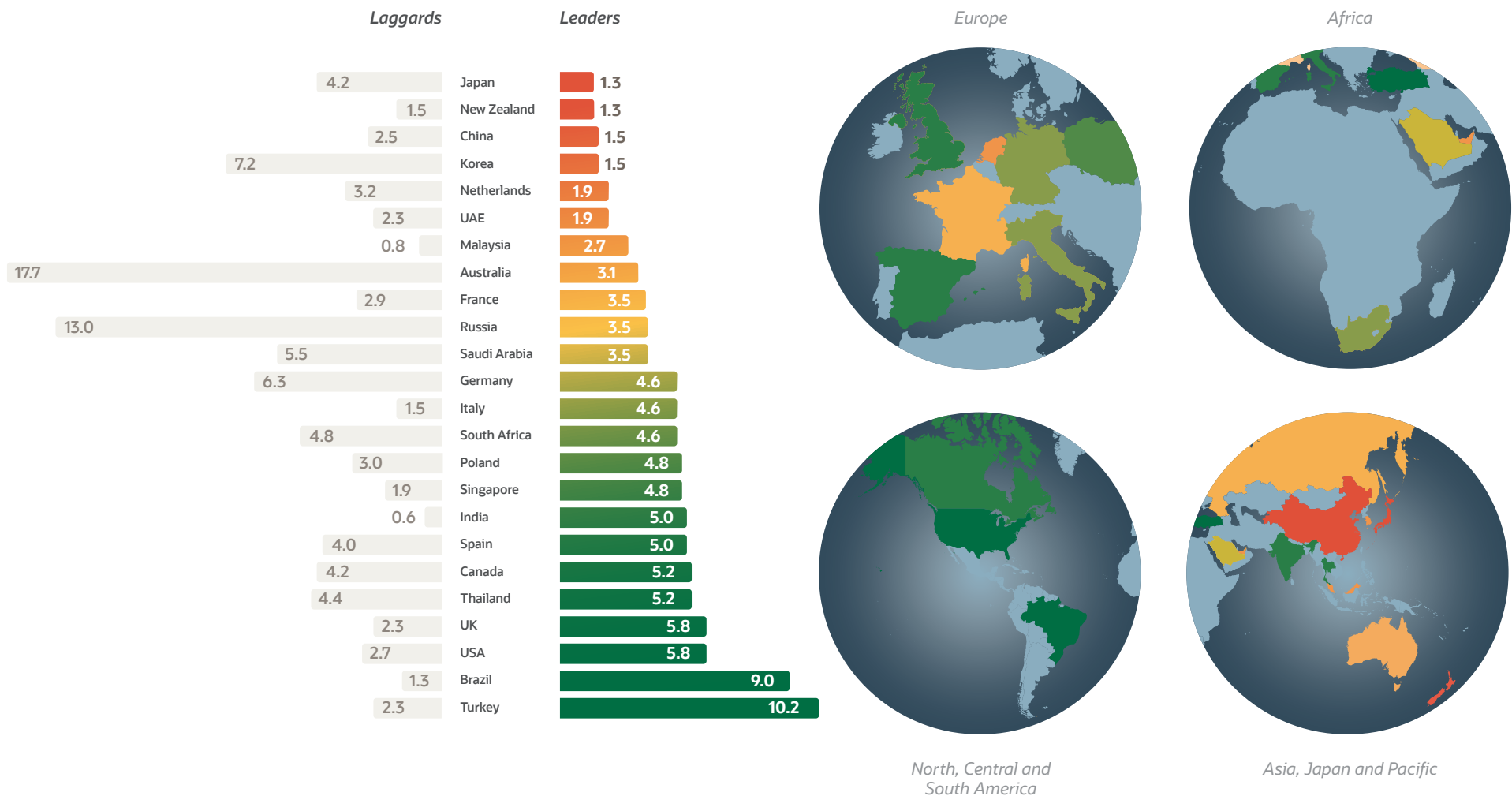
Conclusions



**The Americas lead the way as data leaders**, followed by much of Europe. APAC and Africa are still catching up, and can learn from what leaders do differently.

*Analysis showing the percentage of leaders that fell within each country*

*All respondents. Base: 5539*



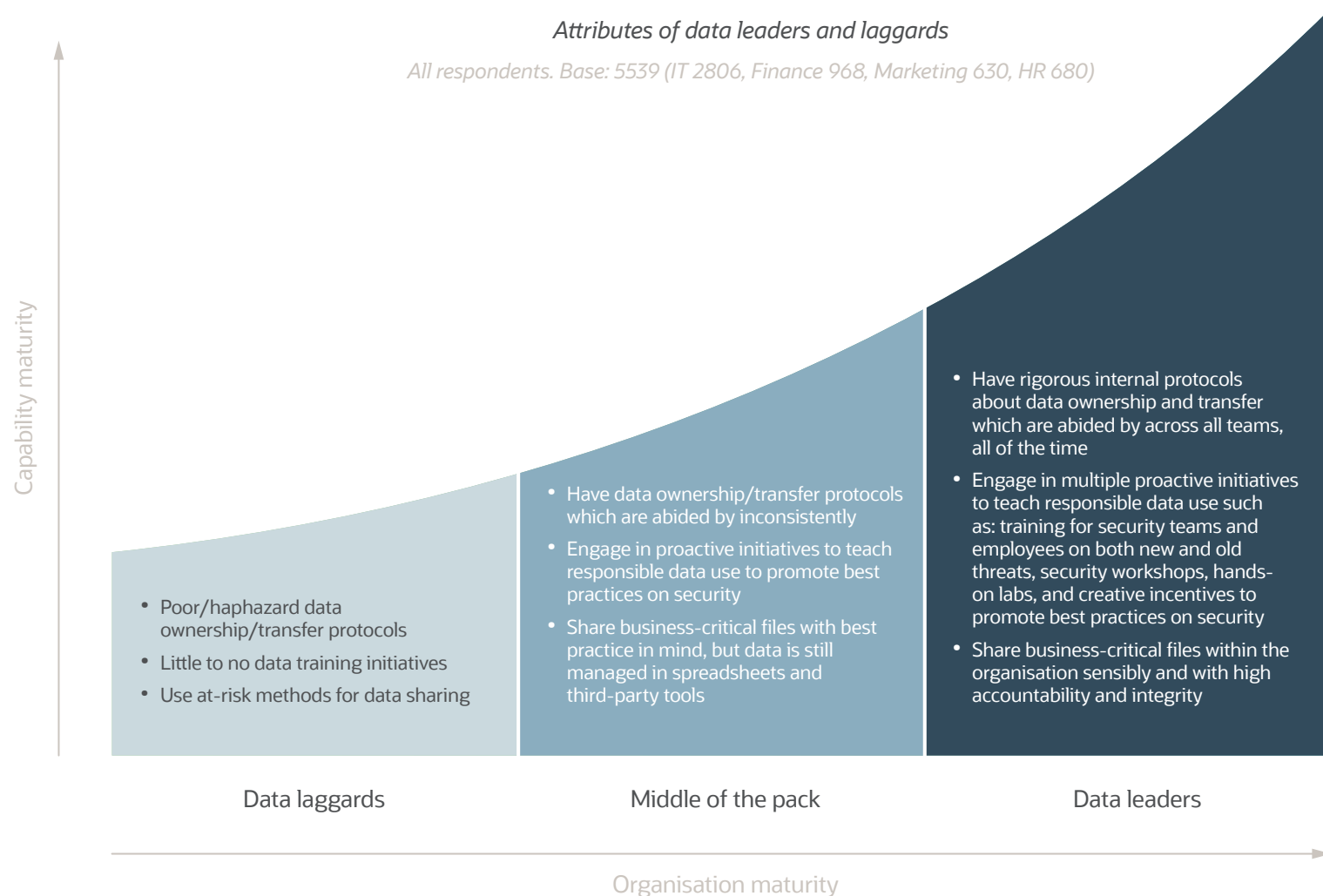


# Why it's important to be a data leader

Finding the value in your data

## Why it's important to be a data leader – What makes a data leader?

There are organisations far ahead of the rest when it comes to data management. Being a leader requires effort, but it's worth it in many ways. Better data means better decision-making, and better decision-making means top and bottom line benefits to a business. **It pays to be a data leader.**

