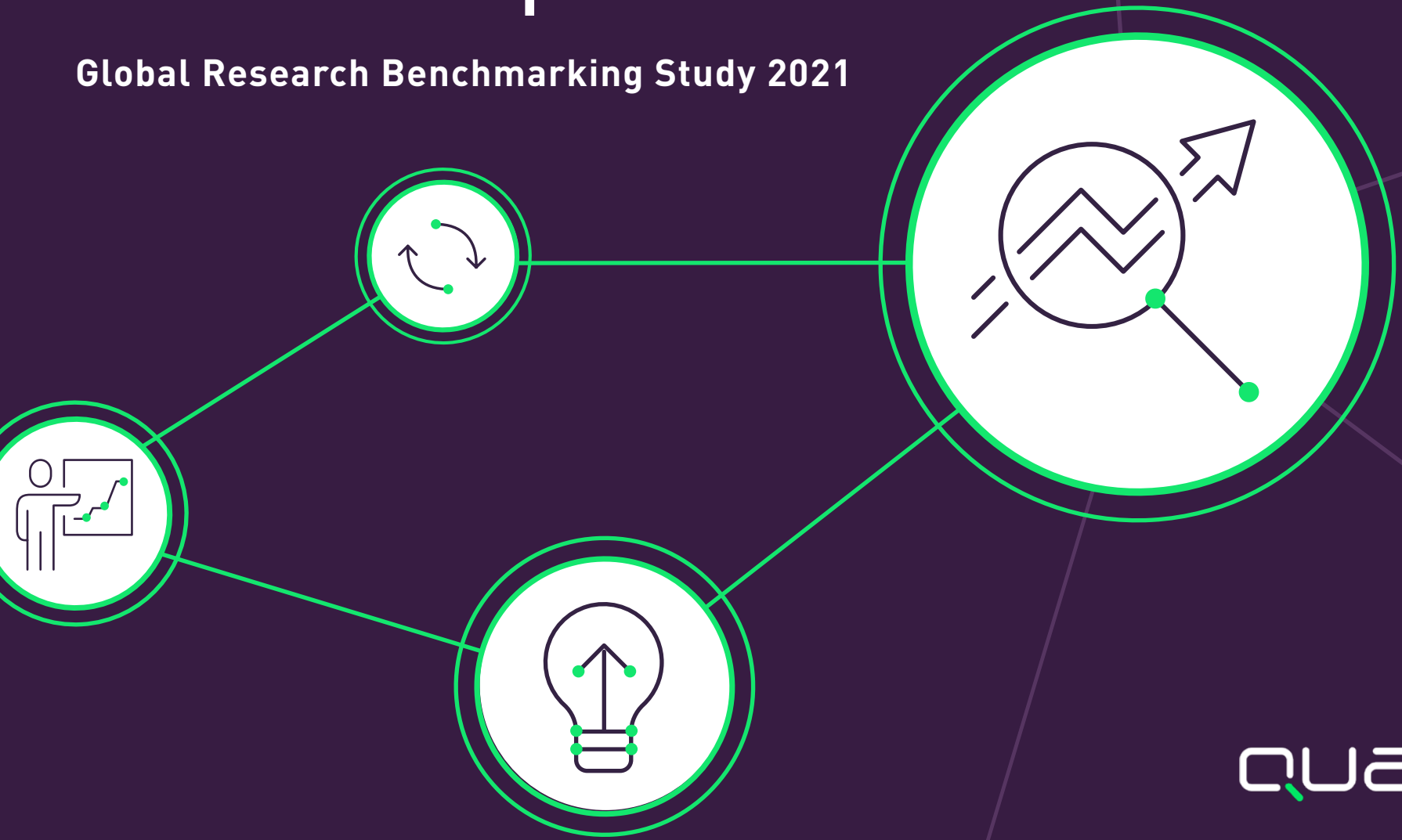
Data in Context:
Closing the Data Decision Gap

Global Research Benchmarking Study 2021



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Meaningful data | Trusted decisions

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Methodology

Quantexa surveyed 750 IT and Data decision-makers across North America, EMEA and Asia-Pacific, posing questions around the quality of data, usefulness in decision-making, and effectiveness of current approaches. This report provides a point-by-point guide to overcoming common data management problems with the help of **Contextual Decision Intelligence**.

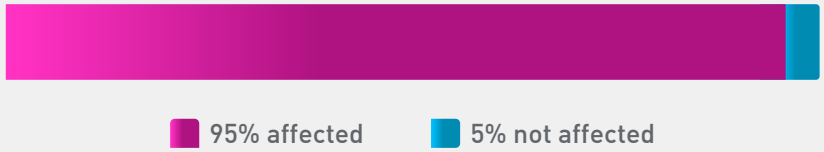
To really understand someone or something you must analyze the context around them.

