

A skateboarder is captured in mid-air, performing a trick in a large, circular concrete skate bowl. The scene is bathed in a cool blue and purple light, creating a dramatic atmosphere. The skateboarder is wearing a dark jacket and pants. The bowl's edge is visible, showing some wear and tear. In the background, another person is sitting on the edge of the bowl, watching the action.

FORRESTER TELCO RESEARCH

# Priorities, challenges and the role of data and analytics as an **accelerator of strategy**

A commissioned study conducted by  
Forrester Consulting on behalf of Experian

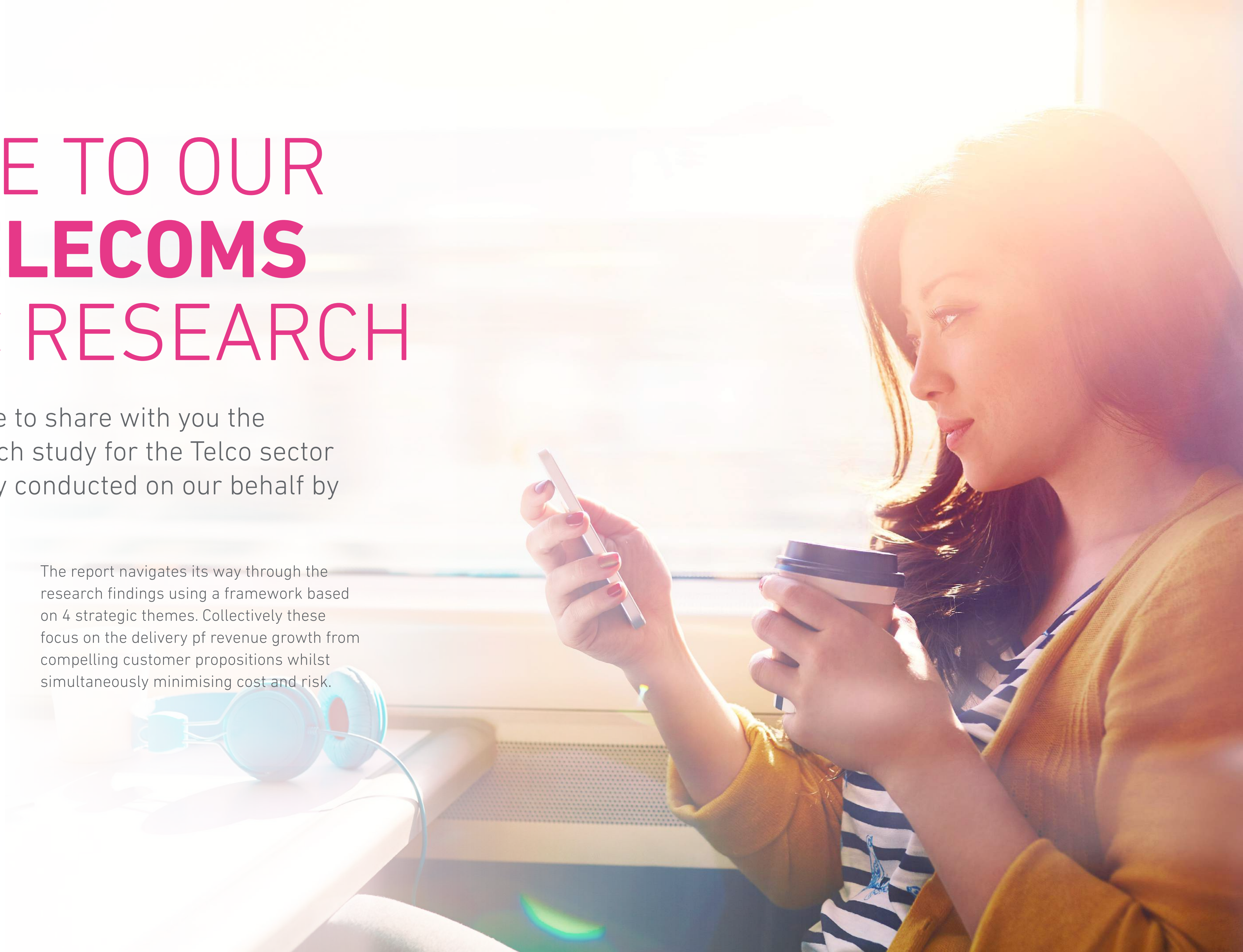


# WELCOME TO OUR FIRST **TELECOMS** SPECIFIC RESEARCH

We are delighted to be able to share with you the findings of our first research study for the Telco sector which has been exclusively conducted on our behalf by [Forrester Consulting](#).

The focus of the study is on the provision of post paid products and services to consumers and small medium sized enterprises. It gathers together responses from **267 senior employees, 66% of which are at least Director** level drawn from across **7 EMEA countries - Denmark, Germany, Spain, Italy, South Africa, Netherlands and Turkey** - and provides valuable insight into how firms have managed increased risk and uncertainty during the pandemic.

The report navigates its way through the research findings using a framework based on 4 strategic themes. Collectively these focus on the delivery of revenue growth from compelling customer propositions whilst simultaneously minimising cost and risk.



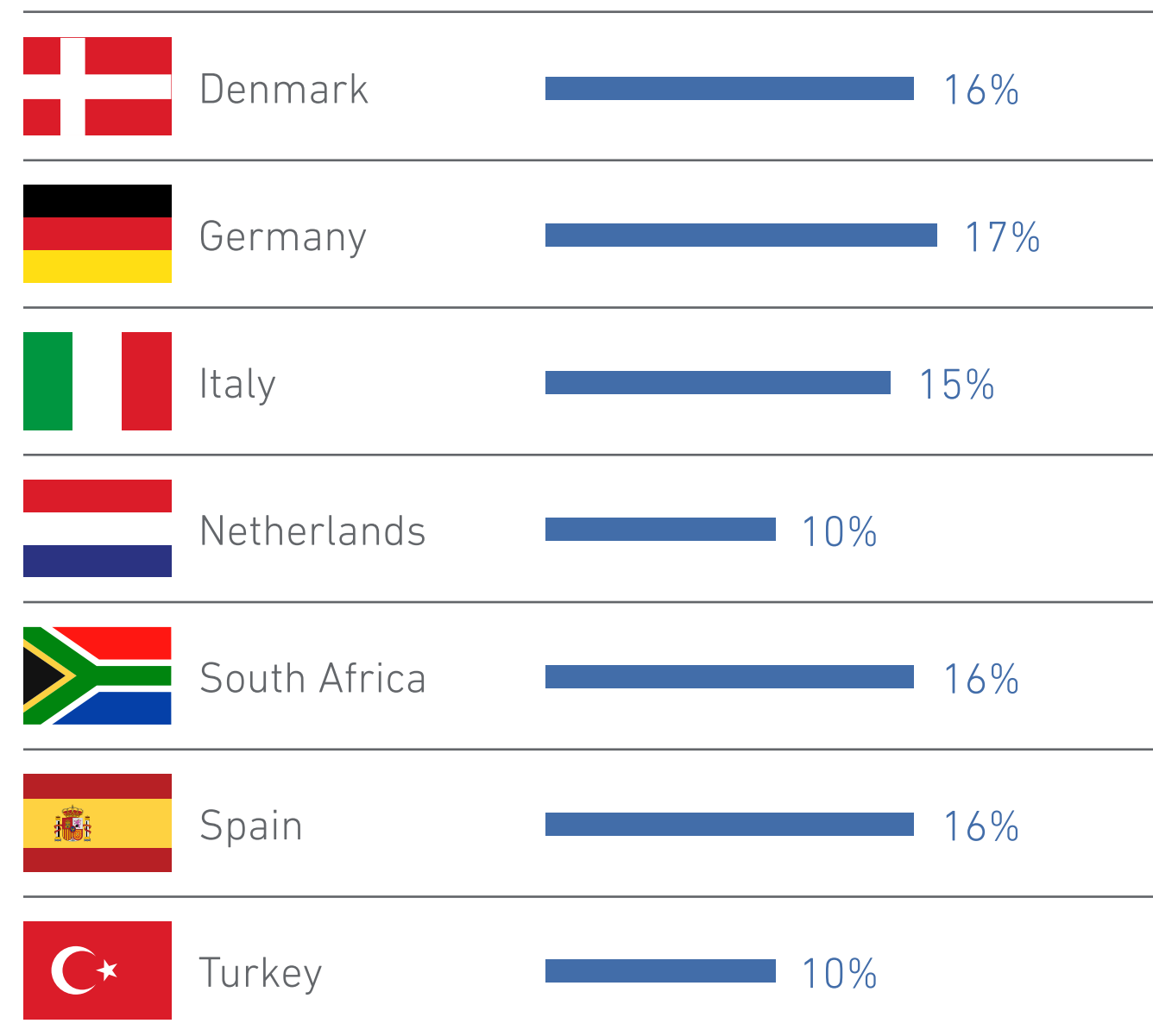
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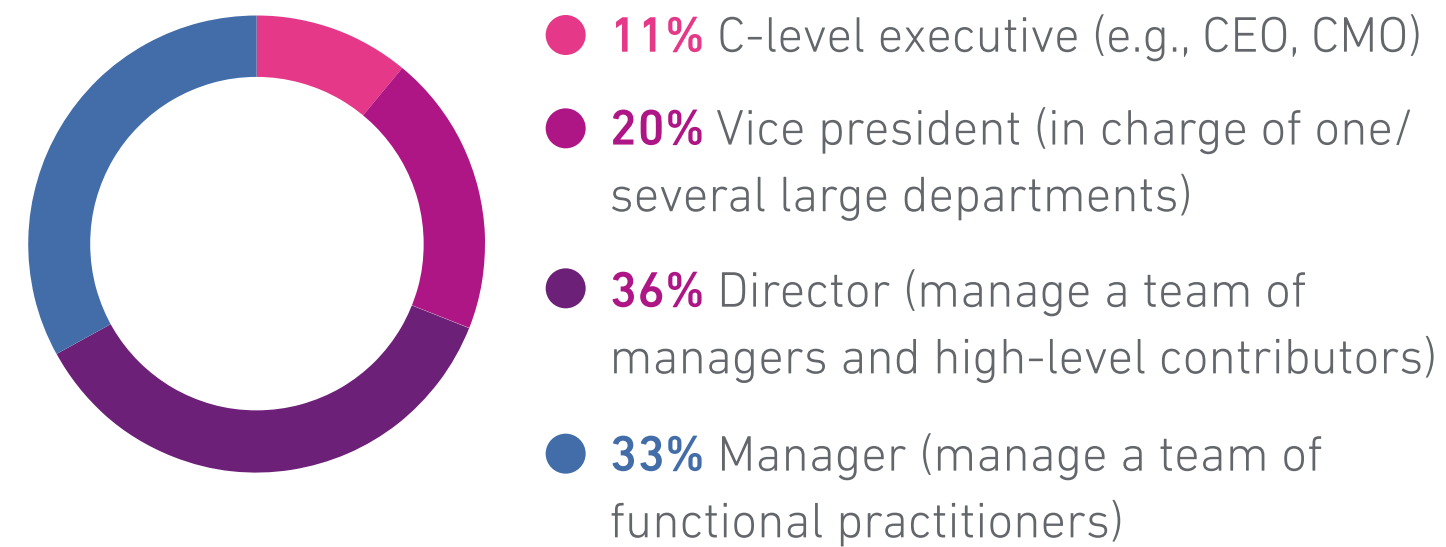
# RESPONDENT MAKE UP