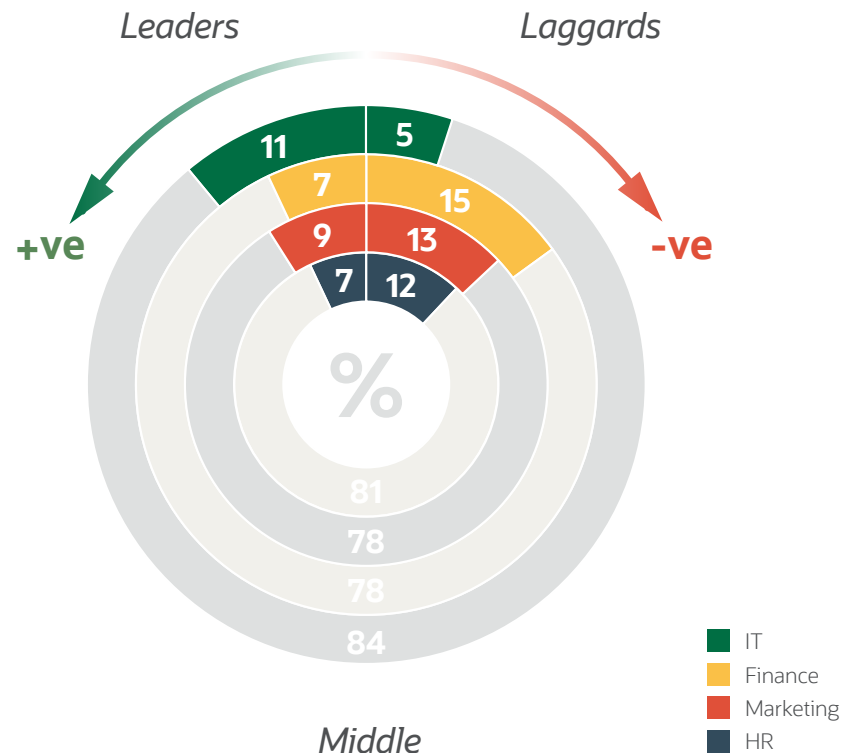


## Why it's important to be a data leader – How did we define data leaders and data laggards?

By looking at respondents' responses to three questions on the topics of internal protocols around data use, teaching people to use data responsibly, and the methods they use to share critical data, we saw that there are organisations far ahead of the rest.

### Maturity distribution

All respondents. Base: 5539 (IT 2806, Finance 968, Marketing 630, HR 680)



### So what makes a data leader?

Data leaders are respondents who are putting the effort into building best processes around data. They:

- work at organisations that have rigorous internal protocols about data ownership and transfer which are abided by across all teams.
- engage in multiple proactive initiatives to teach responsible data use such as: security workshops mixing together people from different lines of business, hands-on labs on secure usage of devices and connections, and creative incentives to promote best practices on security.
- share business critical files within the organisation sensibly and with high accountability and integrity – more often using methods like secure on-premises database access, and less likely to use email or flash drives.

Data laggards, on the other hand, are far less likely to engage in the above, and are almost certainly not doing all three.



## Why it's important to be a data leader – What is the incentive for heads of finance to become data leaders?

When we think of data, it's more than just ones and zeros. Data holds the **key to intelligence that can put a business ahead of its competitors**. Data allows departments to uncover valuable cross-functional insights, and it can enable the whole business to move and think as one hyperconnected entity – which can put distance between itself and the rest of the market in today's experience and service-driven economy.

Data requires storing, protecting, processing and interrogating in order to provide value to the business. Successful businesses think of data as capital – just like your biggest customer it holds massive revenue potential and is costly, and risks reputation damage when lost or mismanaged.

Data leaders understand this and have taken steps to manage data risk and exploit the benefits on offer.

*Showing responses to five critical factors of data management, split by data leaders and data laggards*

*Finance respondents. Base: 968*

■ Data leaders  
■ Data laggards



**Why it's important to be a data leader** – Leaders are better set up to handle the amount of data they hold

Today's execs must manage **exponential data volume** – regardless of their department. One of the side effects from a hyperconnected business is the data that it creates as it runs, and also the data that it needs in order to function.

Those from organisations or departments that are data leaders are more likely to find the data generated from employee records, financial reports, systems logs/monitoring alerts, and/or customer data, completely manageable. The same cannot be said about laggards with the same data (shown below).

It's clear that the key to being able to cope with this data is putting the processes in place (internal protocols, training, and sharing data responsibly) that turn you into a leader. As a result of this you'll become confident in the way that your organisation handles data and turns it into true value.

*Within your organisation now, how manageable is the amount of data generated by the following? – Completely manageable*

*Finance respondents. Base: 968*

■ Data leaders  
■ Data laggards





# Don't drown in data – get data confident

Get ahead, and stay ahead

## Don't drown in data – get data confident – The amount of data is unmanageable for the majority and will get worse

Just how are finance departments coping with the amount of data that they have?

It seems that **only the minority** of respondents are currently completely confident that they can manage the amount of data they hold.