To know if someone's likely to buy, you need to know what else they've bought. To know if someone is laundering money, you need to know where else that money's been.

In spite of massive data infrastructure investments, data-intensive organizations still struggle to generate the single view and relationship network view needed to deliver the context vital for making trusted operational decisions.

Too often, data assets languish in silos and data lakes. This gives a one-dimensional view, full of false positives and negatives, which slows operations down. Organizations struggle to automate high-volume decisions with any degree of confidence or scale.

The Data Decision Gap



Organizations often can't trust the data they have to support their strategic and operational decisions.

This is the Data Decision Gap.

And it is choking the value out of enterprise data assets.

The only way to bridge this gap is to make data meaningful with the context needed for trusted decisions. For this you need a single view of data and to understand how it links to real world entities - the networks of relationships that exist within that data.

In this report we explore how organizations can improve their data foundation and embark on the road to trusted decision-making.

Why organizations struggle to make trusted data-driven decisions

When organizations don't have a meaningful data foundation, they can't trust their own data.

From poor data quality, to disparate silos, and an abundance of duplicates, enterprise datasets can be very confusing. What's more, when human teams try to find meaning and insights in them manually, it turns out to be painstaking and time-consuming work, prone to errors and oversights. Worse, it still doesn't guarantee they will reach the optimum decision.

One in every two
strategic and operational decisions does not take full advantage of the organization's data

What happens when organizations lack a strong data foundation?

- **42%** Operational decisions can't be automated confidently
- **33%** Human teams overwhelmed by manual tactical data matching and analyzing
- **25%** Organizations can't use all data when making decisions

Where do the C-Suite feel the business effects of the Data Decision Gap?

Regulatory scrutiny and compliance issues

Missed customer experience opportunities and customer retention problems

Increased business workload due to manual data work, wasting resources

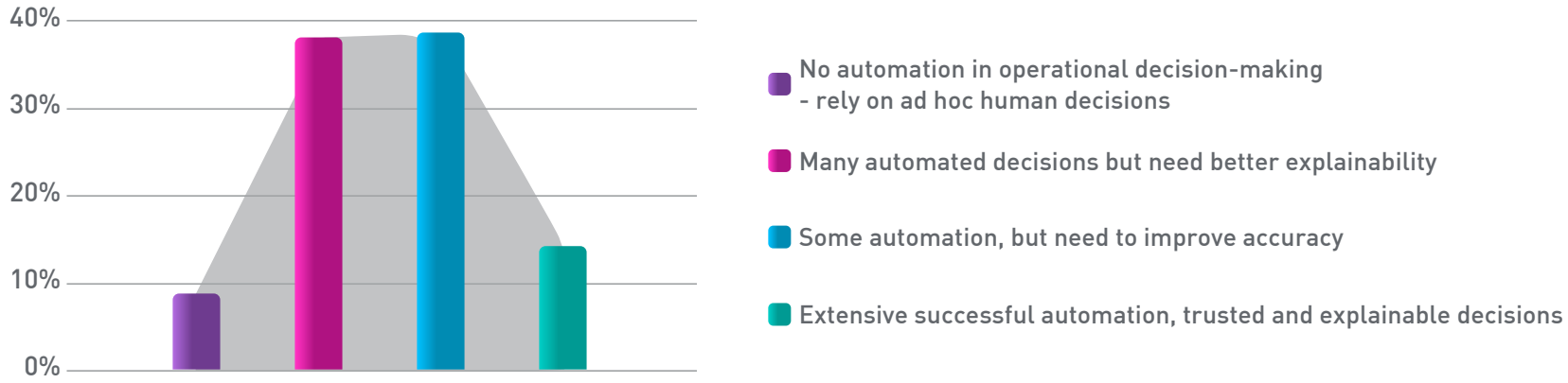
The Data Decision Gap happens when datasets are inaccurate and incomplete, which means it's hard for organizations to fully trust their data. Half of Government organizations cite this as a factor when explaining why their operational decisions struggle to take full advantage of data, followed by **40%** of Banking and Financial Services organizations, and **38%** of Insurance organizations.

The automation maturity curve

Organizations are unable to fully trust and make best use of their data because traditional technologies are not up to the task.

This is largely due to their heavy reliance on manual work, leading to inaccuracy and incompleteness. It also holds back strategic decisions, according to **42%** of respondents, and operational decisions, cited by **40%**.

