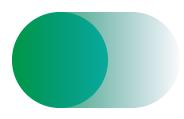
# ompanion Guide

# Clik

# How to become an Al-powered organization





# Introduction

Generative Al holds the potential to usher in a new era of productivity and prosperity.

However, the current lack of data traceability and quality control in GenAl poses a significant risk, allowing unverified data to compromise the reliability of its output. If unaddressed, this issue could exponentially endanger both business and society.

We need to find a new model that promotes better – and trusted – data. This means data that goes beyond the three classic Vs associated with big data - Volume, Velocity, and Variety - to also incorporate the two Vs of Validity and Value.

But how can we do this?

At the beginning of this year, we released Qlik's annual 10 Trends in Data, Analytics, and Al. The purpose of these trends is to help your organization move forward on the path of ensuring that all data is trusted data with value in the Al economy. If you haven't read it, you can access the full thought leadership paper here or watch the webinar on demand.

Now that you have some background, let's talk about how we incorporate these trends into our business practices.



Dan Sommer, Senior Director, Market Intelligence Lead





# 10 Trends

Data, Analytics & Al







# Hybrid Al bridges the maturity gap

# Will traditional Al finally mature, or will GenAl overtake it?

One of the biggest misconceptions is that GenAl will replace all preceding Al tools.

That would be a big mistake.

Now that AI has matured enough to be put into production and scaled, you can harness its potential to bridge the existing GenAI maturity gap, especially in well-established use cases such as fraud analytics and churn analysis.