## Geographical spread of respondents

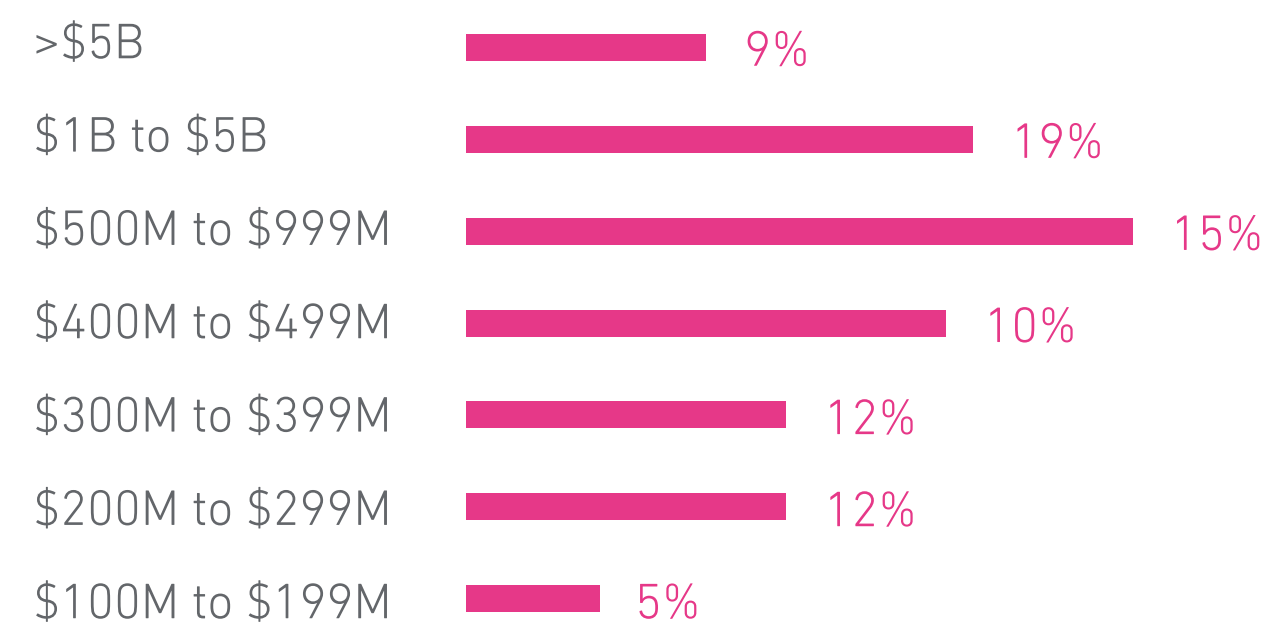


Experian commissioned Forrester Consulting to conduct the study in August 2021 to explore how the pandemic has impacted business metrics, priorities, challenges and budgets. It involved 267 senior decision-makers in telecommunications firms across 7 EMEA countries – Spain, Italy, Germany, South Africa, Denmark, Netherlands and Turkey.

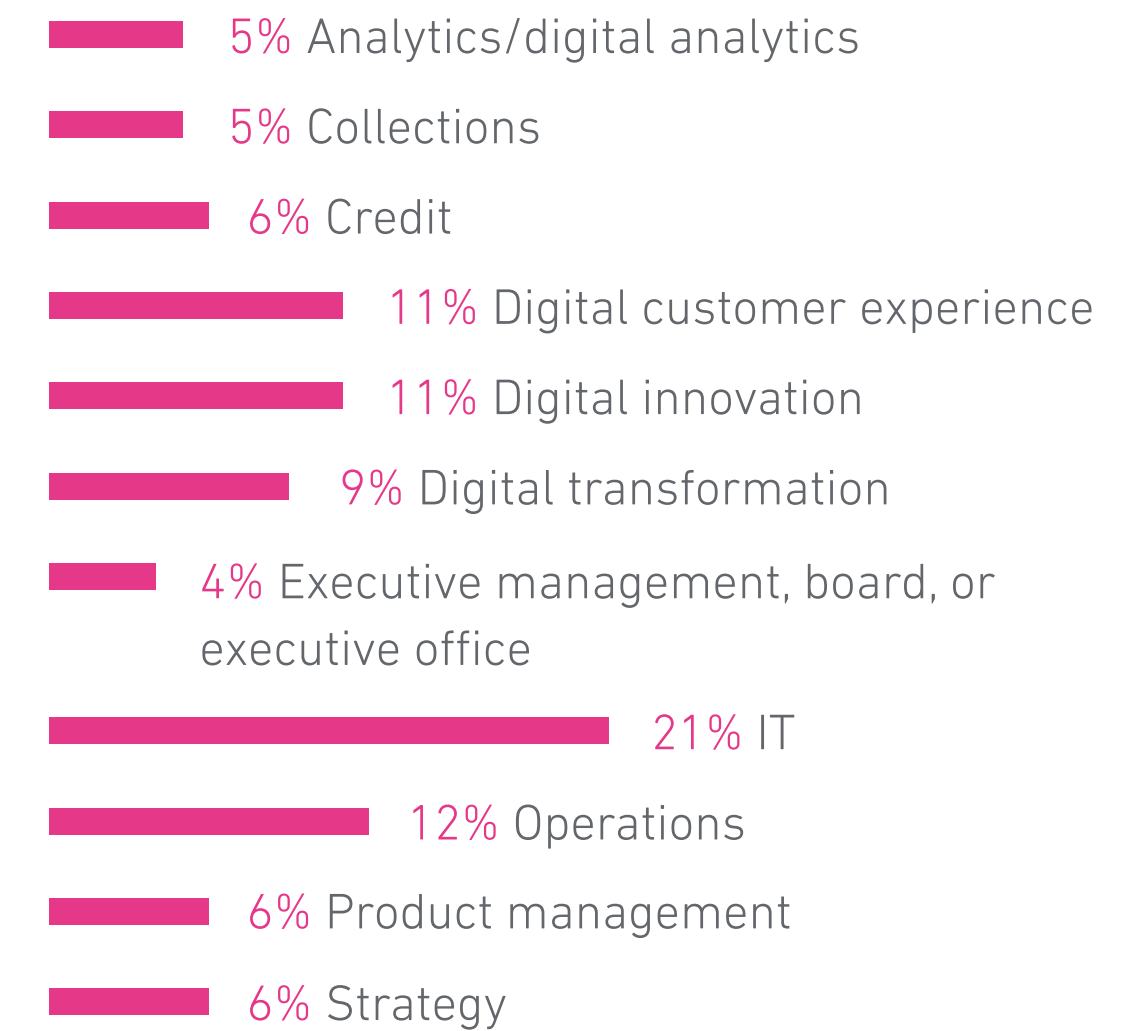
## Respondents' level of authority



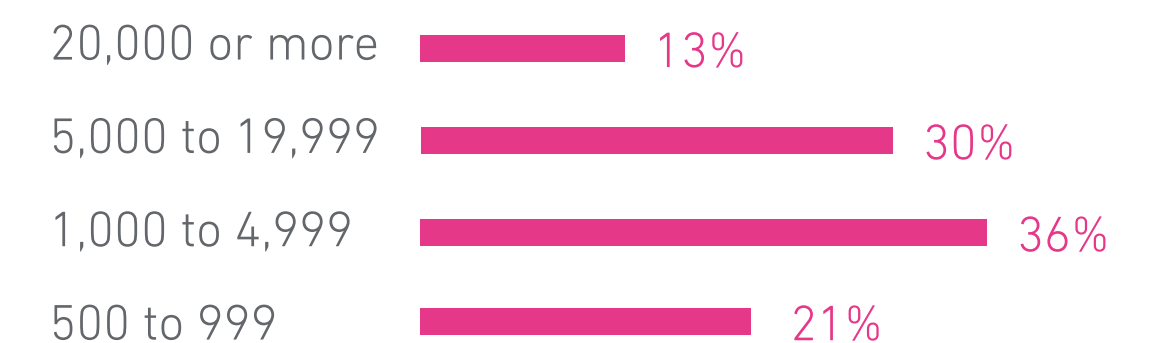
## Respondents' Organisations: Turnover (\$)



## Respondents' role

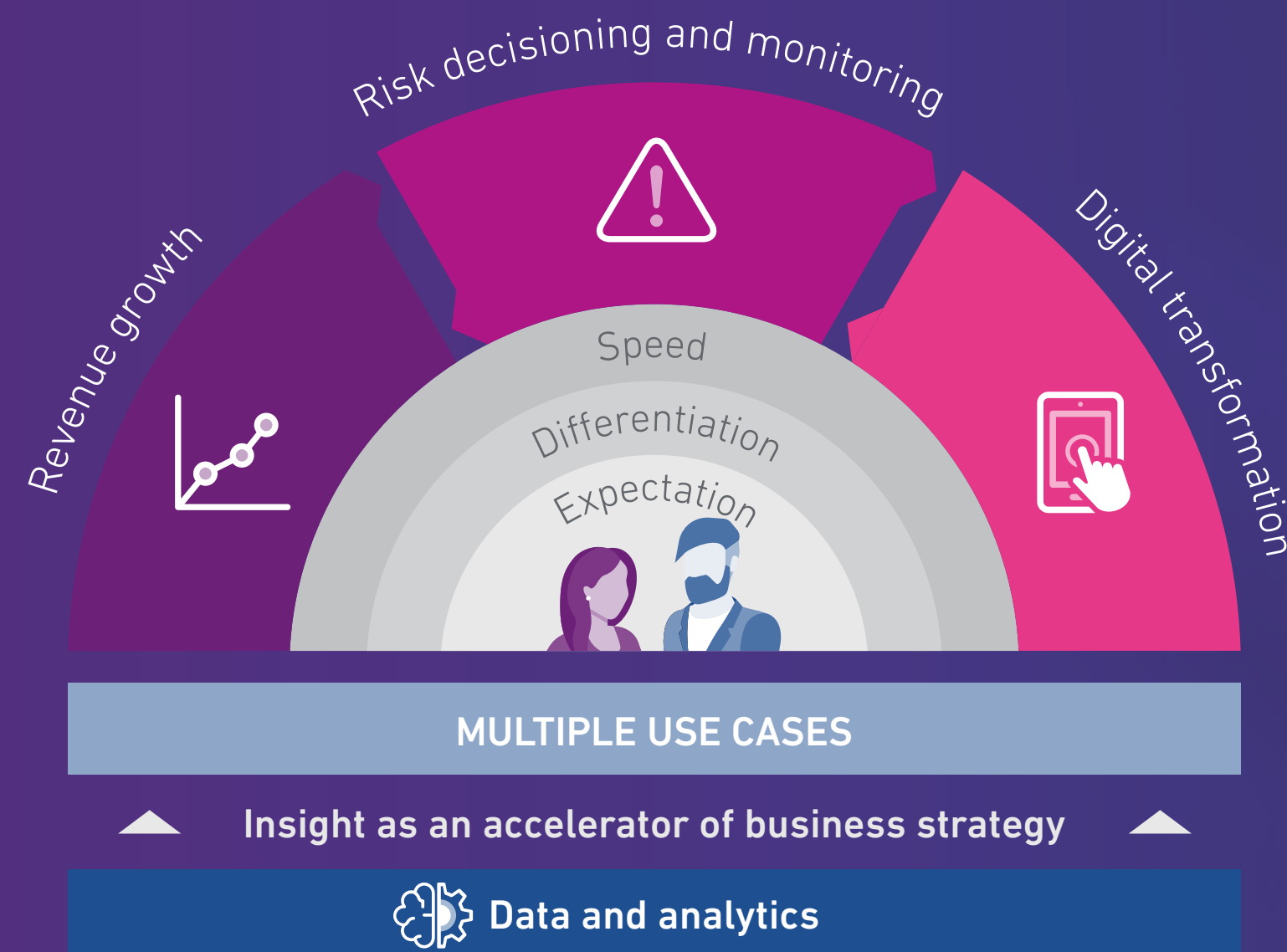


## Respondents' Organisations: Total Employees (Global)



# 4 TELCO STRATEGIC THEMES

The research reveals four interlinked strategic themes which are built around the end customer and the need to provide them with speed, a positively differentiated experience and both meet and exceed their expectations.