The automation maturity curve

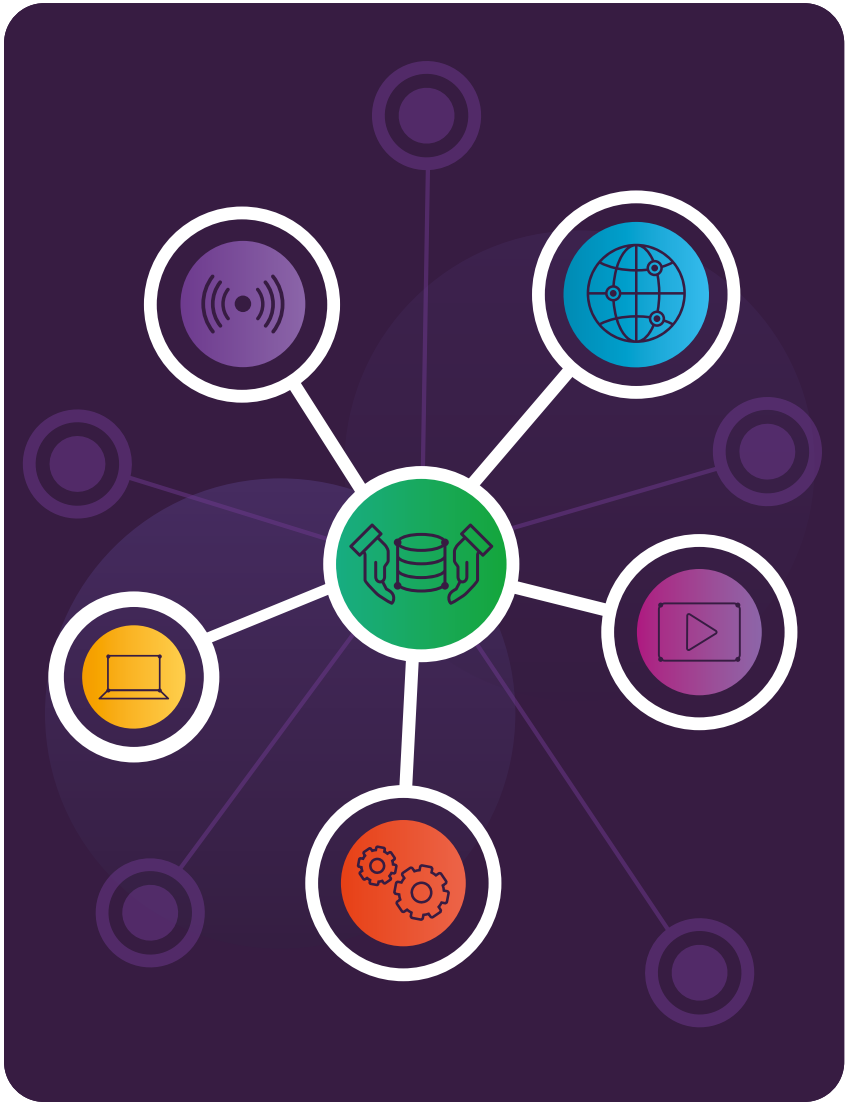


Nearly one in ten
of those surveyed have not yet embarked on their automation journey

At the other extreme, only **14%** of organizations have already implemented extensive automation and are able to trust the outcomes. This means the majority, **77%**, are still on the journey to automation.

They face two key challenges along the way. The first is improving data accuracy to gain full benefit, cited by **39%**. The second is being able to explain the logic behind automated decisions when these can't be finalized automatically, **38%**.