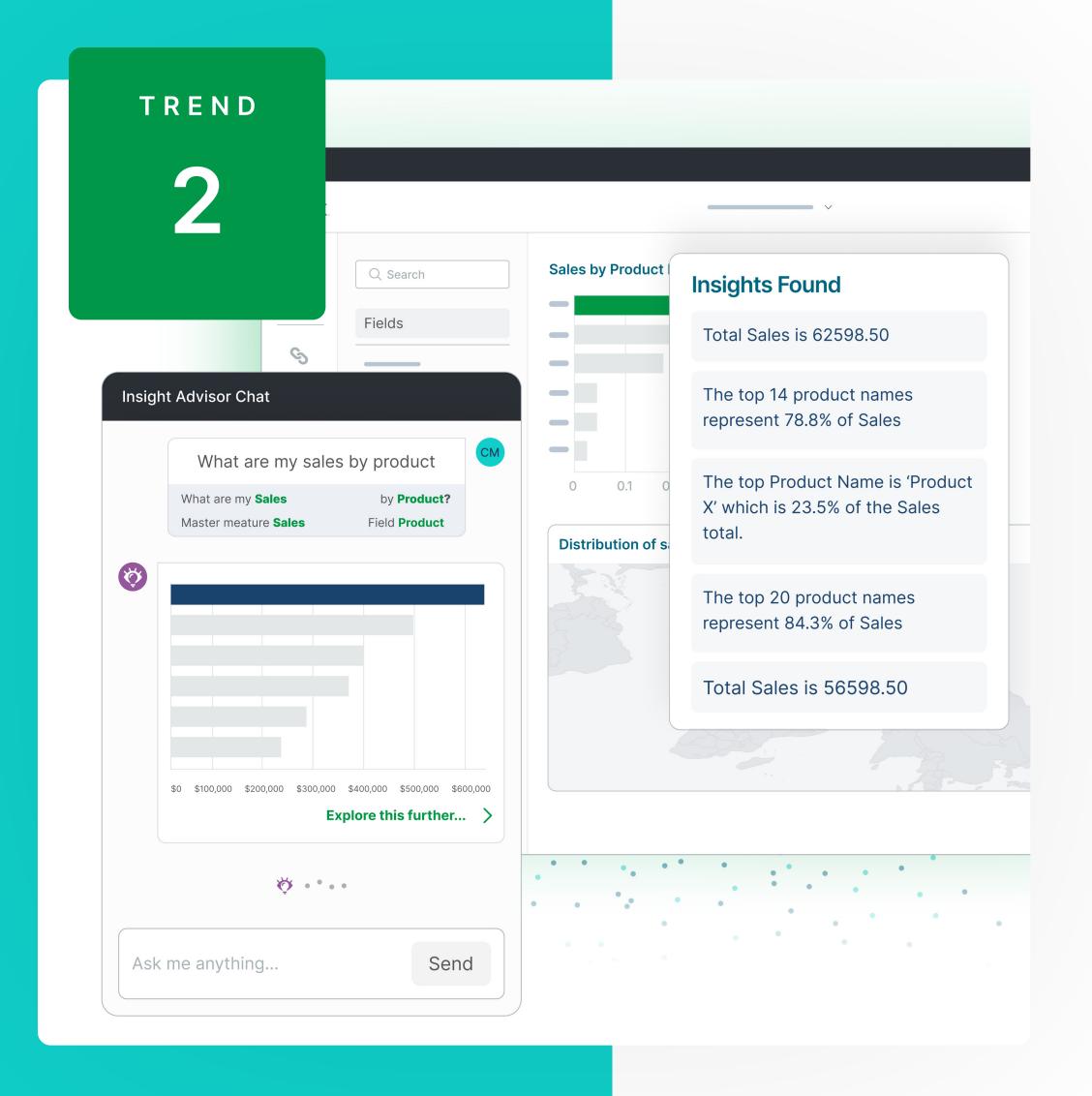
## **Best Practice**

- Agree on what you want to achieve before starting any Al implementation. Make sure that any initiative is rooted in a real-life business challenge that you need to solve.
- Don't let GenAl distract you or eat all your budget, as there are other highly effective means of harnessing Al for analytics, such as machine learning.
- Let your analytics and data team oversee every Al effort underway, to ensure it aligns with and amplifies other ongoing efforts.

## **Technology Solution**

Qlik Staige, our holistic set of solutions, helps customers confidently embrace the power of both traditional and GenAl and deliver tangible value. Working with us, customers can build a trusted data foundation, find and act on insights with Al-infused analytics, and build and deploy Al for advanced use cases.





# GenAl for insights: Supercharging the data consumer experience

# How is Al empowering less-technical information workers?

For those people who just want to get to an answer – and fast – without the time, desire, or skills to perform an analysis, we will see an increase in autogenerated visualizations and insights, enhanced with explanations in natural language.

Consumers also tend to trust people more than data, so collaboration and data sharing will be key. There are bonus points if this can happen within the systems where they operate.