## Revenue growth from both new and existing customers

The feedback received from respondents is wide-ranging and includes topics such as the identification of new market segments, increased personalisation and more accurate targeting of potential customers for cross and up sell.

## More accurate risk decisioning and risk monitoring

This applies at both a customer (consumer and SME) and portfolio level. These factors will have a direct impact on the business metrics regarding credit and fraud losses, bad debt and portfolio volatility.

## Digital transformation

The transformation of operational processes and the transformation of customer experiences are in effect two sides of the same coin. Together these factors will directly impact profitability by simultaneously:

- **Supporting** the growth strategy through increased engagement and retention whilst at the same time
- **Delivering** enhanced operational effectiveness to drive down costs to serve

## Data and analytics

This is the key enabler, catalyst and accelerator for the other three themes.

Included here are the capabilities that provide the power to create an ongoing stream of actionable insight through the optimisation of multiple types of data, advanced analytics, machine learning and artificial intelligence.

# IMPACT OF THE PANDEMIC ON TELCO BUSINESS METRICS



## Top challenges

# INCREASED RISKS CREATED BY THE PANDEMIC

The pandemic brought with it significant changes to the risk landscape for telcos. New risks emerged, existing risks became amplified and many existing risk management practices needed to be fundamentally reviewed. Our research focused on fraud risk, credit and affordability risk, portfolio and operational risk.

Looking at the results which are displayed on the next page, the highest percentage of respondents highlighted the challenge of increase levels of first payment default. This type of fraud is primarily aimed at fraudulent acquisition of handsets on credit with no intention to pay. It is typically done through the use of stolen or synthetic identity data, or via a mule recruited by the fraudsters to use their own identity.

The highest risk from a credit and affordability perspective is seen as the inability to accurately predict future vulnerability within Telcos' customer base. In our experiences over the last year we have seen an increased interest in Telco early warning analytics which draw upon alternative data to enable telcos to engage with the customers early on and discuss what can be done to help them better manage payments.

Economic uncertainty and the uneven nature of the recovery is also creating risks for existing customer portfolios. This applies across the board but can be of particular concern regarding portfolios of SME customers where greater levels of value may be at risk. Increasingly macro-economic forecast data is being used along with new non-traditional data such as web data to get a more accurate understanding of potential risk exposure.

As well as increased volumes of customers moving into collections, additional demands - including the need to reassess affordability on an ongoing basis - have been placed on existing collections systems. We believe that these pressures lie behind the feeling of quarter of respondents that their existing collections systems that do not cater for pandemic impact.

## Top challenges

What are your main concerns and challenges regarding managing financial risk as a result of the pandemic?

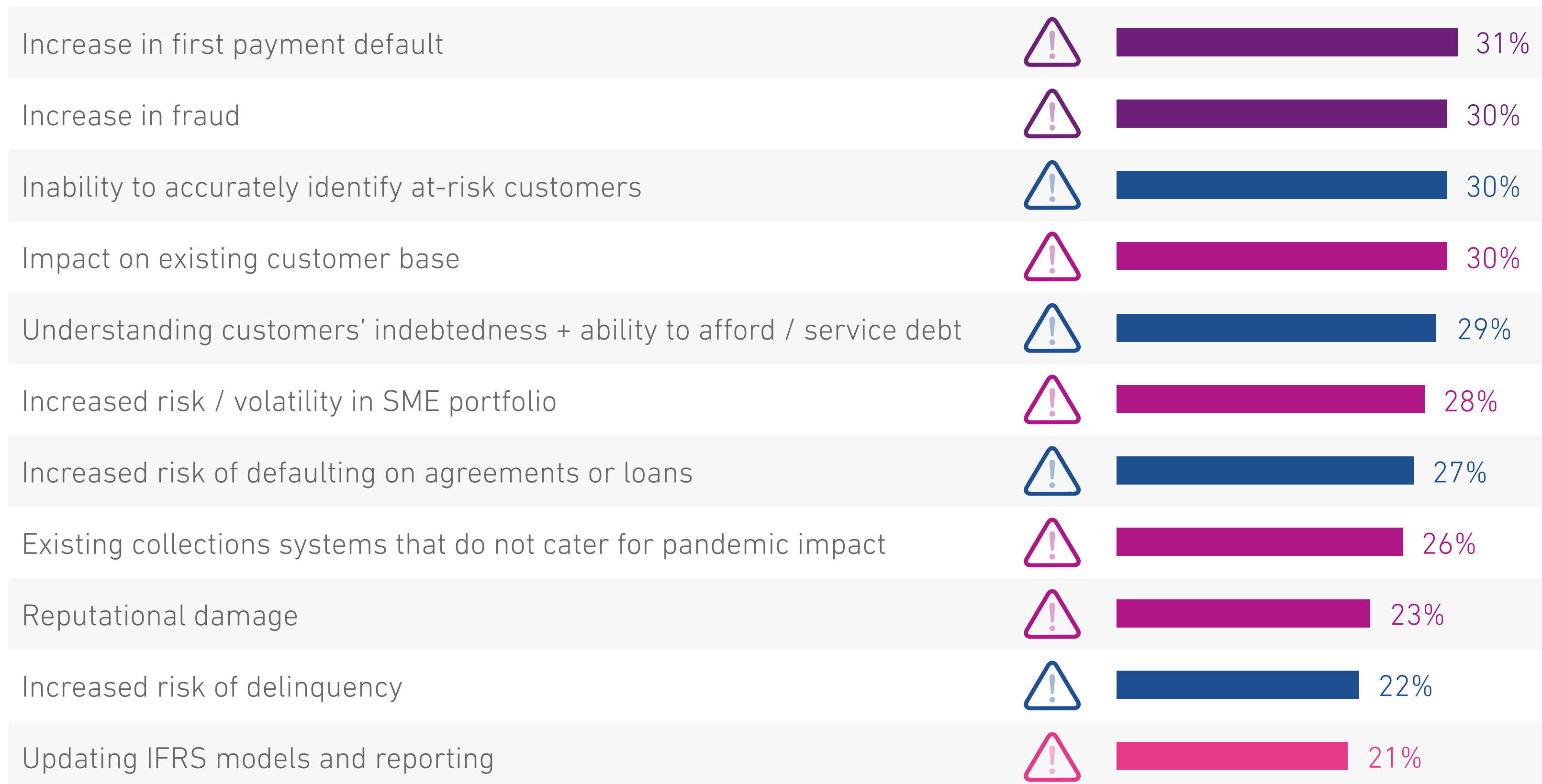
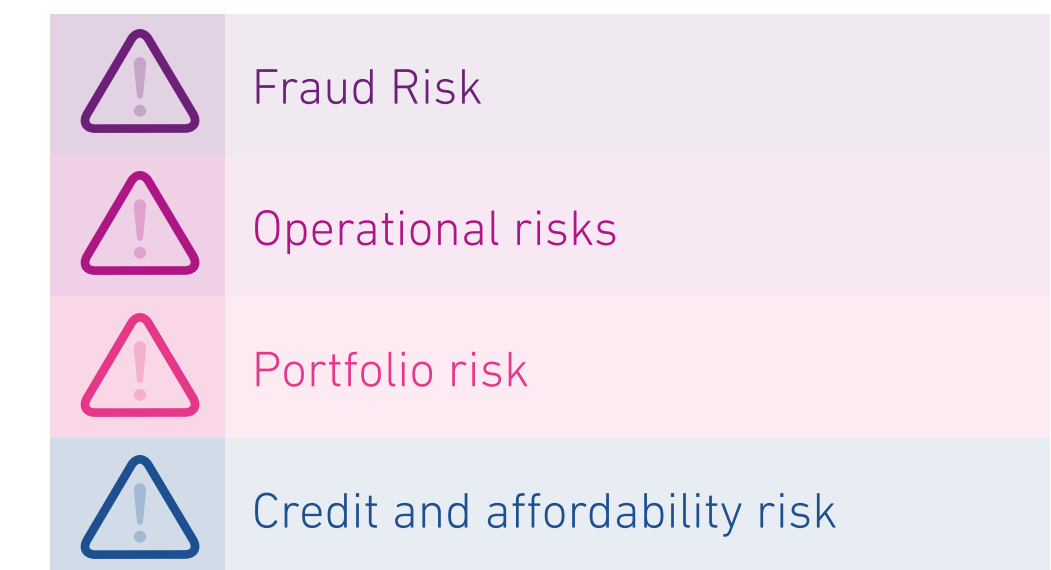


Chart shows percentage of respondents that highlighted specific issues (multiple answers possible from each respondent).





# HOW HAS THE PANDEMIC IMPACTED BUSINESS METRICS?

## Revenue and Average Revenue per User (ARPU)

10 different metrics were explored covering revenue, average revenue per user (ARPU), costs, losses and churn.

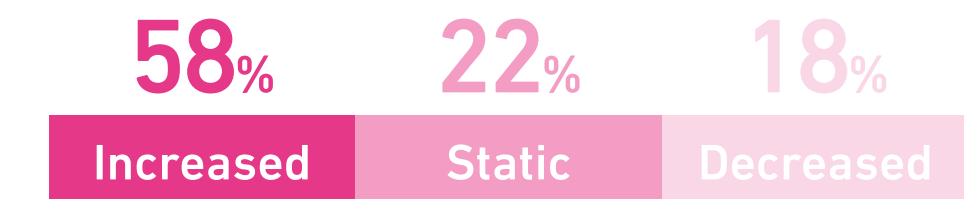
From a revenue and ARPU perspective there appears to be a positive picture. Nearly 60% of respondents reported that applications from new customers had increased and a slightly

lower number reported increased levels of new applications from existing customers.