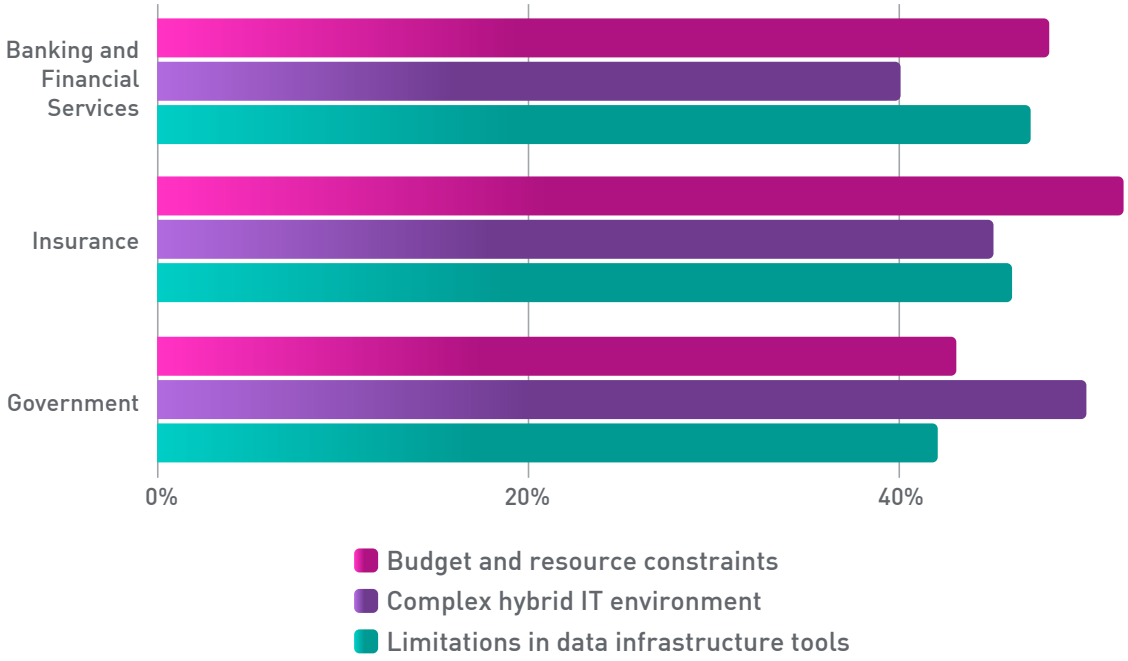
Streaming technologies at the heart of successful automation



To improve automation organizations invest in streaming and real-time technologies.

But, here too they encounter their share of challenges which vary across sectors. The top hurdle for Insurance and for Banking and Financial Services is **budget constraints**, **52%** and **48%** respectively, whereas for **50%** of Government organizations the biggest hurdle is hybrid IT complexity.

What is holding back streaming technologies?

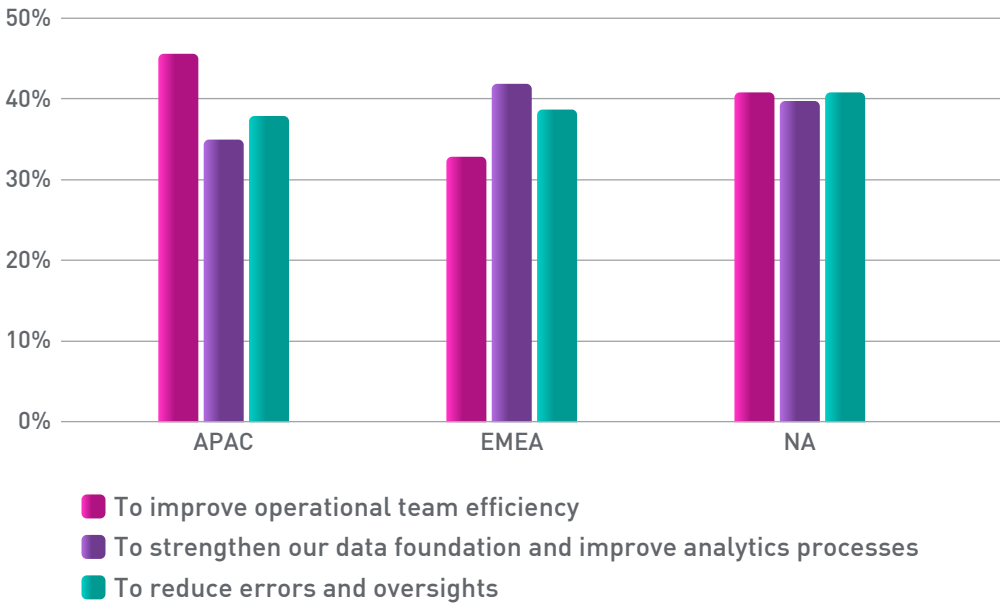


Building a stronger data foundation

Decision-makers need comprehensive insights and understanding, which are impossible to generate from a fragmented basis.

Those surveyed set out three key goals for their data and how to use it to further their business objectives. In APAC, the top goal is operational efficiency, for EMEA it is strengthening the data foundation and analytics, while both have equal weighting in North America as well as reducing errors and oversights.

Top goals for data and analytics by region



MDM: Is it the answer to data foundation pains?

Business leaders face several challenges when building a stronger data foundation, including:

42%

Access to necessary infrastructure, on premise or in the cloud

40%

Difficulty integrating potentially useful third party data

40%

Inflexibility of traditional data models, especially for complex data and relationships

Traditional MDM misses the relationship view, connections, and lacks context, which leads to bad decision-making and leaves question marks around business value.