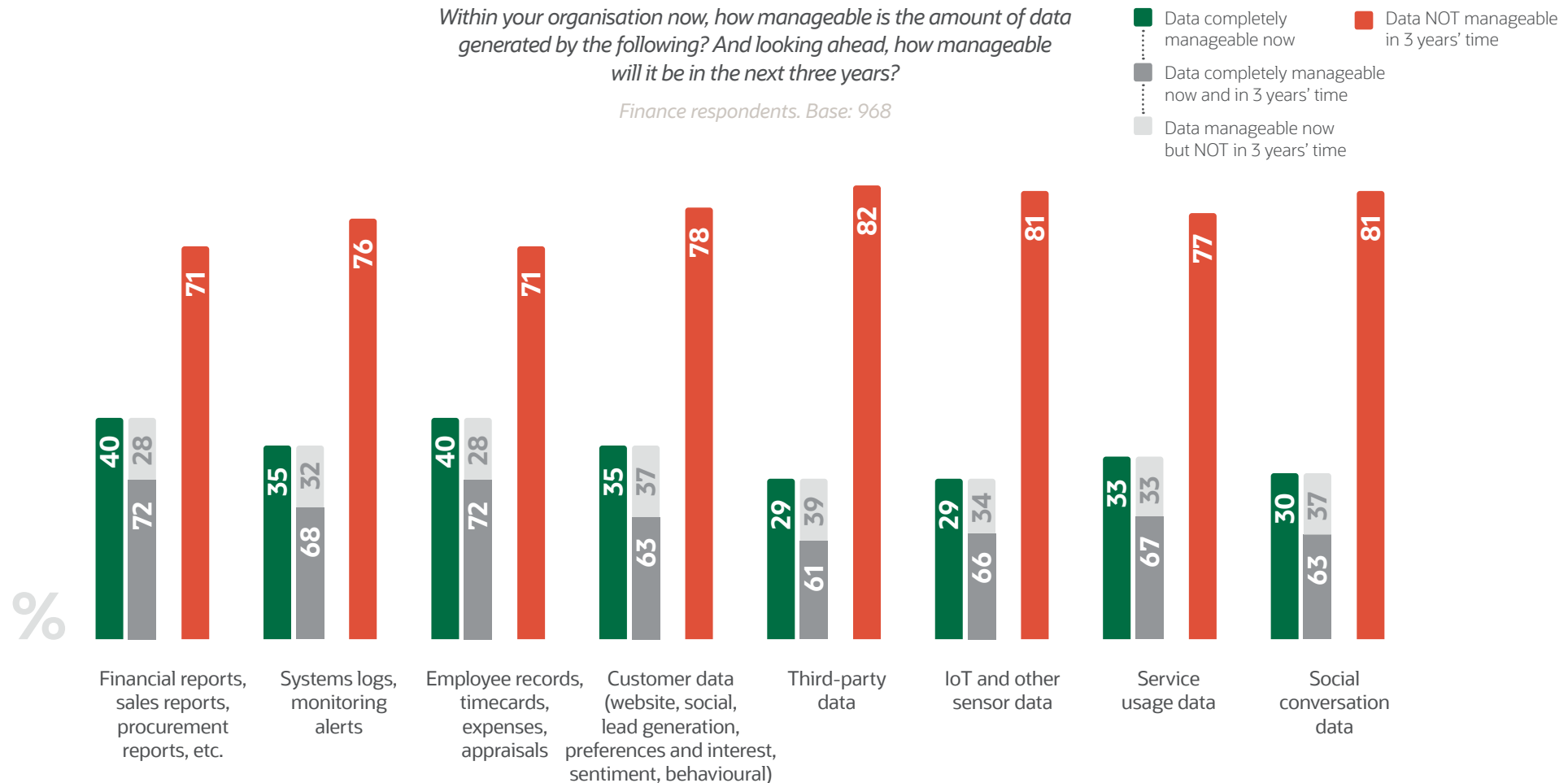
Critically when we look at how many of those went on to say that this will still be the case in three years' time, there is a drop in confidence among finance leaders that the amount of data generated in each area will be completely manageable.

For example, two in five of those who can currently cope with the amount of third-party data they have now, won't be able to in three years' time.

In other words, they are unprepared for what is to come.

*Within your organisation now, how manageable is the amount of data generated by the following? And looking ahead, how manageable will it be in the next three years?*

*Finance respondents. Base: 968*





## Don't drown in data – get data confident – Confidence in data management is low

Unfortunately for finance leaders, the volume of data is not the only thing that they should be concerned about. While the **amount of data** is certainly enough to stifle innovation, the situation only becomes bleaker when looking at some of their **other data management** practices.

As eluded to previously, leaders have higher confidence in the security of the data and also in the ability to use it to generate meaningful insight. The output of all this hard work is being confident in handling the amount of data your department not only generates, but needs to interrogate.

But while a significant minority of respondents in the finance department said that they were highly confident in each of the following, only 28% of

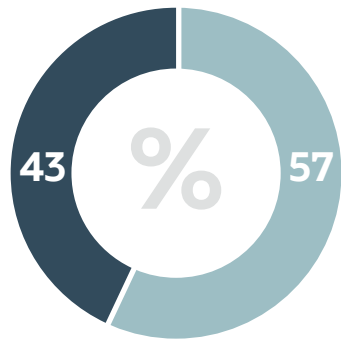
finance respondents are highly confident in ALL of these basic areas:

- the security of the data your organisation holds
- that your organisation is managing the deluge of data to generate meaningful insights, based on the last six months
- that your organisation's use of data is ethical, based on the last six months

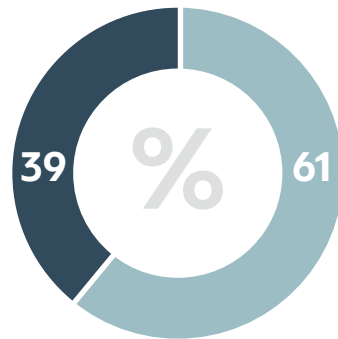
### The confidence index

Finance respondents. Base: 968

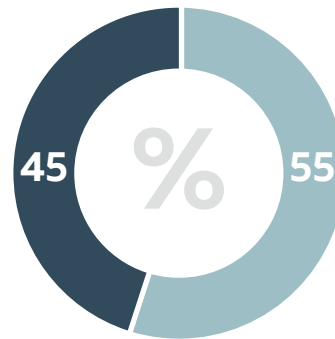
■ Highly confident  
■ NOT highly confident



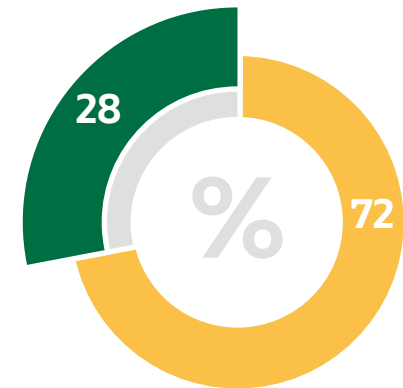
How confident are you in the security of the data your organisation holds?



How confident are you that your organisation is managing the deluge of data to generate meaningful insights, based on the last six months?



How confident are you that your organisation's use of data is ethical, based on the last six months?



Highly confident/Not highly confident in all three



## Don't drown in data – get data confident – But confidence in data is crucial

It stands to reason that if a business cannot master the **foundations of data management**, they cannot possibly build onwards and upwards with innovation – the structures and processes simply will not support it, and it could all come crashing down in the form of non-compliance, or poor business decisions based on bad data.

There are further incentives to nail the data management processes; those among the group that have high confidence in their organisations' data and its use act differently to those that don't. For example, they are more likely to find the amount of data they hold across