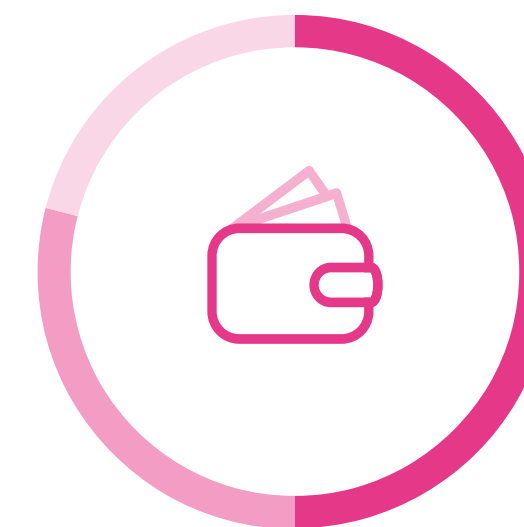
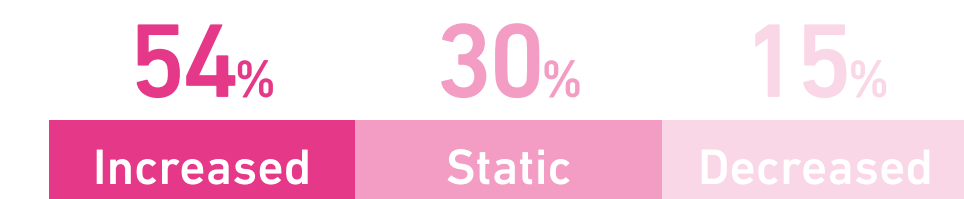
Equally, half of the respondents reported ARPU growth. It would be interesting to see the trends behind these headlines to understand which segments and variables are driving this growth.



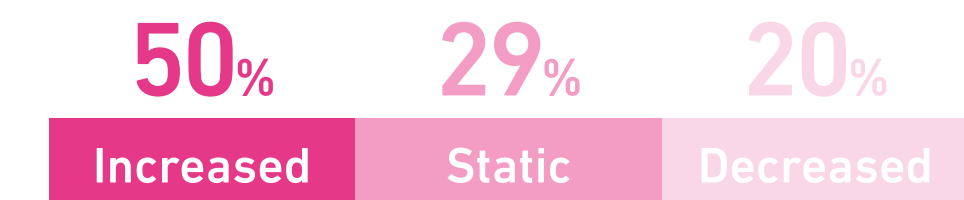
“Net new” customer applications\*



Applications from existing customers\*



Average Revenue Per User (ARPU)\*



(\*) of total Telco respondents across EMEA

## HOW HAS THE PANDEMIC IMPACTED BUSINESS METRICS?

### Costs

In terms of costs, a less positive picture emerges.

Given the highly competitive nature of the Telco market, we believe that it is critical that costs are reduced. If costs only remain static then this will eventually put the organisation in an uncompetitive position.

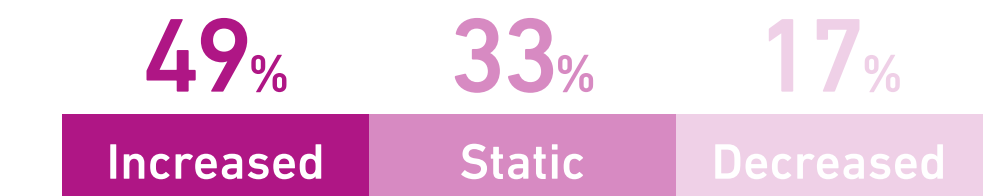
These results reveal that over three quarters of respondents reported either increased or static costs in terms of acquisition, operational costs to serve and collections.

Once again, the headline numbers raises further questions about some of the pressures created by the pandemic.

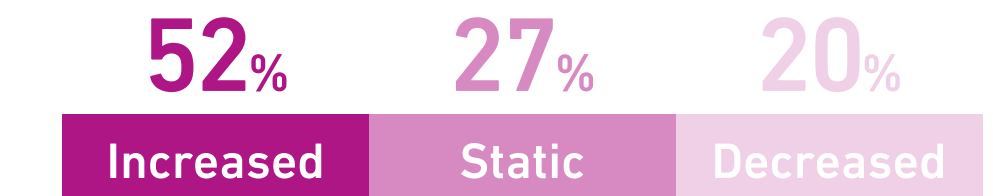
Pressure on cost to serve could be a consequence of more products and services demanded by customers, requiring more customer service processes and manual interventions. If this were to be the case then this would seem to suggest the value of increased focus on automation and greater use of machine learning and AI?



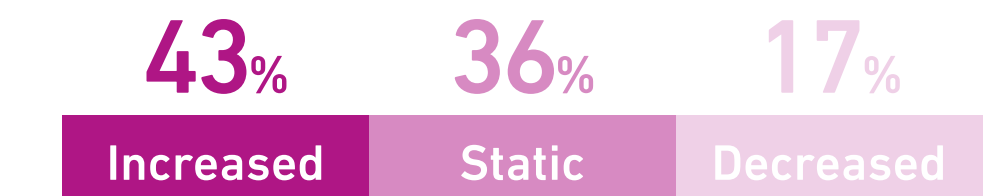
#### Costs per acquisition\*



#### Total operational cost to serve\*



#### Costs of collections\*



(\*) of total Telco respondents across EMEA

HOW HAS THE PANDEMIC IMPACTED BUSINESS METRICS?

## Churn, default, fraud and bad debt

**In terms of churn** – 78% reported increased or at best static churn rates. Again this raises a number of questions. Why is churn so high? Perhaps it is linked to the increase in customer acquisitions as the typical Telco subscriber base is by nature very transient. Levels of churn also has a knock effect on revenue and costs. It is more expensive to win a new customer with a typical 6 month break even position. Equally, ARPU is typically lower for a new customer rather than one with a tenure of six months or more.

Further questions arising from these insight are how do the churn sectors relate to those sectors and individuals most impacted by the pandemic and what are the future trends as we enter a period of potentially protracted economic uncertainty? Do individual telcos have access to a single view of a customer across all data pools which can be analysed to help identify churn risk and take appropriate action to intervene before they are lost?

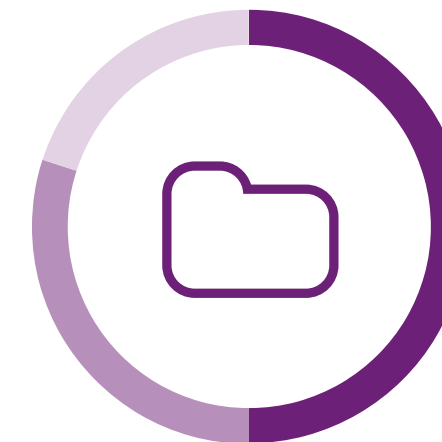
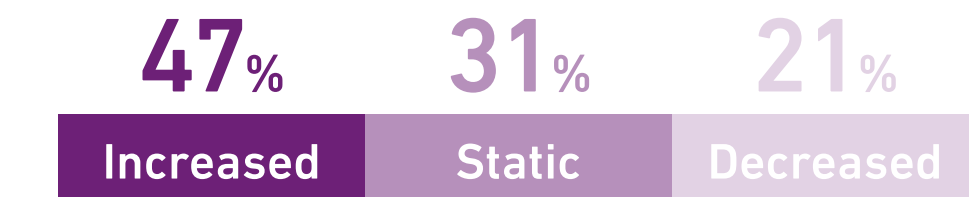
**Looking at collections case volumes** – 50% report an increase in collections cases, not altogether surprising given the economic impact of the pandemic. Indeed this could have been

worse had the telecommunications services not been so important during the pandemic and keeping connected became more of a necessity for consumers. One thing is clear from our work with Telcos - the pandemic has made collections harder to manage, requiring more people and less predictability from existing collections analytics and strategies. As a consequence, we have seen an increase in bad debt levels. As a result, many are reviewing their strategies and scorecards in light of the continuing economic uncertainties post covid.

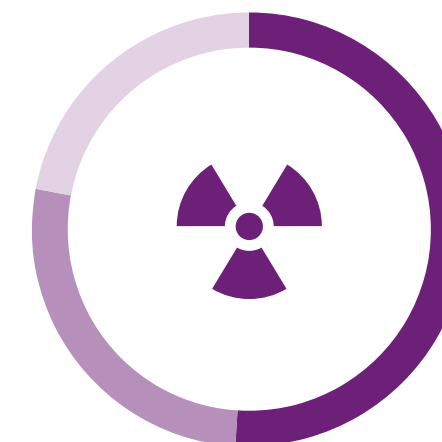
Finally, the position regarding increased **fraud losses** is very interesting. As highlighted within later sections of this research, for the vast majority of Telcos preventing fraud is key strategic priority. Yet there are also 30% of respondents who reported that fraud losses decreased during this period. Once again, from discussions with Telcos it is apparent that these operators are more likely to be the ones that have invested heavily in highly scalable, automated, multi-layered fraud prevention systems driven by the most up to date fraud analytics rather than a reliance on static rules and scores.



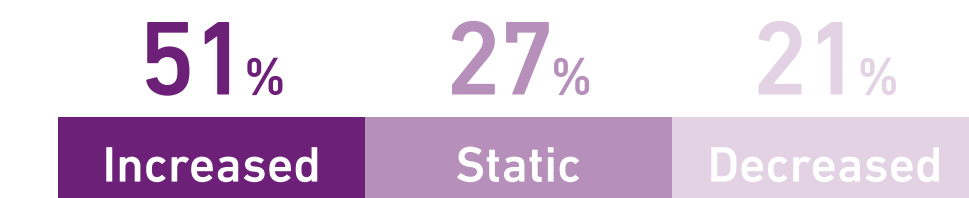
### Customer churn\*



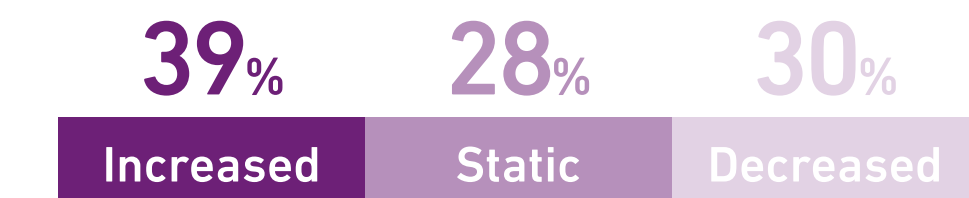
### Collections cases\*



### Levels of bad debt\*



### Fraud losses\*



(\*) of total Telco respondents across EMEA

# BUDGETS

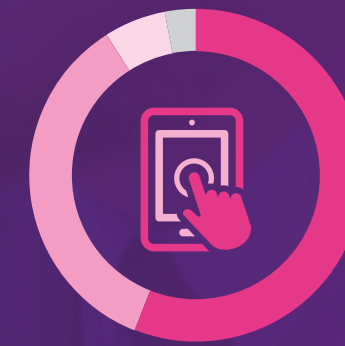
## How have these results impacted budget allocation?

The biggest proportion of respondents who reporting increases in budget did so regarding digital transformation of the customer experience. With the increased use of digital channels, growing consumer expectations, and the ongoing competitive pressure, many Telcos appear to have sought to accelerate their development in this area.

What this doesn't tell us is which aspects of the customer lifecycle are being prioritised. However, from our discussions with leading Telcos, there does seem to be a very strong focus on new customer onboarding as will be explored later in this report.

The findings regarding investments in fraud, advanced analytics and customer insight confirm what we would expect but the situation regarding collections raises some interesting issues.