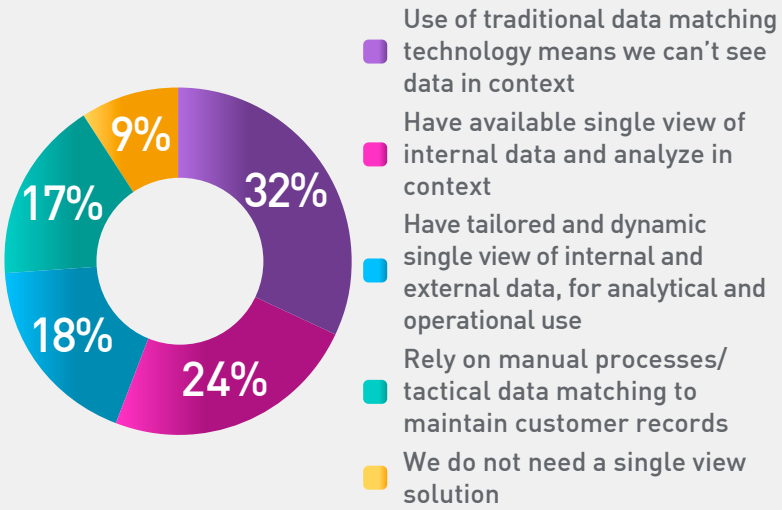
The cornerstone of effective Master Data Management is solving the single view problem.
This can only happen when context enters the picture.

Time to solve ‘the single view issue’

Organizations need a solid data foundation to solve ‘the single view issue’. This foundation needs to be fit for a world in which the installed base of enterprise storage is growing at an annualized growth rate of 31%, totalling 5,451 exabytes (EB) in 2025.

The study shows almost a third, **32%**, can’t see data in context with the standard data matching technologies they use. Only **18%** have a tailored and dynamic single view of internal data and can use it for operational and analytics purposes. Worst of all, **17%** rely on manual and tactical matching processes.

Single view solutions in organizations



One in three
organizations declare they can’t get a single view of their customers due to inaccuracies stemming from traditional technologies

Almost half, **46%**, state traditional single view solutions are failing under the sheer volume of data. This renders traditional data matching technologies unfit for purpose and means organizations do not have a holistic, 360-degree view of their data. These solutions are not equipped to give operational and strategic decision-makers what they need: a full view of the context their data exists in.

Issues compound when data is collected in silos, because different departments, different functions and various external sources have their own preferred systems, preferred apps and data fields. Without joining data sets to generate context, organizations can’t see the patterns merging into a full picture.

Outdated approaches tend to be rules-based, reliant on batch-processing and require too much manual work. Traditional single view solutions are often use-case-specific and hard to integrate, quickly replicating data silos, according to **46%**. They also struggle with integrating key third-party data, **40%**, such as public records, which are critical for analytics in many use cases.

Seeing data in context is crucial to pinpointing hidden risks and opportunities.

A strong data foundation means internal and external datasets are connected into a single holistic view of real-world relationships between people, places and organizations.