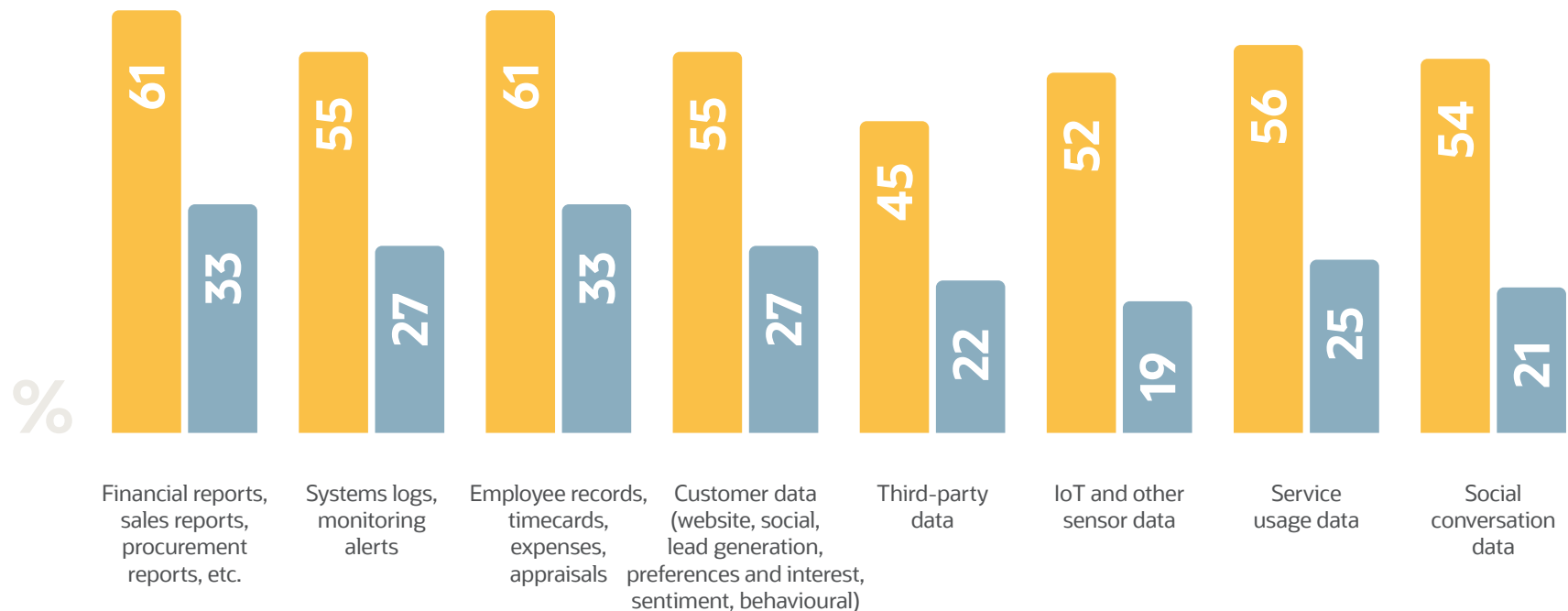
all areas manageable, probably because they have rigorous processes in place to manage it, and they manage it well.

If finance can get data management under control then they should start to see some of the benefits that these more advanced organisations experience.

*Within your organisation now, how manageable is the amount of data generated by the following?  
Cross tabbed by the confidence respondents have in their data and its use*

*Finance respondents. Base: 968*

■ Highly confident in data and its use  
■ Not highly confident in data and its use





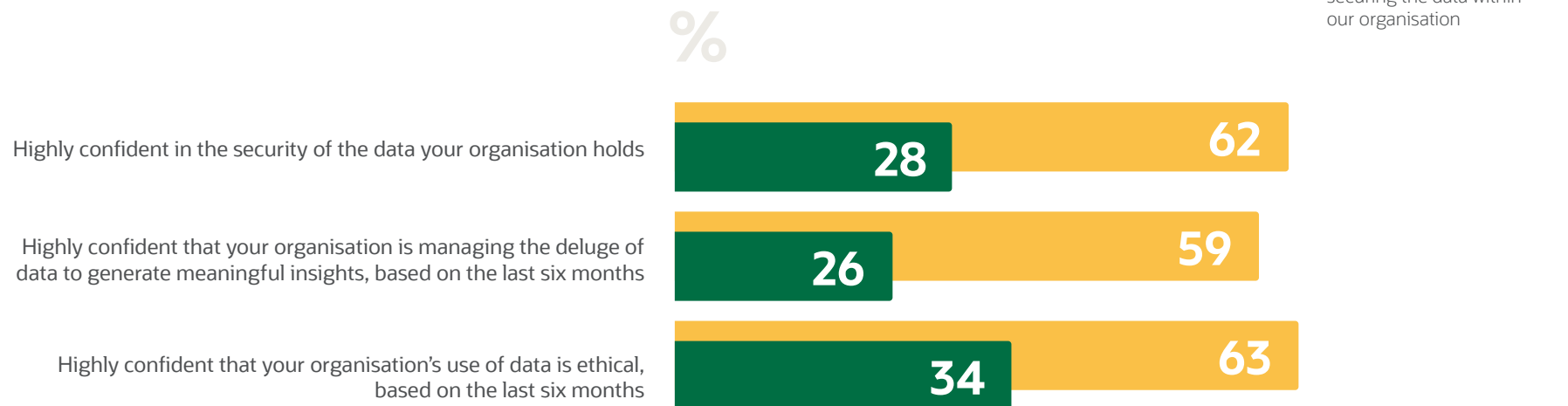
**Don't drown in data – get data confident** – Confidence is obtained through accountability

Those with the right mindset have put in the effort and become data leaders. They have gone on to experience the outcome of being highly confident in their data. The key to this is **taking accountability**. Simply being responsible is not enough.

Heads of finance departments who are ultimately in charge of securing their data are far more likely to say that they are highly confident, in each of the following areas, than those who say that they are merely responsible.

*Showing those who are highly confident in each of the below areas, cross tabbed by what role finance leaders said their department has in securing the data within their organisation*

*Finance respondents. Base: 968*





# Once data is under control, connect it all up

Dots to business success

## Once data is under control, connect it all up – Becoming hyperconnected is important, but share data securely

The need to share data across the business and dynamically align people to strategies makes **tracking data that is poorly managed** (shared inefficiently or duplicated), an unmanageable task.

However, there are steps that businesses can take to ensure that data sharing is as secure (and compliant) as possible. Finance leaders with high confidence in their organisation's data and its use are more likely to use the best practice to share business-critical data used within their organisation. It can be seen that the difference is starker among the methods considered more secure/mature (green), than less secure methods (yellow).

The group that has high confidence in their organisations' data and its use are also significantly more likely to understand that secure management of data is important to their organisations' reputation; 89% among those who are highly confident in their organisations' data and use of it, vs. 42% of those without high confidence.

*How frequently, if at all, are the following ways of sharing business-critical data used within your organisation?  
Cross tabbed by the confidence respondents have in their data and its use*

■ More secure methods  
■ Less secure methods

*Finance respondents. Base: 968*

	Highly confident in data and its use and use this all the time	NOT Highly confident in data and its use and use this all the time	Difference in percentage using method 'all the time'
Secure on-premises database access	59	34	25
Data is managed on spreadsheets	50	27	23
Files are shared by internal social tools	45	22	23
Files are shared by email	44	24	20
Data is stored on cloud or external database providers	53	24	24
Data is carried by flash drive	40	21	21
Documents are password-protected	63	37	37
Data usage only happens on trusted devices	61	30	30

%

## Once data is under control, connect it all up – Consider the data that you collect in the first place

We've already seen that many organisations are struggling with the amount of data that they hold, and that this struggle is only going to be magnified in three years' time. Considering that **31 billion IoT devices** will be installed by 2020\*, it's not surprising.