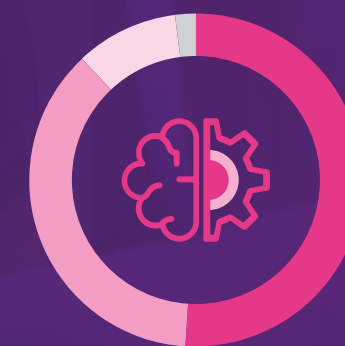
Faced with the increases in cases entering collections and increasing collections costs, one might perhaps have expected to see a higher proportion of Telcos reporting increases to budgets for collections.



### Digitisation of the customer experience



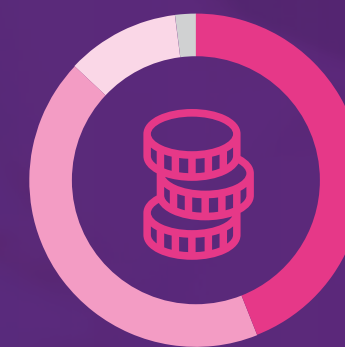
### Fraud prevention



### Advanced Analytics



### Customer Insight



### Collections/Bad debt



# ONGOING AREAS OF CHALLENGE

The top two ongoing threats to strategy both relate to **data, analytics and insight**. These are “the lack of expertise and technology infrastructure to incorporate machine learning and exploit big data” (highlighted by 36% of respondents) and “lack of sufficient data for insights needed” (highlighted by 34%). These points are also further re-enforced when we look at Telcos’ self-assessment of their existing data, analytics capabilities later in this report.

With regard to the pursuit of **revenue growth**, increased competitor activity – from both existing and new competitors - are seen as a challenge.

From the **risk decisioning and risk forecasting** perspective, once again the increased exposure to fraud risk has been called out – this time by a third of respondents.

Finally, in terms of **digital transformation**, automation and the impact of legacy technology systems are highlighted as the biggest challenges.



## Ongoing areas of challenge

Apart from the pandemic, what are the biggest challenges prohibiting your company from achieving your top initiatives?

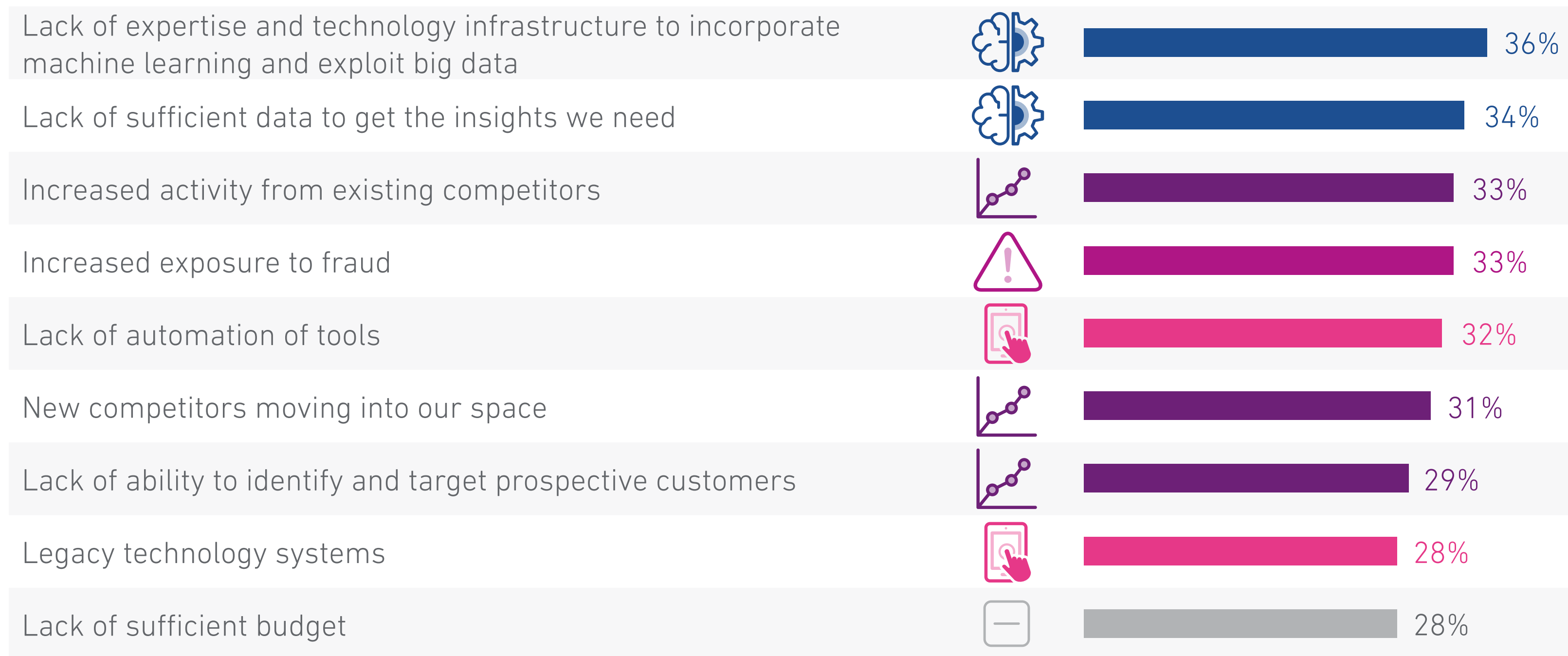


Chart shows percentage of respondents that highlighted specific issues (multiple answers possible from each respondent).



# OVERALL BUSINESS PRIORITIES

for next 12 months

## Revenue Growth

“**Growth through new customer acquisition**” is regarded as either “critical” or “high” by 68% of respondents and is the second highest of all ongoing business priorities. Unsurprisingly, “**growth through cross sell and up sell**” is regarded as the second highest priority.

The other two revenue and growth-related insights relate to how these growth objectives are likely to be achieved – through “**the ability to personalise marketing, products and services**” (65%) and “**entering new markets and customer segments**” (63%).

## Risk Decisioning and Monitoring

Once again fraud is called out – in this instance 65% of respondents regarded “**investing to improve protection against fraud**” as either “critical” or “high”.

## Digital Transformation

“**Improving the experience of our customers**” is the highest overall business priority rated as high/ critical and not surprisingly we see reference to “**digital transformation of core business processes**”.

Two priorities that are highlighted are worthy of note.

“**Reducing the friction associated with verifying customer identity**” – regarded as either “critical” or “high” by 61% of respondents - is clearly a priority that has a high level of visibility amongst senior stakeholders. This is perhaps explained by it being a key consideration within customer onboarding and the need to accelerate the overall process and minimise customer drop off rates.

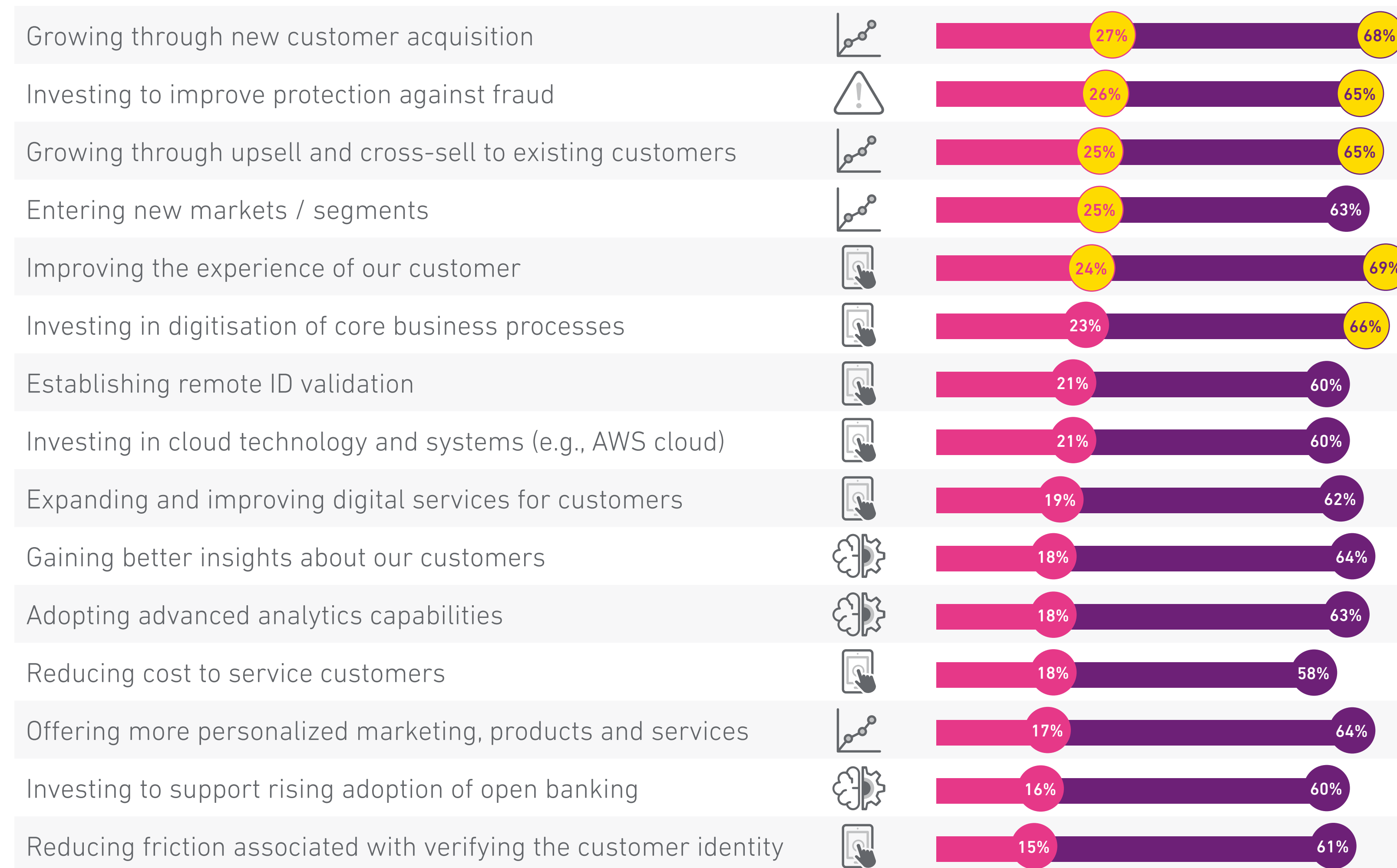
“**Investing in cloud technology and systems**” will potentially have a significant impact on ongoing costs across the board. It is perhaps surprising that cloud investment has not attracted a higher priority rating given its potential operational and cost advantages.

## Data and Analytics

The top two data and analytics priorities – “**gaining better insights about our customers**” and “**adopting advanced analytics capabilities**” – confirm what we already suspected but something of interest here is the split between the numbers of respondents prioritising them as either “critical” or “high”. In both instances, less than 20% regarded them as “critical” but nearly half regard them as “high”. Once again, this might potentially suggest that whilst their importance is widely appreciated, there may be a potential lack of urgency.

Finally, we also see reference to the potential to enhance data and analytics capabilities by “**investing in the adoption of open banking data**”. This increased levels of insight that thus can generate can have a significant impact on increasing the accuracy of risk assessment for customers at the margins of eligibility. Additionally, it can help support greater levels of engagement due to its need for customer consent.

OVERALL BUSINESS PRIORITIES **for next 12 months**



**Critical** **High** **Top 5**

Percentages reflect cumulative numbers of base that stated priorities as being either **“critical”**, or **“high”**. The other available options were “moderate”, “low”, “not on our agenda” and “don’t know”.