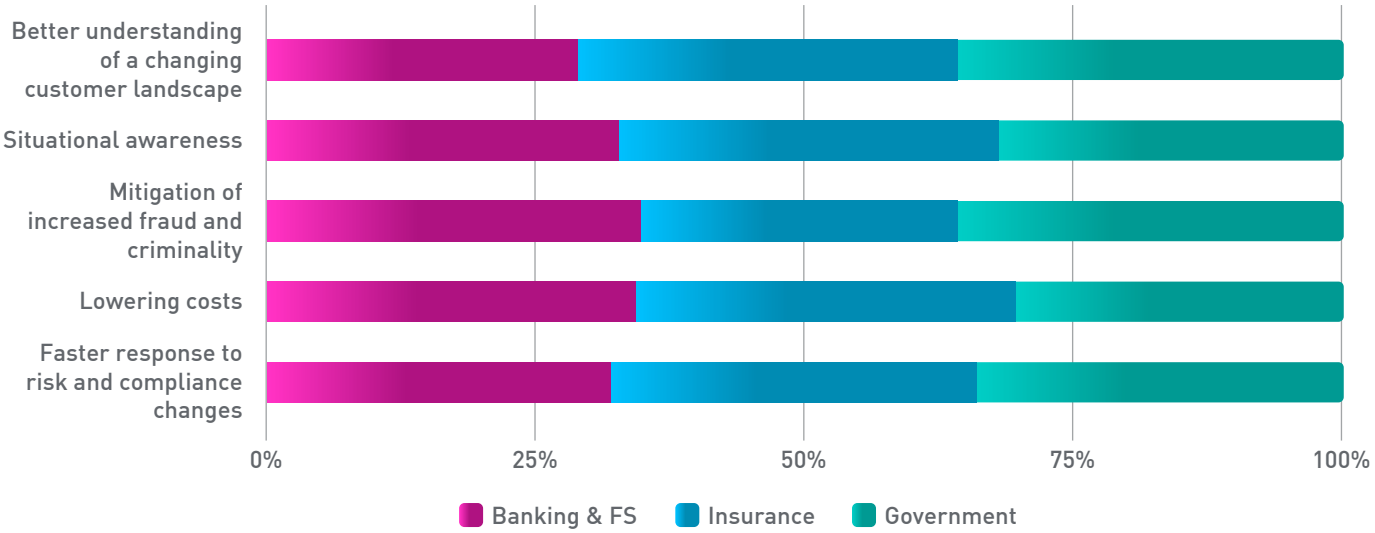
Improving data for business resilience

Behind the drive to improve organizations' data foundation, data strategy, and the tools they have to support them, is a simple goal: to make the organization more resilient and able to cope with sudden disruption.

The first years of the 2020s saw economies brought to a standstill and businesses throwing everything they had at finding a way to adapt and survive.

Most found data to be an invaluable ally.

How will you use data for post-COVID recovery?



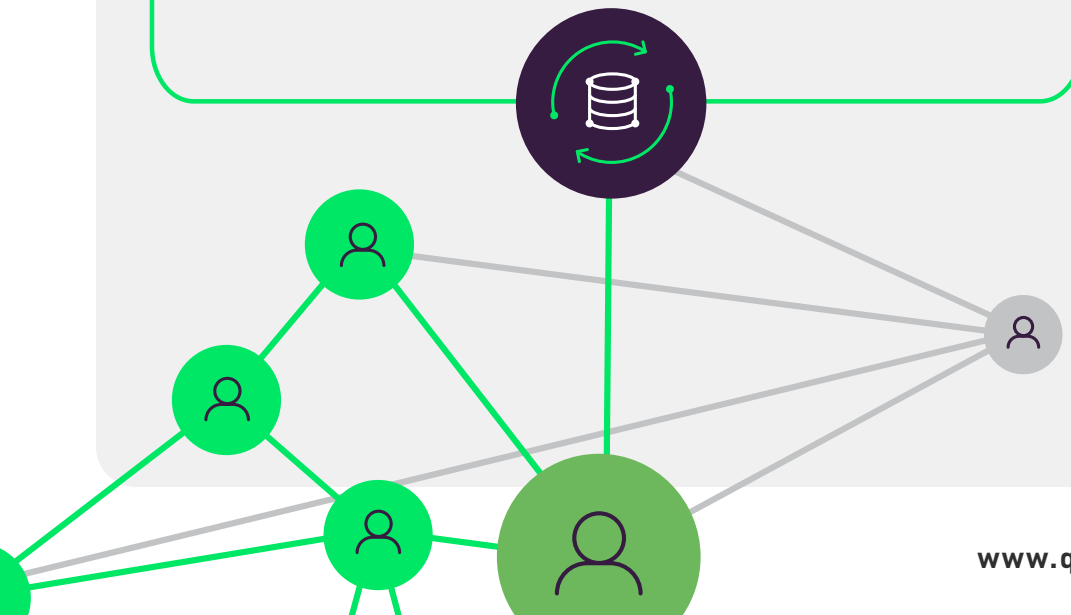
When asked about how data can help them overcome present and future challenges, organizations found five top goals, which vary by sector. The Government sector hones in on using data to gain better knowledge of its citizens' changing landscape, **48%**, and a similar number in Insurance, **47%**, want better understanding of its customers. The Banking sector wants better data in order to crack down on fraud and financial crime, cited by **42%**.

The first step organizations take towards making data truly useful for recovery and growth is improving data and analytics processes to bolster their data foundation and reduce errors, both key objectives for **40%**. Next in line, for **38%**, is better data and analytics to improve operational team efficiency, while **37%** see better data as a direct advantage over the competition.

Context: the missing link to managing data better

Decision-makers want to get more value out of their data management, and are clear on the benefits.

To extract more value from their data, leaders are implementing new data management capabilities.



The evolution of Master Data Management with context

To extract greater value from data, traditional MDM tools are being supplemented with Contextual MDM (cMDM). Ineffective output from MDM solutions affects everything from customer experience to operational performance. As a result, many organizations have lost confidence in MDM programs.

The difference between that old model and Contextual MDM starts from the single view: instead of simply updating records improving them as-it-happens, cMDM ingests data using the source data structure, without time-consuming transformation or reformatting. cMDM uses context to give real-world meaning to the data and helps fill the gaps in poor-quality or incomplete records, making them more representative of real world entities and easier to draw rich insight from.