### **Best Practice**

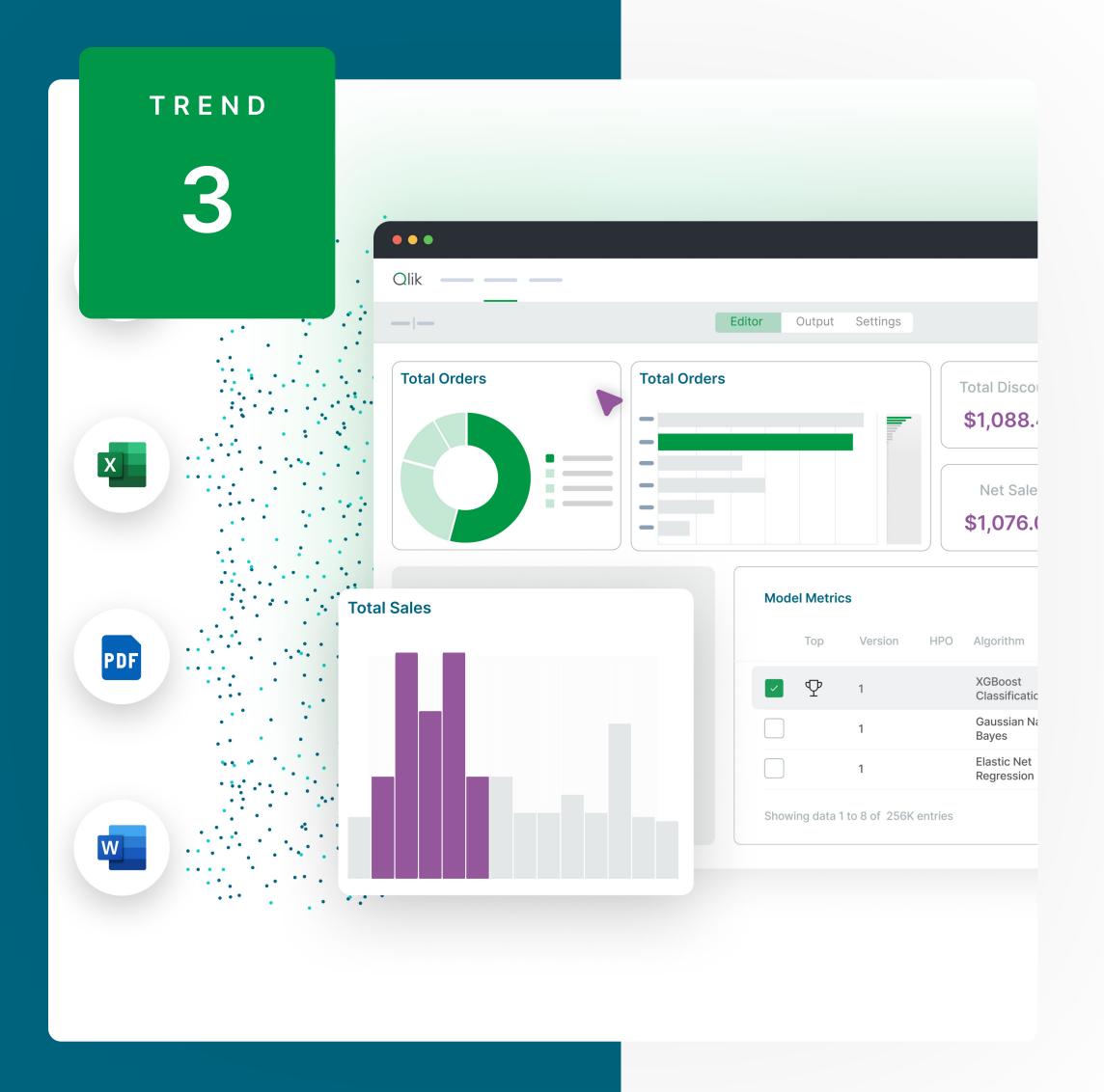
Look for ways to have a bigger impact with Al-infused analytics efforts, such as embedding more micro-insights throughout the entire data and analytics pipeline and into operational workflows that can be actioned. You can also consider using technologies such as embedded analytics, alerting and application automation.

This augmented analytics considers your intent and behaviors – including processing conversational inputs through NLP – to generate insights and visualizations that are context-aware and therefore highly relevant.

## **Technology Solution**

Qlik's Al-enhanced platform finds and brings real-time insights to inform key business decisions. It removes any guesswork with visualizations, predictive insights, and summaries generated on the fly, using chat, search, and prompt-based experiences. The self-service environment enables smart data preparation for intuitive and real-time chart generation, whilst Al recommendations help you find associations between data sources and outliers. Insight feeds are also generated in natural language, alerts, and Teams integrations.





# The age of unstructured data is now

# Is GenAl the key to making unstructured data easier to analyze?

The majority (Forrester says 80%)<sup>1</sup> of the world's data is unstructured.

Many have previously tried and failed to analyze unstructured data, but with new GenAl techniques, we can unlock its potential and value.

The opportunities for combining structured and unstructured data in a trusted way will be endless. You can re-use verified questions and answers to efficiently scan and analyze your entire data estate.

## **Best Practice**

Use open-source chatbots like ChatGPT for external use cases alongside more private chatbots where your trusted enterprise data has been secured – ideally ones that can also leverage your structured and unstructured data.

## **Technology Solution**

Thanks to Qlik's associative indexing - and the acquisition of <u>Kyndi</u> - our unique analysis delivers superior exploration of structured and unstructured data. Using Qlik connectors to OpenAl, you can trawl larger amounts of unstructured data in a secure way to open new powerful use cases.





# From BI to AI and back again, business analysis is changing

# How is GenAl supporting business analysis?

Increasingly, individuals might start their analytical journey in GenAl tools, using them for simple data visualization and business projections.