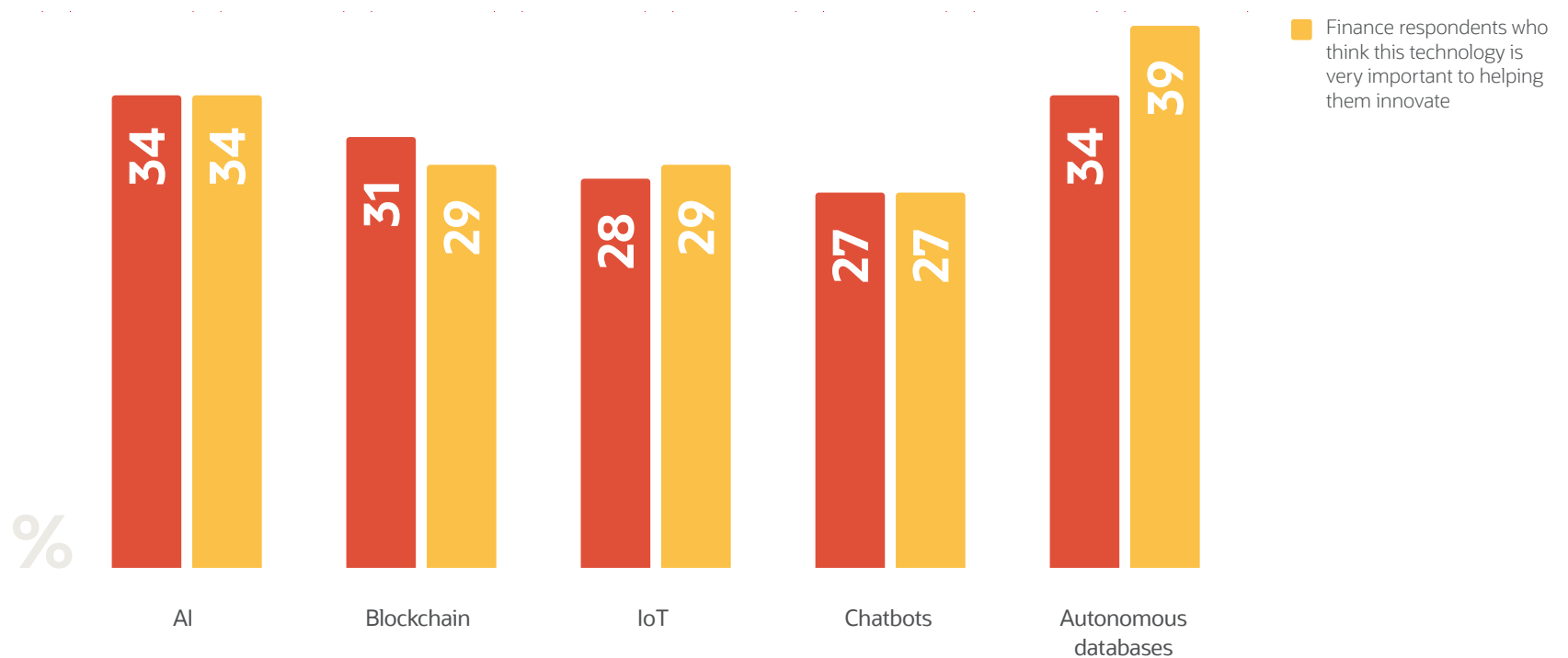
So there is the need for finance and operations departments to consider, firstly, why are you collecting the data and why you need it? and secondly, how are you going to turn it into insight?

It is interesting to note that fewer respondents agreed that IoT would

revolutionise their business than said the same for AI and/or autonomous databases. But the key is that these technologies work symbiotically; IoT collects mounds of data, and then AI and autonomous databases are the key to deciphering it and turning it into actionable insight.

*How would you describe the potential of these technologies to deliver meaningful change within your business? And, how important are these technologies to helping you innovate?*

*Finance respondents. Base: 501*



\* Source Statista



## Once data is under control, connect it all up – Technology enables hyperconnectivity

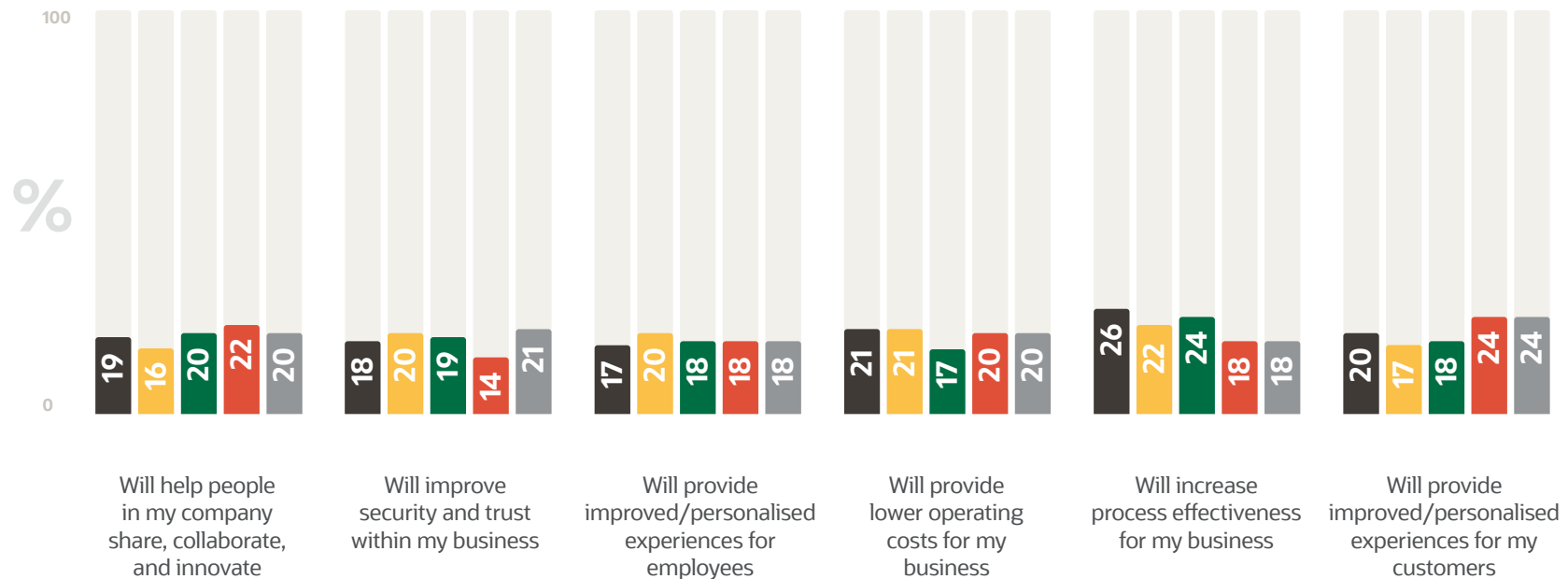
Being hyperconnected relies on two critical factors. Firstly a combination of technologies that enable data collection, predictive intelligence and data application. Secondly, a robust, accurate and single source of truth for data. At the moment **finance leaders are behind the curve** appreciating this.

Once in place hyperconnectivity offers the capability for intelligence to benefit the complete product and supply chain, with insight informing customer needs and behaviours, product evolution, and service delivery, in realtime.

*In what ways will these technologies drive innovation for your business in the next three years?*

*Finance respondents. Base: 501*

- AI
- Blockchain
- IoT
- Chatbots
- Autonomous databases



Once data is under control, connect it all up – Under-utilise technology at your peril

# 1

## There are two main drivers for operations departments to exploit technology and become hyperconnected:

### Set yourself up to cope with the continuous and inevitable influx of data

Improvement of front-end and back-end platforms is creating more micro-moments with the consumer.

As consumer interaction with technology continues to proliferate, opportunities for engagement along the path to purchase will inevitably increase.

With this in mind, it's essential to connect up all systems to ensure a hyper-personalised experience for the consumer, and for you to compete with your competitors.

Overall, when it came to next steps for their Industry 4.0 implementations, manufacturers ranked customer-facing operations as the most crucial place for change within the next three years. Half said they would be focusing on removing data siloes and 47% acknowledged they needed to create a more open exchange of data with suppliers and distributors.

# 2

### Improve product development\*

Product development quality is at risk if the flow of data and intelligence through life cycles doesn't improve:

- The number of teams that rated their organisation as efficient or very efficient for gathering input to requirements was 40%.