The whole process cuts months from the time required to reach trustworthy MDM and makes forward-compatibility easy, as all data is stored whole and as-is. This eliminates the need for manual work by flexibly scaling to **100bn+** records, while also reducing records by **20%** through deduplication, a task which commonly taxes human teams, and leads to high inefficiency.

More intelligence, trusted decisions, with context

The ultimate objective of adopting data capabilities is to solve the problem of the Data Decision Gap.

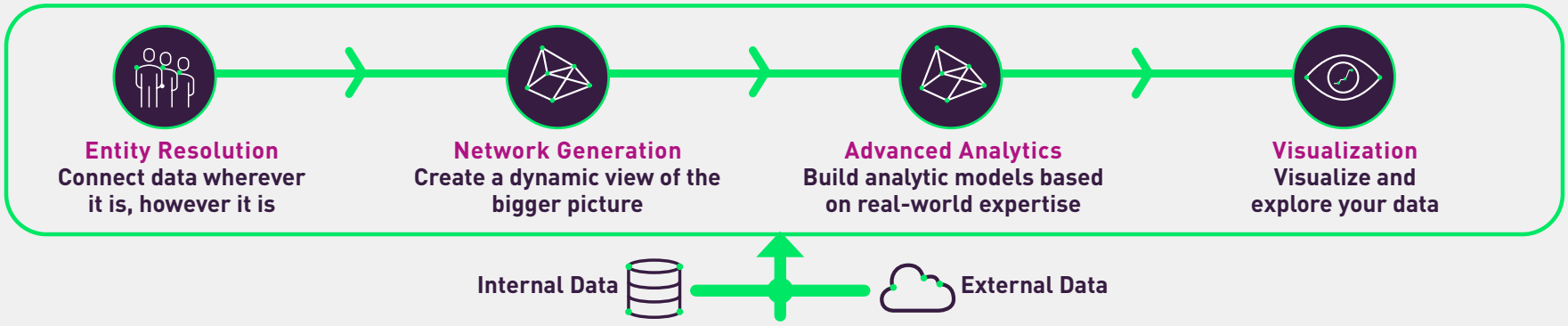
Half of organizations see twin priorities: implementing a scalable data foundation for strategic and operational use, and moving from batch processes to near real-time data to support decisions.

Next, they are increasingly looking to modern entity resolution technology to create an accurate single customer view, **49%**. The same percentage also wants to drive improvements in master data quality, and **47%** are seeking to accelerate multiple use cases with a shared data platform.

Enterprise data approaches must be imbued with context for decisions to be accurate and trustworthy, and for that they must be built on a strong data foundation.

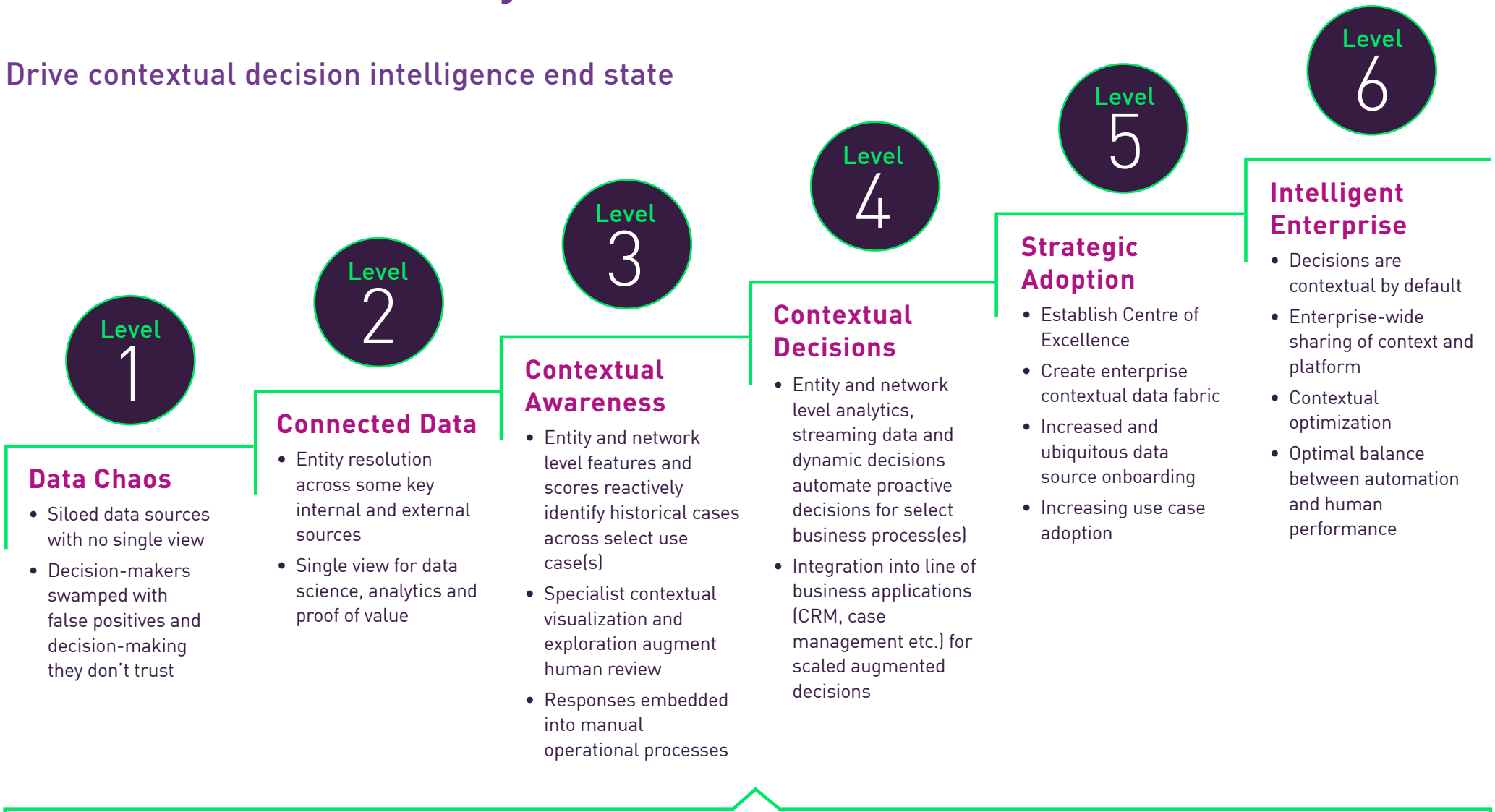
Contextual Decision Intelligence (CDI) is the approach to decision management that adds context to data analysis by connecting every datapoint, internal or external, to all others in the organization. Upon this connected data foundation, decision-makers have a single view of customers and counterparties from which they can extract real-world intelligence.