As a next step, they may want to tap into enterprisegrade tooling for deeper analysis, bringing the benefits of GenAl to their trusted tools.

## **Best Practice**

Experiment with chatbots for ad hoc queries but understand that they will not fulfill all enterprise needs for the data that runs your business.

When you need persistent analytics using data you can trust, make sure you also use enterprise-grade technologies that are embeddable and integrable using open APIs.

## **Technology Solution**

Qlik is an embeddable, governed, enterprise-grade platform that allows you to start your analysis in multiple places, including collaboration tools, business systems, intranets or chatbots.

40,000 customers, including Harman, Hitatchi and Volvo, already have the confidence to trust the end results of their work because of Qlik's ability to embed powerful Al into all of their data and analytics infrastructure.





# Data origin matters: Understanding your data's DNA

# If you don't know where data comes from, how can you trust it?

If data quality and lineage were important before, they have become non-negotiable in a world with Al.

A new mechanism to clearly label and signpost data will emerge to create the equivalent of a DNA test for your data to ensure you know and can trust its origin.

### **Best Practice**

If you want to responsibly expose data to GenAl, you need to prepare your data responsibly by auditing and grading it using techniques like lineage, traceability and trust scores.

Data that receives a lower trust score can be used for certain purposes, but not for mission-critical applications that are heavily leveraged for AI, as any AI tool needs to be built on trusted data. High-quality data that has a strong trust score, however, can be productized and used outside of your organization. Ensure that your public LLMs have data provenance and cryptography before using that external data more widely.

## **Technology Solution**

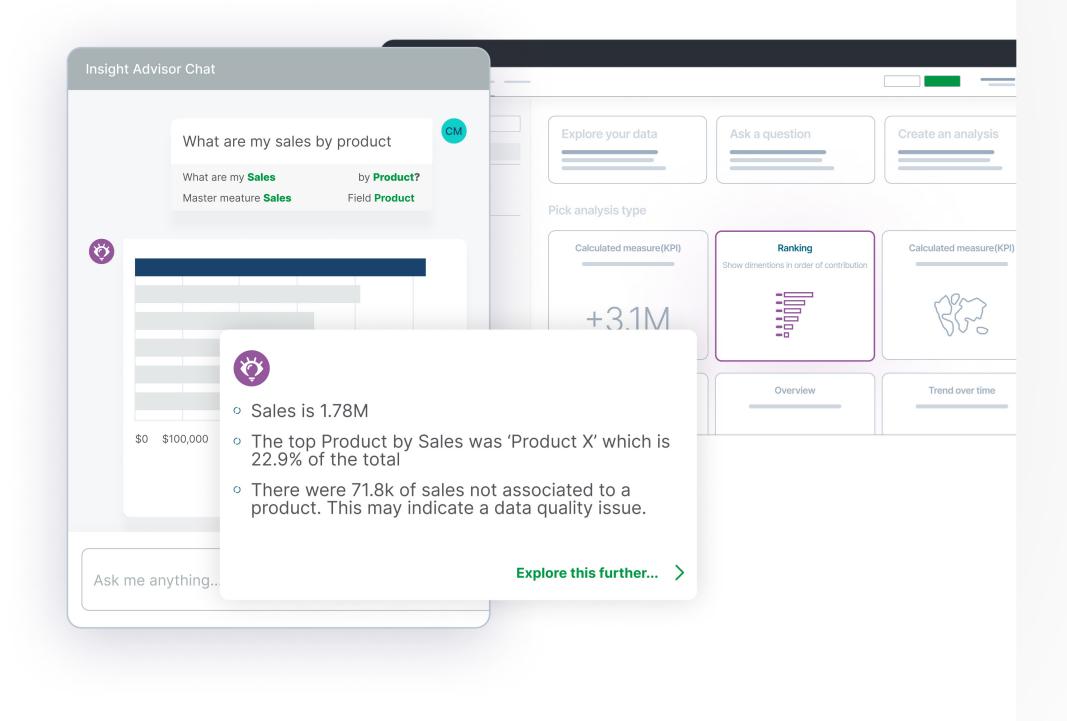
Qlik helps deliver governed and trusted data to organizations like Airbus, Jaguar, Schneider Electric and J.B. Hunt.