	Revenue growth
	Risk decisioning
	Digital transformation
	Data and Analytics

Base: 267 senior decision-makers in telecommunications firms from 7 selected countries in EMEA August 2021.



# TOP ONBOARDING PRIORITIES

in the next 12 months

A Telco's onboarding proposition brings all of the four strategic themes together.

For many customers it will be their first exposure to the brand promise and so to minimise the risk of abandonment, and the associated loss of new revenue, the onboarding experience needs to meet or better still exceed their expectations. It therefore needs to be engaging, fast, differentiated and result in an accurate and explainable outcome.

At the same time, the customer journey needs to be supported by automated operational processes that facilitate multiple risk assessments without adding friction, delay or cost. These need to create accurate assessments of identity, fraud, credit and affordability risks by answering the key questions:

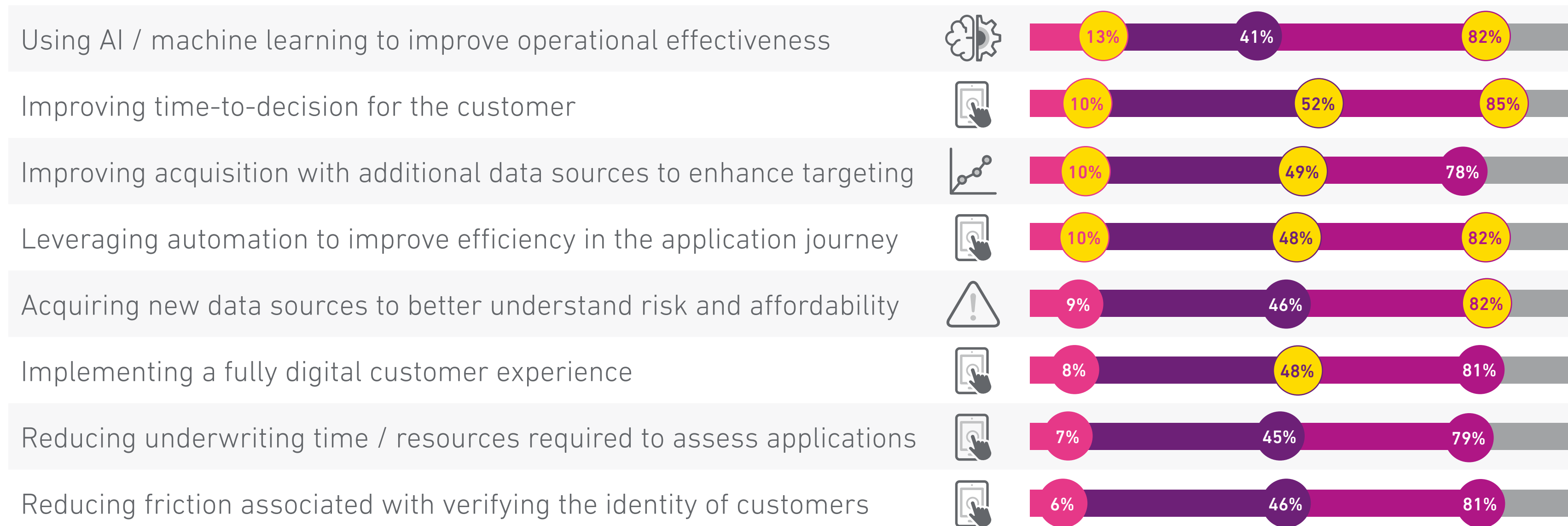
- Is this a real live person?
- Do they intend to pay?
- Can they afford to pay?
- Can they afford to buy additional products?

Access to accurate data and analytics powered insights are therefore critical to accelerating the customer journey, accelerating the time to cash and to enabling personalised cross-selling and up-selling processes to commence.

The results show high levels of agreement of the overall importance of onboarding priorities. However, the numbers of respondents regarding each priority as being "critical" are intriguing. Given the intense competition in the sector, already confirmed earlier in the research, it is surprising that only between 13% and 10% of telco respondents view the top four priorities as being "critical".

Equally intriguing is the fact that for between 15% and 22% of Telco respondents all of these onboarding priorities are either regarded as "low" or "not on our agenda".

TOP ONBOARDING PRIORITIES **in the next 12 months**



	Revenue growth
	Risk decisioning
	Digital transformation
	Data and Analytics

**Critical**  
**High**  
**Moderate**  
**Top 4**  
**Low**

Percentages refer to the total percentage of base who identified stated on-boarding initiatives as being either a **“critical priority”**, a **“high priority”** or a **“moderate priority”**. Other available options were “low” and “not on our agenda”.

# EXISTING DATA AND ANALYTICS CAPABILITIES AND PRIORITIES

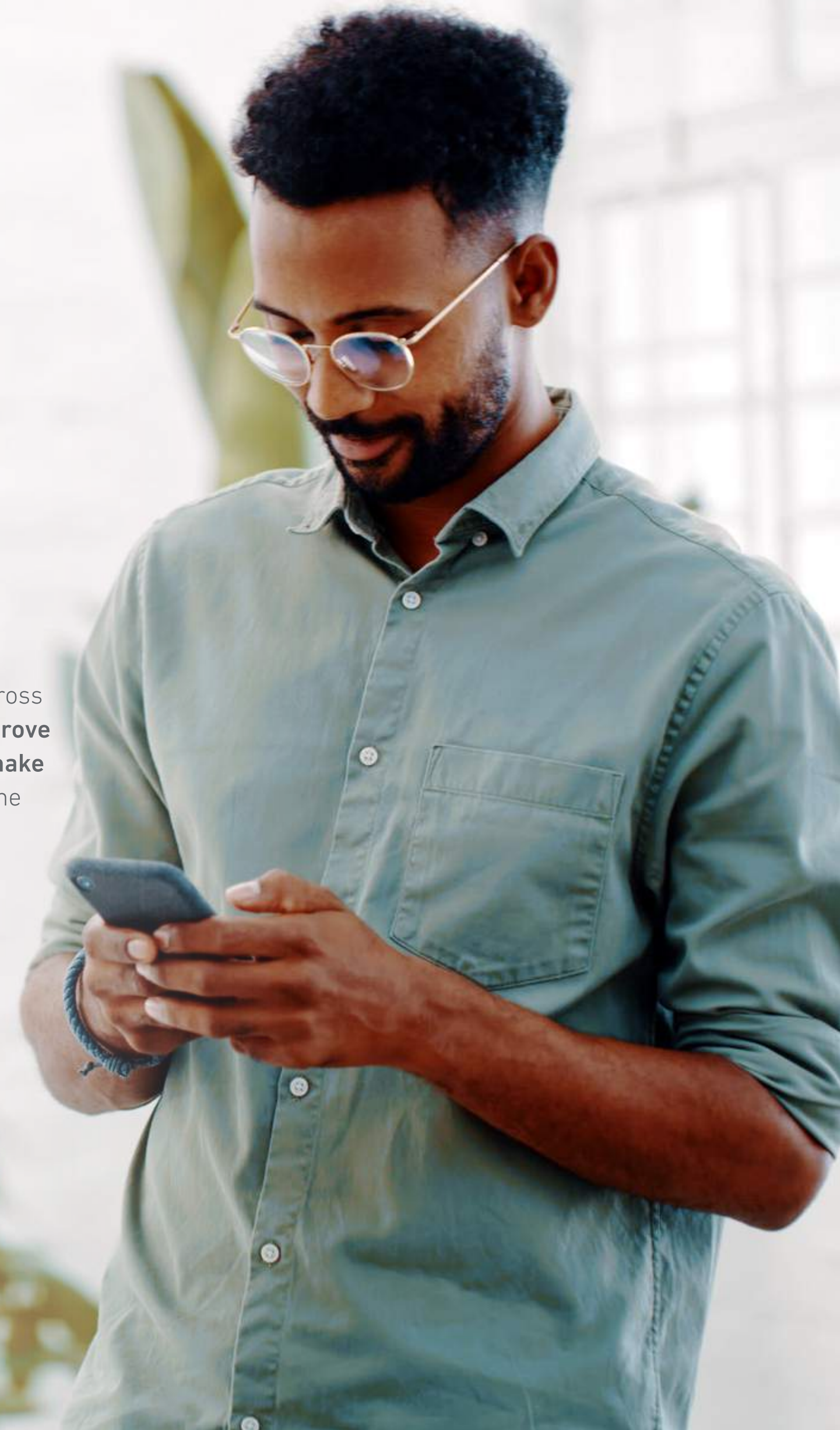
The next set of findings relate to a self-assessment of respondents' existing data and analytics capabilities, their analytics use case priorities, and the extent to which they have implemented machine learning.

66% of Telco respondents agree (31% of them strongly) that **“advanced analytics, machine learning with artificial intelligence are going to radically change the way we do business”**. This is a really interesting one as it suggests a sense of “when not if” - that Telcos recognise that it is going to happen but also recognise that they are not there yet.

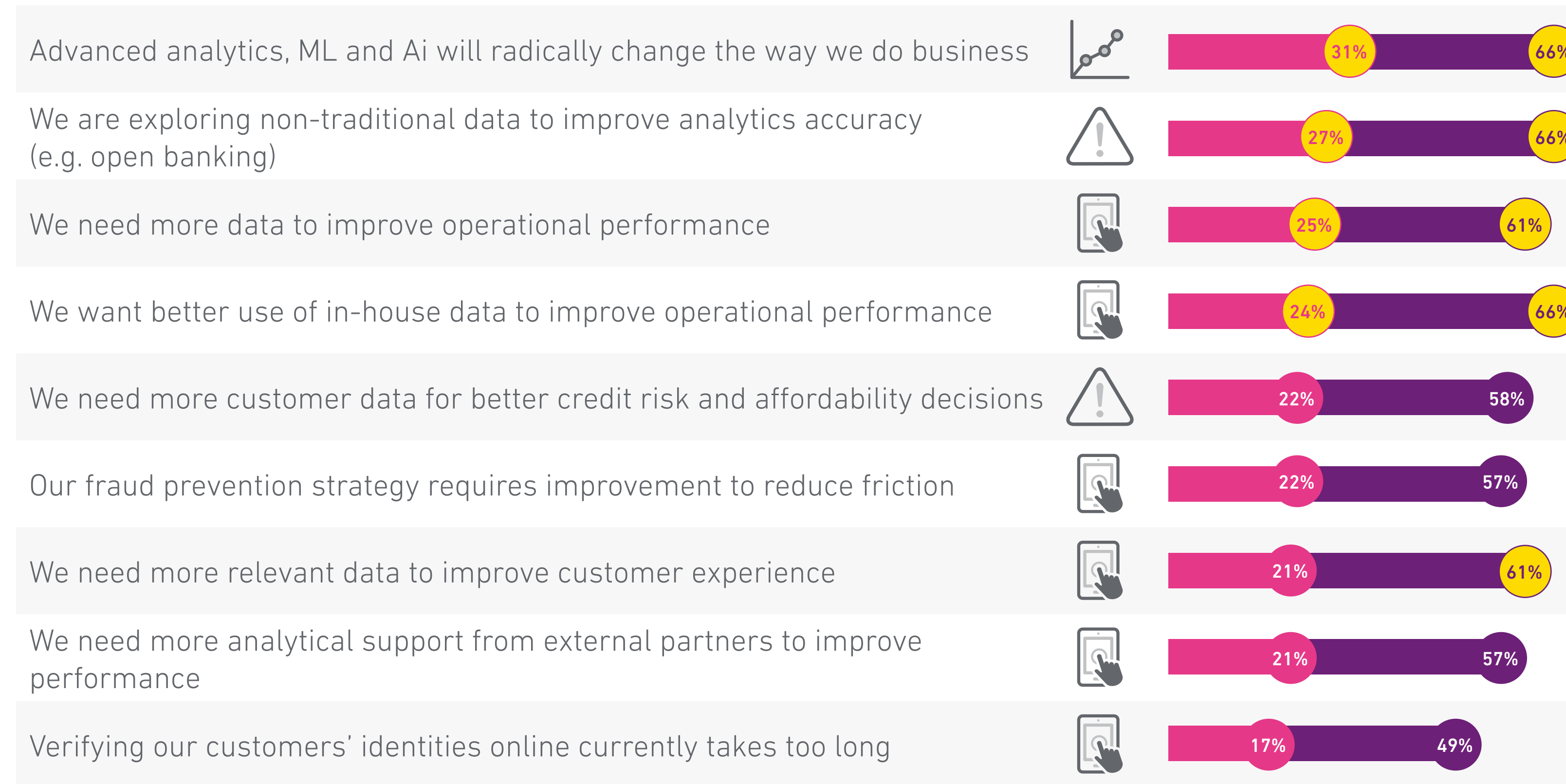
As with the “when not if” statement, two thirds of EMEA Telco respondents also agree that they are **“exploring different types of data to improve accuracy of analytics – such as non-traditional data such as open banking”**. Embracing non-traditional data of this type can increase accuracy by enabling data scientists to analyse new sets of data variables to identify indicators of increased risk.