The pillars of context



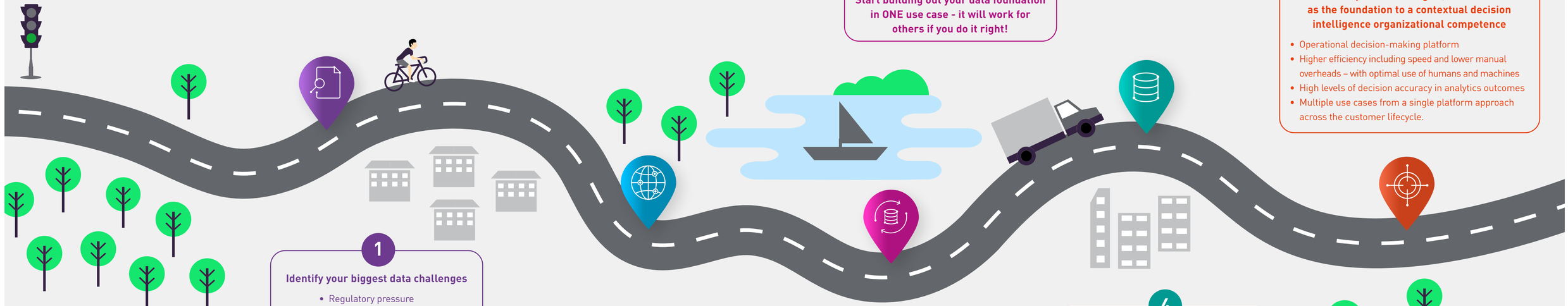
The Data Maturity Model

Drive contextual decision intelligence end state



Wherever your organization is in the journey to closing the Data Decision Gap, there are actionable steps you can take today to make more trusted, more efficient and more intelligent decisions.

Roadmap to closing the Data Decision Gap



1

Identify your biggest data challenges

- Regulatory pressure
- Customer experience
- Business growth
- Efficiency drivers
- Situational awareness
- Digital resilience
- Technology innovation

2

Map out achievable phases for enterprise evolution or transformation

3

Start building out your data foundation in ONE use case - it will work for others if you do it right!

4

Make sure your data is all in one place AND joined together, otherwise it will yield low value and result in low trust in operational decision-making

5

Destination point: Meaningful, connected data as the foundation to a contextual decision intelligence organizational competence

- Operational decision-making platform
- Higher efficiency including speed and lower manual overheads – with optimal use of humans and machines
- High levels of decision accuracy in analytics outcomes
- Multiple use cases from a single platform approach across the customer lifecycle.

Harness the power of your data to drive trusted operational decision-making

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