A complete view of product development processes is limited by a lack of data tracking tools:

- 54% of teams are neglecting to track their data
- 18% have no formal system
- 36% are relying on 30-year-old (or older) technology (emails/spreadsheets) to track critical inputs to the development process.

Data is now seen as capital or currency by the most successful organisations, and yet external data isn't being valued fully by product development teams:

- Only 32% of teams have access at any time to product data across the product life cycle and when deployed in the field
- Only 34% of product development teams have timely and accurate key performance indicator data.

\* Source for all statistics in column two  
The Digital Transformation of Product Design: How are design teams using and planning for design technology fuelled by data?  
Engineering.com sponsored by Oracle





# Reasons to disrupt yourself

Getting ahead and staying ahead

## Reasons to disrupt yourself – Reliance on transformational technology set to increase

Staying relevant to your customers and consumers means being agile enough to adapt to their changing needs and demands. In essence it means recognising the need to **use technology to adapt and disrupt yourself** as an organisation.

Currently, only the minority of finance heads say that their organisations are very reliant on the following technologies – but more think they will be very reliant on them in three years' time.

This is more the case for blockchain and AI or IoT than for chatbots. This shows that there is some understanding that

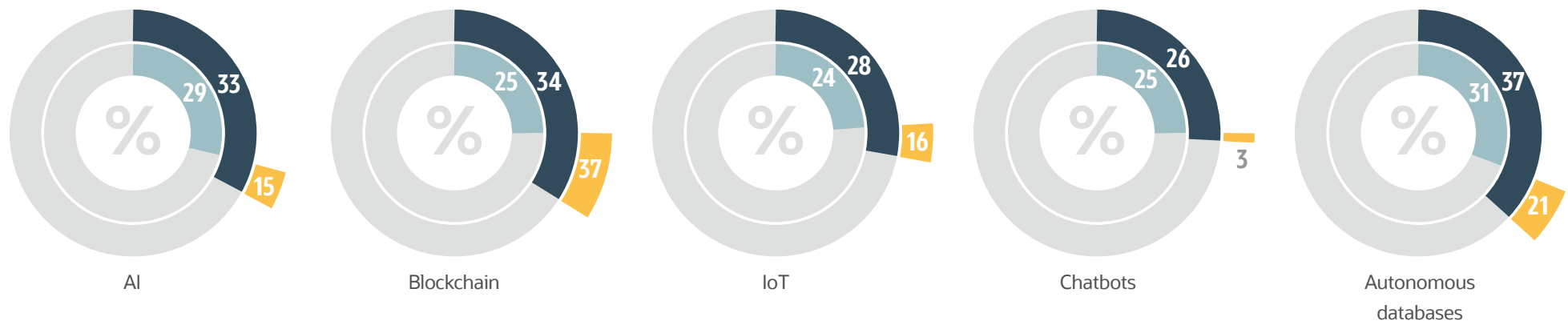
these technologies will be ubiquitous soon and that while organisations might not be reliant on them now, they will be pivotal to successful transformation.

As we will see, use of these technologies will underpin the innovation objectives that finance leaders are looking to achieve.

*Showing finance respondents who are very reliant on this technology now, and those who think that they will be very reliant on it in three years' time, and the percentage increase in reliance*

*Finance respondents. Base: 501*

- Very reliant now
- Very reliant in 3 years' time
- % increase in reliance over next 3 years



## Reasons to disrupt yourself – The transformation journey has only just begun

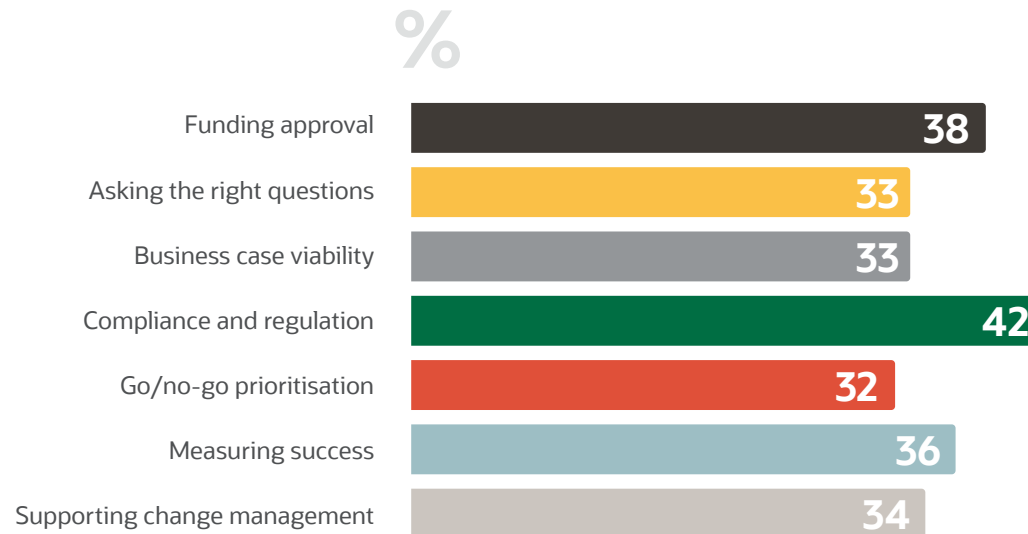
Only three or four in ten finance leaders who named each of these areas as somewhere that they aspire to **enable innovation**, have actually gone on to complete them.

Technology could help finance heads to get these transformation projects over the finish line – but as we've seen, their reliance on technology is not as

high as it could be currently, with too few saying it will revolutionise their businesses.

*Finance respondents that named each area as somewhere they aspire to enable innovation as a priority, only showing those that have gone on to complete it*