Other identified areas of need include the **“need for more data”** across the board both to **“enhance operational performance”** and to **“improve customer experience”**. The reference to more customer data to **“make better credit and affordability decisions”** if anything re-enforces the value of open banking data.

Finally, 57% of respondents believe that their **“fraud prevention strategy requires improvement to reduce friction”**. This is really interesting as friction can often be associated with the lack of automated risk decisioning analytics. Machine learning has an important role to play here and the usage of machine learning for fraud prevention is something that is covered in a later section.



## EXISTING DATA AND ANALYTICS CAPABILITIES AND PRIORITIES



Percentages reflect percentages of total base that either **“strongly agreed”** or **“agreed”** with the statements. Other options were “neither agree or disagree”, “disagree” and “strongly disagree.”



## ANALYTICS USE CASE PRIORITIES

### How is your organization planning to prioritize its use of analytics in the next 12 months?

When respondents were asked where they would prioritise their use of analytics a very interesting picture emerged.

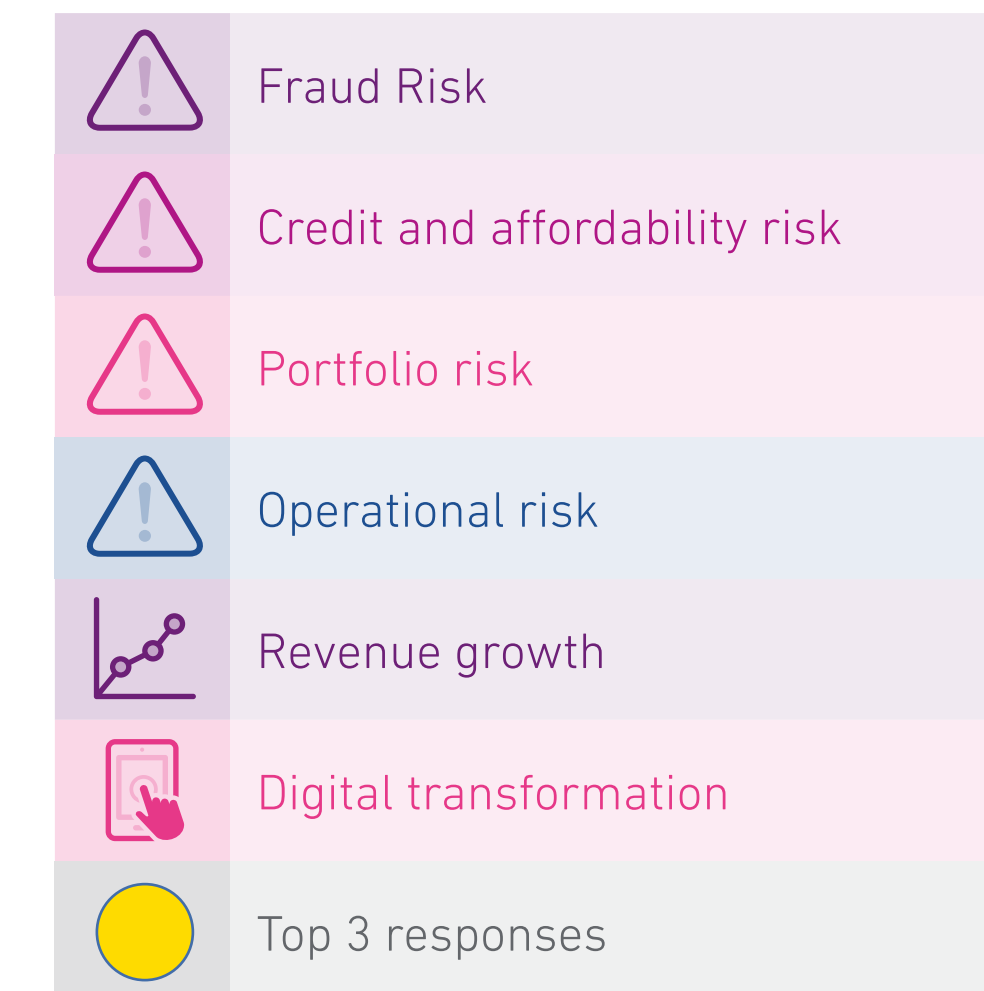
The three highest overall responses are highlighted – each reflecting one of the strategic themes. However, along with these, respondents also reported multiple other use cases as also being prioritised. What is interesting is the lack of clarity. All of the percentages are relatively low and within a relatively narrow range.

Remember that respondents represent multiple areas of the organisation. So perhaps this might suggest that there is a strong need to be able to scale the use of analytics driven insights across multiple use cases to deliver benefits across multiple business functions.

**Usage and scalability of machine learning therefore appear to be very important considerations and so they have been explored in more detail within the next section.**



Percentages reflect percentages of base that highlighted specific use cases in answering the question “How is your organisation planning to prioritise its use of analytics in the next 12 months?” (multiple answers possible from each respondent).



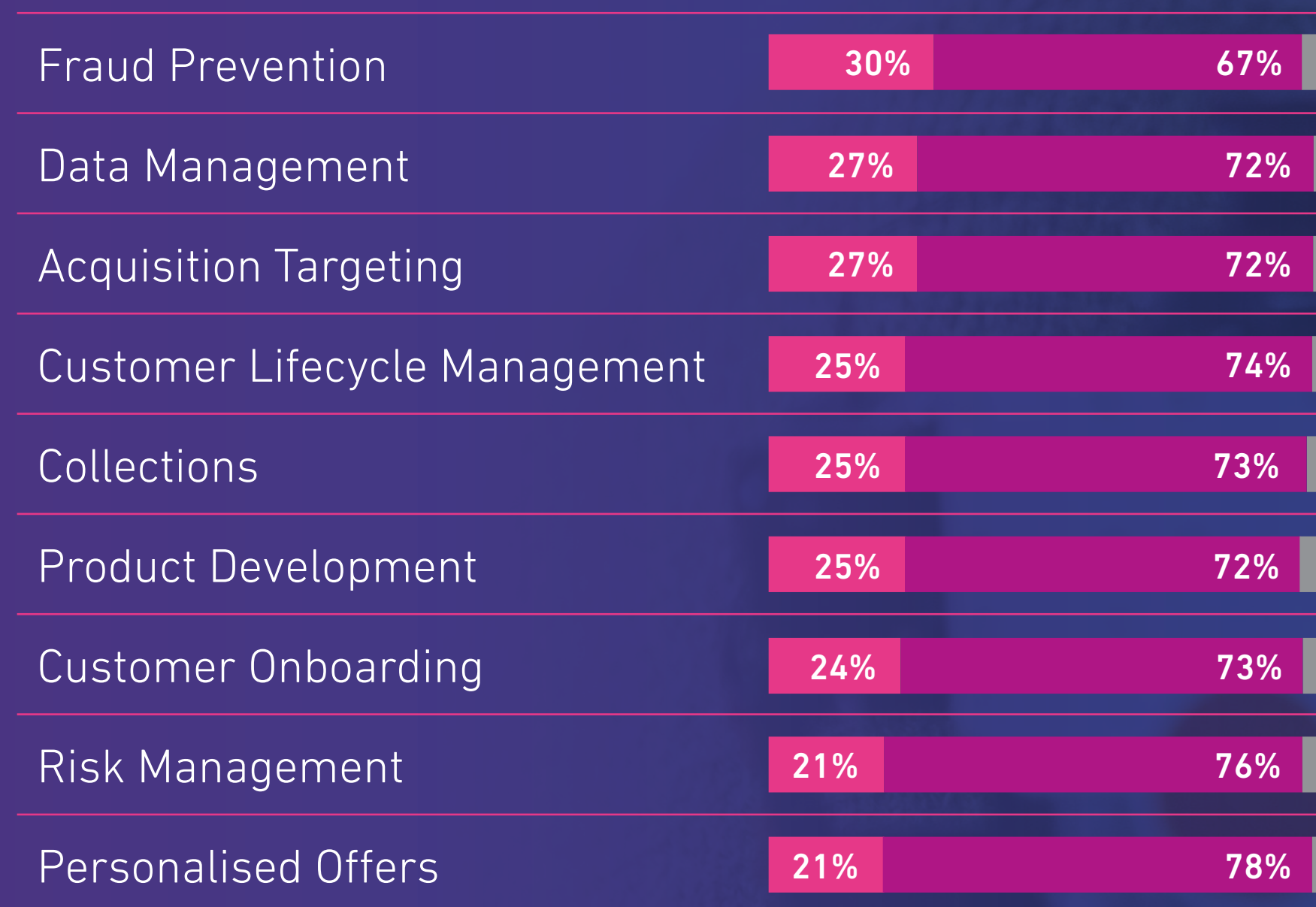
# MACHINE LEARNING USAGE AND CHALLENGES

The research findings show usage levels appear to be well established. Across the nine highlighted use cases, between two thirds and three quarters of telcos highlight either “**moderate**” or “**broad**” usage.

However, there appears to be a sizeable remainder who indicate “**no or limited use**” across in the areas shown.

For this reason, the graph is ranked according to “**little or limited use**”. What is surprising is that 30% of respondents have indicated that this is the case for fraud prevention.

This is intriguing given the fact that fraud prevention has been highlighted by 2/3<sup>rd</sup>s of respondents as being either a “**critical**” or “**high**” overall business priority.



**No use or limited use**   **Moderate to broad use**   **Don't know / doesn't apply**

Chart shows percentage of base that replied to question “to what extent are you leveraging machine learning in the following areas?”.