Qlik Talend™ Data Integration and Quality solutions enable a data fabric for modern architectures using automated data transformation pipelines to reduce complexity. Data Quality and Governance mitigate risk by providing trusted data with rich metadata management, data lineage and a trust score to keep track of your data health. All taking a no code, low code or code as you want approach to deliver clean, reliable and trusted data in near real time, ultimately building a solid foundation for any Al and analytics initiative.



TREND

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# The rise of novice developers demands Al Literacy

# How can you safely put great power in the hands of citizen developers?

With plain English (or any other language) now the new dominating programming language for GenAl tools, we are seeing an explosion of apps built by the 'everyday developer' – resulting in a flurry of innovation.

Just as data literacy has been crucial in the last few years, we now need to turn our attention to Al literacy to improve standards, avoid governance chaos and application glut.

As this process puts very strong powers into the hands of the many, organizations must take steps to educate their workforce in the benefits and pitfalls of GenAl.

Now is the time to facilitate the creation of rich, thoughtfully designed applications that enable exploration.

## **Best Practice**

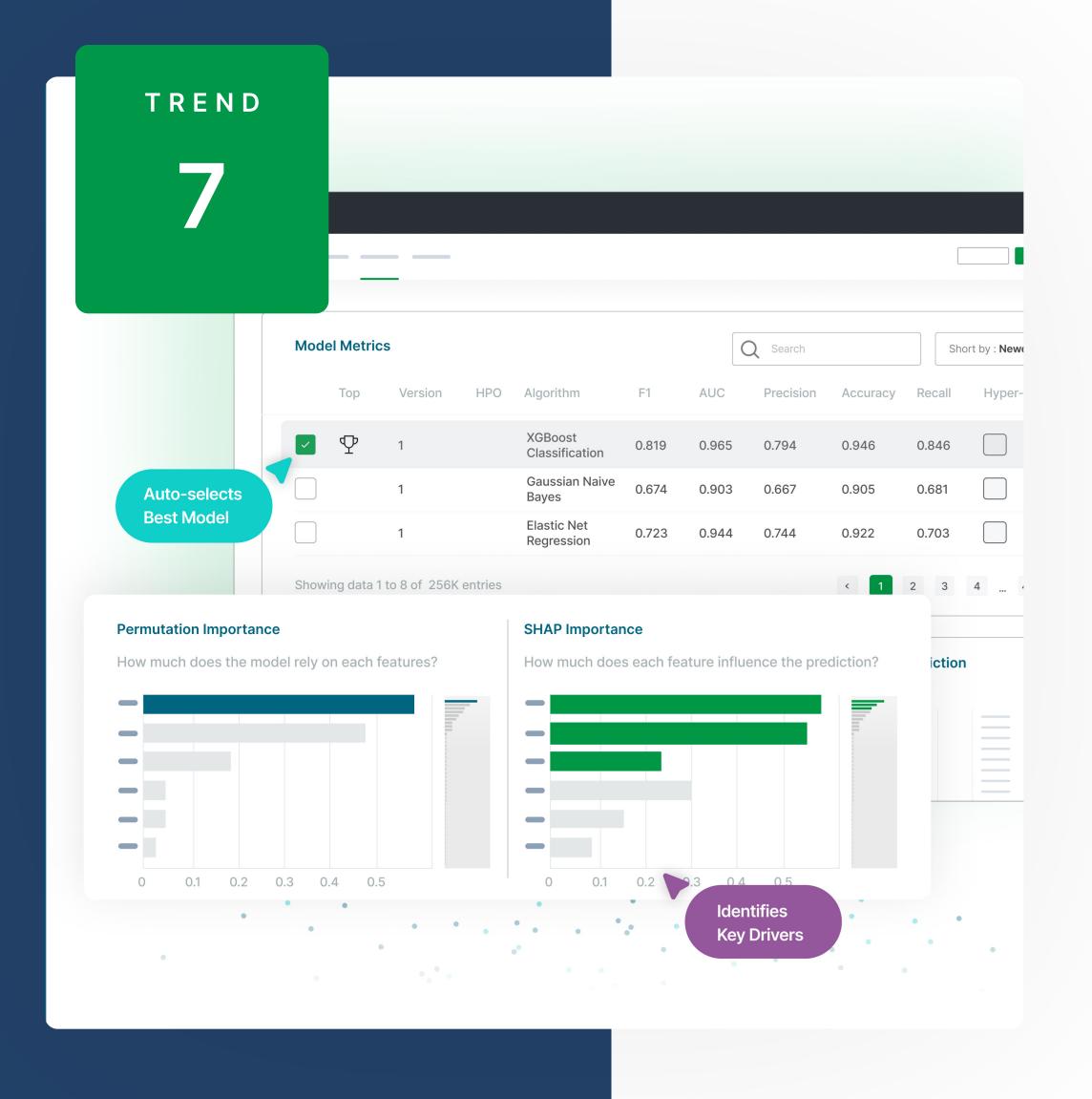
Introduce prompt engineering and put policies in place that encourage app creation. This should be done with privacy-first guard rails in place, so that if these apps are shared more widely, they are underpinned by trusted data models to prove legitimacy.