*Finance respondents. Base: 845*



## Reasons to disrupt yourself – The transformation journey is worth the effort

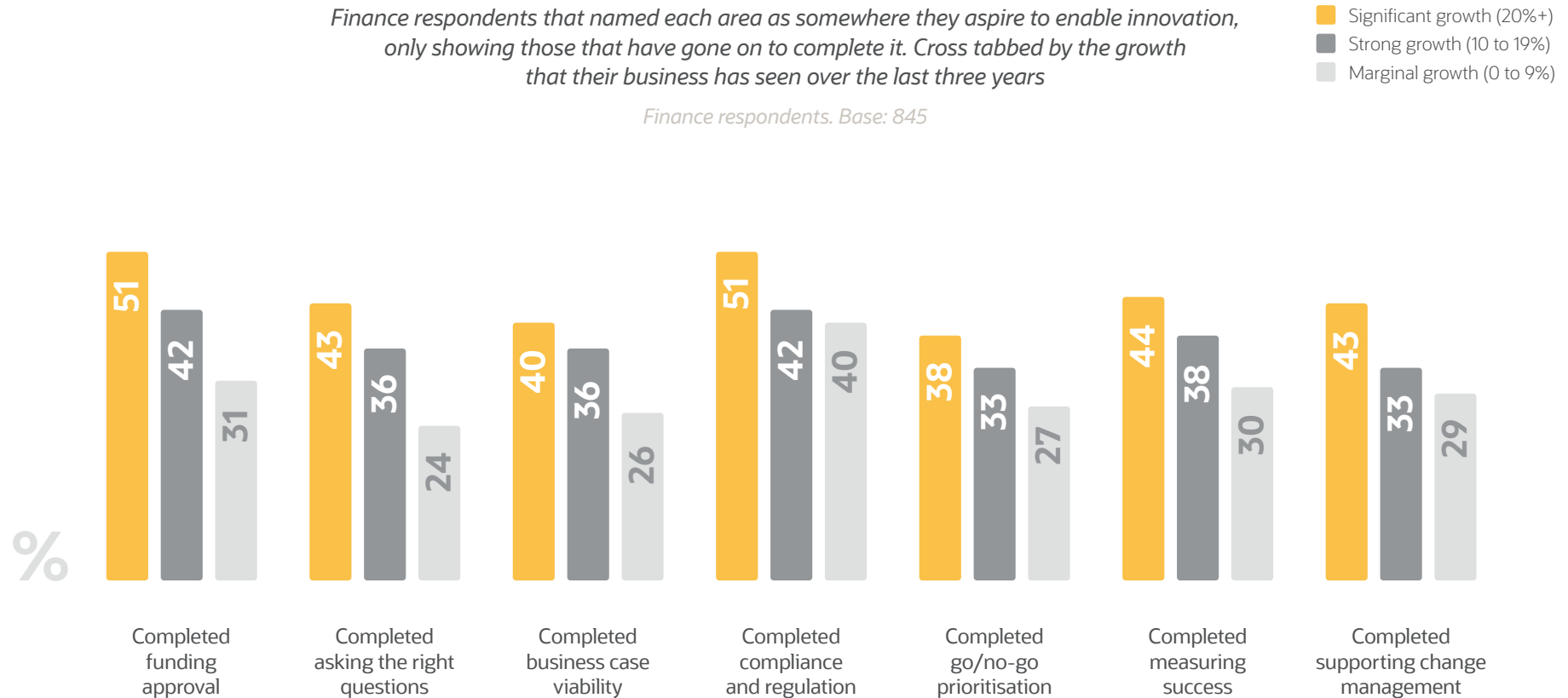
In order for a business to succeed in today's market, it's not enough to merely keep up with your competitors, you need to put aside the way you have done things in the past and **prioritise innovation** to get ahead of the competition.

It will be crucial for finance leaders to push through innovation roadblocks and disrupt themselves. Those who have successfully enabled innovation in each of the following areas are

more likely to be from organisations who have seen significant growth over the last three years, thus proving the link between innovation and significant business benefits.

*Finance respondents that named each area as somewhere they aspire to enable innovation, only showing those that have gone on to complete it. Cross tabbed by the growth that their business has seen over the last three years*

*Finance respondents. Base: 845*



## Reasons to disrupt yourself – Committing to an innovation strategy pays off

Looking at the types of innovation that finance heads are saying are playing a **significant role in their organisation** – irrespective of which is chosen – enabling and prioritising one or more innovation methods pays off.

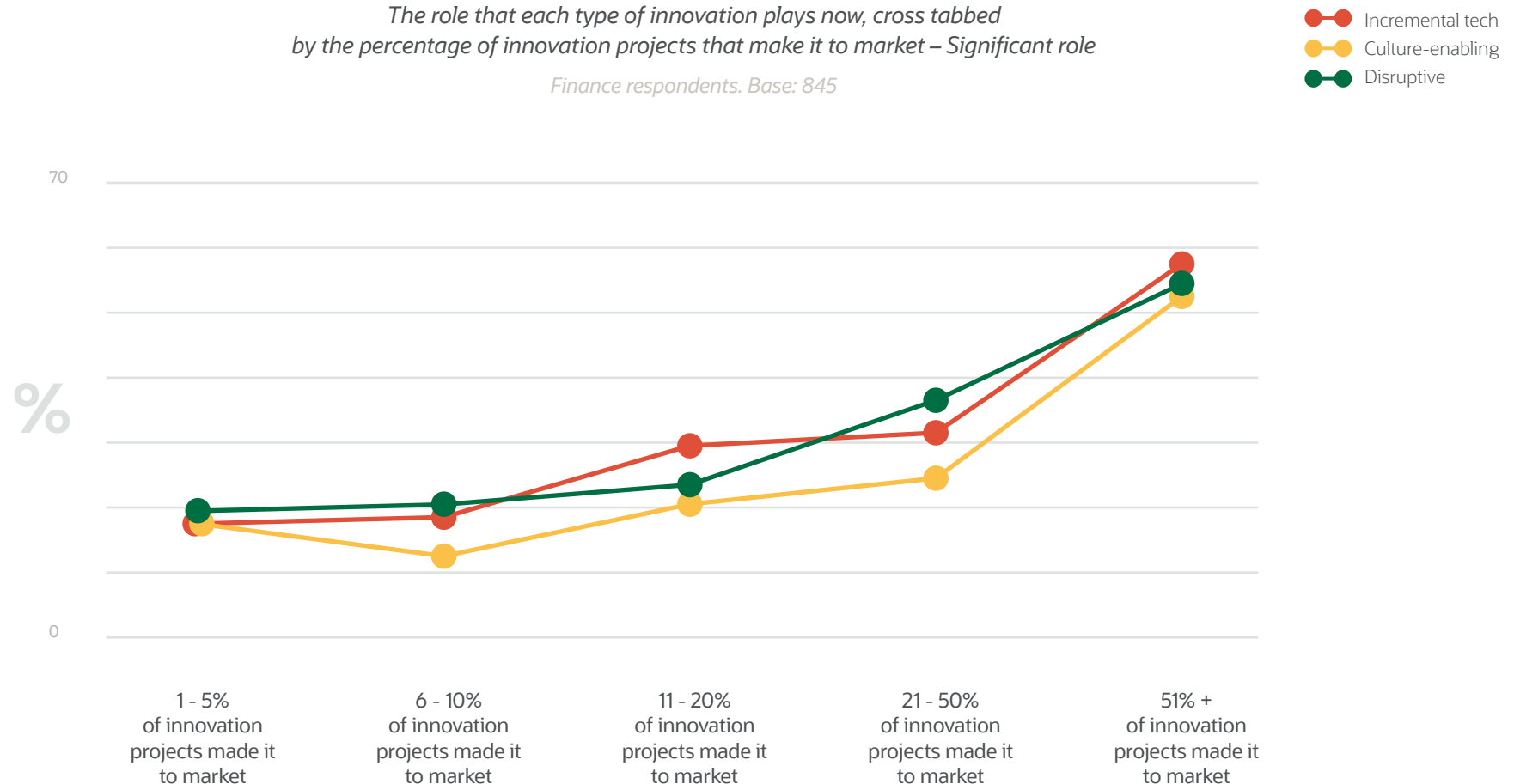
The higher the number of innovation projects that make it to market, the more likely it is that the type of innovation is seen as significant to the organisation by department leaders in finance. There are different ways that an organisation can innovate; the use of incremental technology, using culture to enable innovation, or to be disruptive.

These are not mutually exclusive – an organisation may have a number of initiatives spread across these three methodologies.

It then stands to reason that getting more innovation projects across the finish line and into market, where they can generate revenue, will directly impact the bottom line and contribute to the growth that we saw on the previous page.

*The role that each type of innovation plays now, cross tabbed by the percentage of innovation projects that make it to market – Significant role*

*Finance respondents. Base: 845*



## Reasons to disrupt yourself – Committing to an innovation strategy pays off (cont.)

The argument for disruption is clear because the same trend can be seen when we look at the role that each type of innovation will play in **three years' time**.