## Current barriers to machine learning adoption

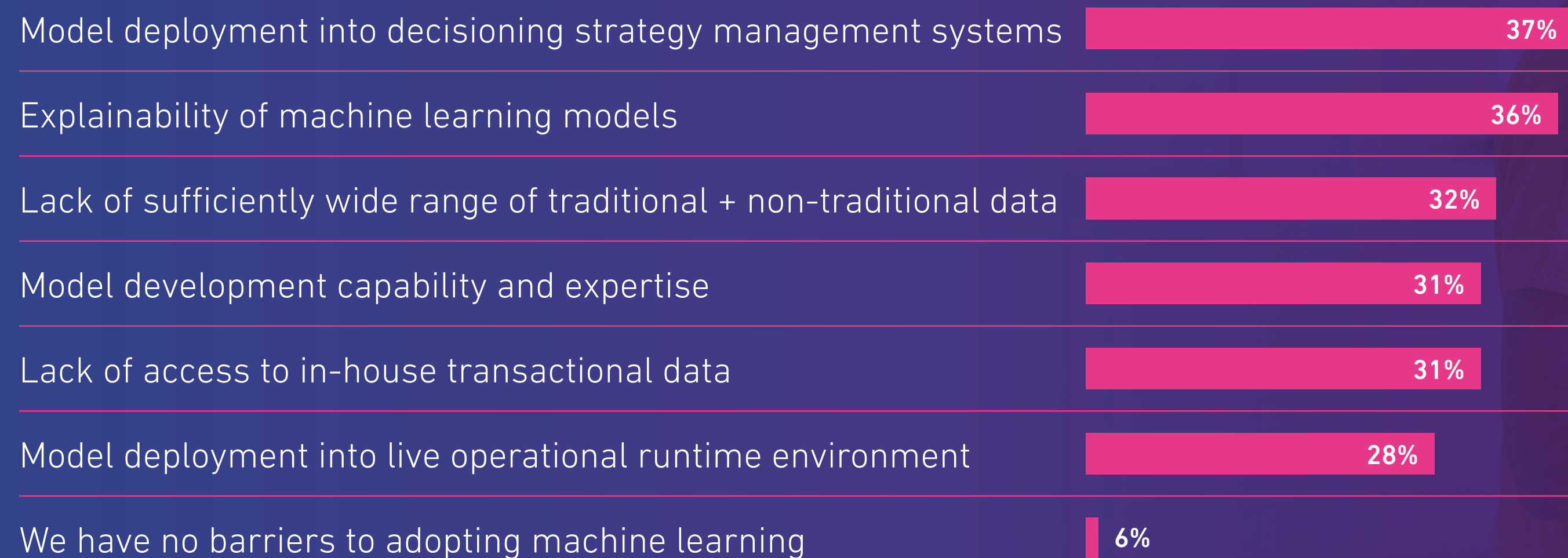


Chart shows percentage of base that highlighted specific issues in response to the question “What are the main barriers to adopting machine learning in your organisation?” Multiple answers possible from each respondent.

Base: 267 senior decision-makers in telecommunications firms from 7 selected countries in EMEA August 2021.

### The highest total percentage of respondents highlighted model deployment into decisioning strategy management systems as a barrier to machine learning adoption.

This is a widely recognised challenge that many business sectors are facing. It is typically created by a lack of scalable methodology and benchmarked best practice for managing what is effectively the transition of complex analytical models from the “academic” world of data science into “pragmatic” world of operational delivery.

The complexity is compounded by the fact that there are typically multiple participants

involved in the process spanning data scientists, data engineers, DevOps, IT, business users, application services and business sponsors all with different scope, lines of sight, skills and tools.

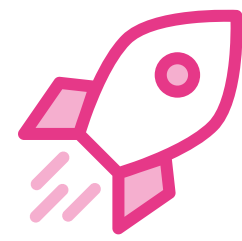
This complexity adds cost and risk and delays the delivery of a positive return on the analytics investment costs which have already been incurred.

**The second most widely recognised barrier is the challenge of explainability** - the ability to understand and communicate why a model has assigned different scores, treatments or strategies to different applications.

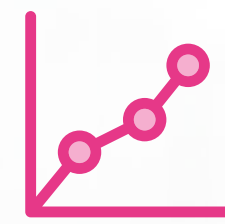
Typically explainability of a model’s outcome is linked to the sophistication of the machine learning algorithms. This effectively means that increased levels of predictive accuracy become progressively harder to explain. Without explainable outcomes, Telcos face multiple risks such as the risk of reputational damage due to what customers might potentially regard as a lack of fair treatment or at worse as some form of discrimination.

We also see in these results once again reference to the **lack of sufficiently wide data assets** which is consistent with the other findings we have seen.

# SUMMARY



**Achieving higher levels of maturity** in terms of data and analytics and customer insight is clearly seen as something that needs to happen. This is reflected in the increases in budget allocation to advanced analytics and customer insight.



To **increase revenues, ARPU and customer retention**, Telcos are expanding digital channels and digital services and striving to achieve competitive advantage in the form of differentiated, fast, and friction free customer experiences.



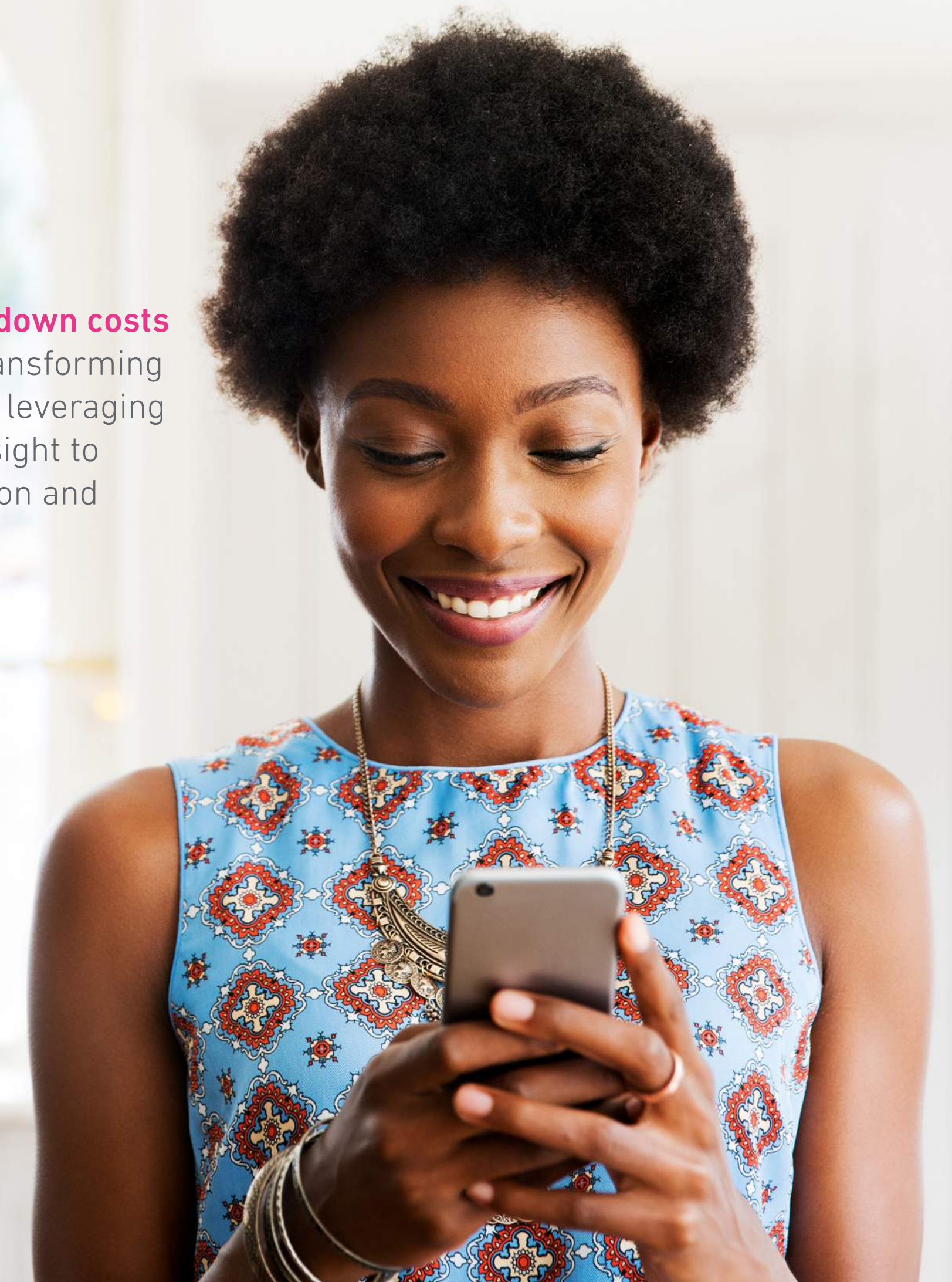
Simultaneously, to **drive down costs and losses**, Telcos are transforming operational processes by leveraging the power of data and insight to drive increased automation and efficiency.

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The pandemic's effects have changed the nature of financial risk with particular regard to fraud, first payment default, identity, credit, affordability and default risks.

Telco's top overall business priorities reflect the need to drive growth but also improve prevention against fraud.

And analytics appears to be regarded as a priority across the whole lifecycle but once again a particular focus on acquisition, revenue growth and fraud prevention.





















SUMMARY



Agree that “advanced analytics, ML and AI will **radically change** the way we do business”

Prospecting	Customer Onboarding			Customer Management			Collections			Financial Management
 Who should we target?	 Is this areal live person?	 Do they intend to pay?	 Can they afford to pay?	 How do we get them to buy other products?	 How likely are they to churn?	 Can they continue to afford to pay?	 How can we make it easy for them to pay?	 Do their payments need to be changed?	 What actions should we take to recover?	 What is the impact on portfolio quality?
Expanding and improving digital services for customers / Improving the experience of customers / Becoming “provider of choice”										
Investing in the digitisation of core business processes / Driving process and cost efficiency										
(A) (B)	 (A) (B)	 (A) (B)	 (A)	(A) (B)	(A)	 (A)	(A)	(A)	 (A)	(A)

 Area of increased financial risk      (A) Analytics priority      (B) Business priority

# HOW WE CAN HELP

## Our value proposition for Telcos

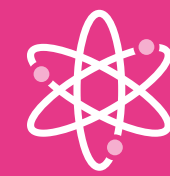
Through our unique blend of data, advanced analytics, software and expertise, we help Telco clients maximise value across the customer lifecycle. We do this by shortening the time to profit, by maximising revenue without taking on additional risk, and by reducing costs and losses.

### We help clients achieve these outcomes

### Through a variety of solutions and capabilities



Expand data access and provide an ongoing cycle of insight creation, outcome tracking and continuous improvement



A single, combined data and analytics environment that is integrated with automated operational decisioning and strategy management systems



Ensure insight is applied and maintained with maximum speed, agility, accuracy + efficiency



Scalable, streamlined, low cost processes for accelerated analytical model deployment, maintenance and explainability



Enable multiple business functions to optimise data, analytics and insight across multiple use cases



Complementary data, analytics and cloud based software solutions based on modular architecture enabling shared internal user access, consistency and traceability



Find out more

Contact your local Experian consultant or visit [experianacademy.com](https://experianacademy.com) to be kept up with commentary and analysis specifically.