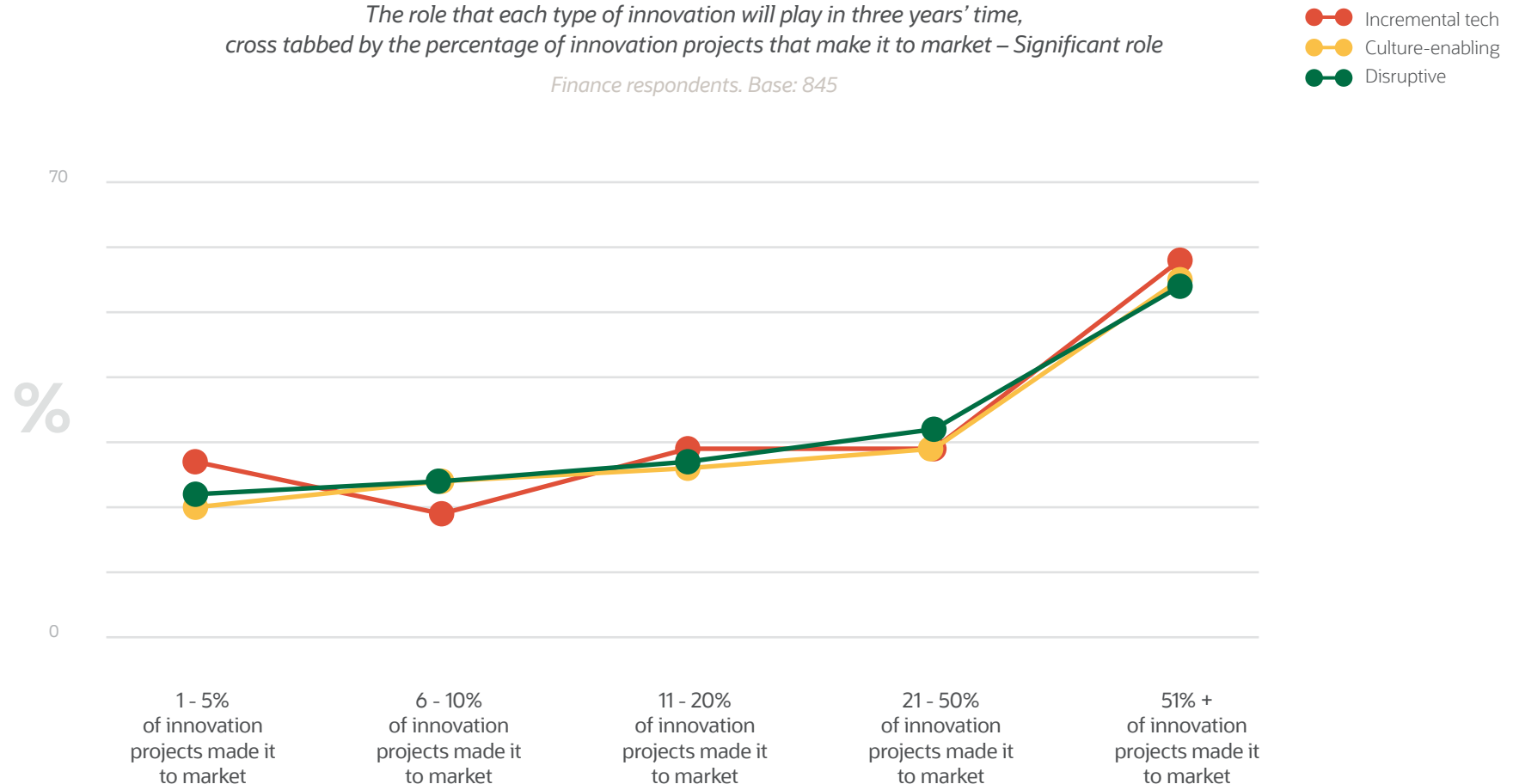
**1 Technology is leading disruptors;** therefore all companies need to be imagining and embracing an agile mindset. Whatever transformation you put your mind to – make it significant throughout the entire business – especially in operations and back office departments.

**2 Pace yourself because the finish line keeps moving.** Transition your focus away from big, extensive and undisciplined changes and instead understand the benefits of the perpetual-evolution model, which emphasises continual monitoring and ongoing renewal across all elements of technology stacks.

**3 Use your disruption to empower you** to complete your priorities around enabling continuous innovation, which leads to more increased business growth.

*The role that each type of innovation will play in three years' time, cross tabbed by the percentage of innovation projects that make it to market – Significant role*

*Finance respondents. Base: 845*





## Conclusions – Reaping the benefits of hyperconnectivity

**There are two things that a successful business in 2020 will need to master – data and innovation. You can't have one without the other, and you can't have either without an agile mindset.**

**Firstly data. The amount of data we all generate as humans is only going to increase – and therefore, it's likely that businesses will employ more and more tools to capture that data.**

**But this is useless if they can't then turn it into insight that will help them to better service their customers in a hyper-personalised way – and operations departments will be pivotal in making that happen.**

Unmanaged data can do more harm than just sit there unused – it opens businesses up to vulnerabilities around security and data breaches, and problems around risk and compliance. The way to mitigate these concerns is for the business to become a data leader with the goal of becoming data confident; put in rigorous processes and internal protocols around data and train your employees how to use it and share it.

Sharing it will be crucial for the business to be connected and compete in the current, and future, climate. Becoming a hyperconnected business that is agile and responsive, successfully processing its data and turning it into insight, is critical for 2020. However, it cannot be treated as a race to the finish, or a tick-box exercise – data management is ongoing and the process in which data is processed and shared with the rest of the business to enable decision-making needs to be reviewed frequently.

Secondly... innovation. In order to be truly hyperconnected, businesses will need to innovate to make that happen, and leaders driving these transformations need to carry a special disruption DNA and breed it into accelerating their organisation's technology advancement. Those that don't will fall behind.

If the finance heads can understand the need to adopt transformative technologies and build a solid foundation of data management to support this, it will help transform the organisation into an agile, hyperconnected enterprise and enable every department to be the business partner the organisation needs.

It's essential to take a holistic perspective and think about how to exploit new technologies for continuous improvement of the customer experience. The key will be that whatever route you take to innovate, it becomes embedded into the lifeblood of the business, and becomes a mindset for everyone in it. If you succeed at this, the changes won't feel disruptive at all, they will be seen as they should be – evolution. Survival of the fittest.

**How should you get ready to compete?**

## Conclusions – Four steps to getting data to drive your business

# 1

### Set yourself up to cope with the continuous and inevitable influx of data

- *Start with your department. Become accountable for the data that your department collects, uses and shares*
- *Be a data leader – put in place protocols and rigorous processes around data security. Don't let data smother innovation*
- *Get data confident – invest in technology to turn data into actionable insight for the business as a business leader*

# 2

### Become securely hyperconnected

- *Collect only data that matters, and analyse it powerfully*
  - *Customers' views are ever-changing, the only way to keep up is to invest in transformational technology*
- *Dynamically align business leaders to strategy in ever-shifting markets, to position lines of business as business partners in a hyperconnected enterprise*

# 3

### See technology as an ally to ongoing agility

- *Investing in incremental technology will enable innovation priorities to be completed and set the business up for greater growth, and a higher proportion of innovation projects making it to market*
- *Transformational technology will improve and augment decision-making and increase efficiencies through automation using things like AI, autonomous databases and blockchain*

# 4

### Embrace innovation and challenge yourself to change

- *Embody innovative thinking*
- *Live and breathe your chosen path – make it significant to every person in the business*
- *Use technology as a catalyst to augment innovation and disrupt yourself*



To learn how these transformational technologies can help innovate your finance department, **why not try Oracle Cloud today?**



[Find out how Oracle Cloud can help](#)