Similar to getting a 'driver's license,' Al bots should have to pass relevant tests to prove proficiency.

## **Technology Solution**

With Qlik, more "citizen developers" can build simple, but richer, more advanced applications for your business to rely on. It's easier than ever with tools such as text to SQL, expression editors in natural language, auto app creations and the ability to build visualizations and dashboards from a few prompts.





# Data engineering, analysis and data science are merging

# Will data be democratized by removing the need for advanced knowledge and tools?

New platforms, combined with the evolution of data fabrics, will consumerize data engineering to a new breed of users — especially if augmented with powerful AI, automation and data science.

Making the hard stuff easier and merging the roles and capabilities of data engineering, data science and analysis will enable organizations to solve tougher problems with fewer resources. Eliminating barriers between previously siloed functions will also help businesses move data and outputs from big to better.

## **Best Practice**

Challenge your business analysts, engineers and data scientists to work together across more of the data pipeline. Identify skilled people in your organization — ideally those close to the business problems that need solving — and give them the right tools to do more outside of their comfort zone. Innovation often comes from convergence between unexpected parts of your organization.

## **Technology Solution**

Use Qlik Talend™ Data Integration and Quality to embrace complexity and unify fragmented data, Business Intelligence (BI) and AI/ML projects.

With Qlik in place to deliver clean, trusted data, the key data and analytics professionals in your organization can do more in a safe and governed way.





# Automation and Al create a virtuous cycle

# Why is the focus of AI changing from analysis to execution?

So far, GenAl tools have mainly been used to support reasoning and conduct analysis, rather than for action.

But with transformed data in near-real time and in the right place, we will start to see new ways of using GenAl with application automation.

GenAl, connected with automation, will mean less manual work for humans to connect and build workflows and instead take on the role of decision stewards.

## **Best Practice**

Make sure your data is in the right place and has the right transformations. Automate incrementally as comfort grows, by monitoring progress, adjusting, and then automating more. But always have humans in the loop.

## **Technology Solution**

Qlik makes the most up-to-date information available in the most important moment: now.

Not only can Qlik help you find the insights and drive action with built-in Al, but you can also integrate into other Al and RPA platforms to deliver Al-ready data and then bring it back into Qlik to show the results, instantly and automatically.

Drive automated metrics and insights within dashboards or embed them directly into machine-driven processes, using APIs and automating data workflows between cloud-based applications to streamline DevOps and lower operational costs. Qlik combines data at rest with data in motion, reflecting the pulse of the data and delivering insights in the business.





# Last-mile Al customization becomes critical for business

# How do we develop GenAl tools specifically for business needs?

Early applications of GenAl are massively scalable — but currently generic.

Over time, we'll increasingly see Al customized to industry, and more specifically, business-to-business (B2B) use cases built on multi-cloud environments for efficiency and stability.

This will take the shape of applications where the foundation may be common, but with layers of customization that better serve the long tail.

Furthering this trend, we will also see that with less effort and fewer consultancy hours, sophisticated applications can be built that address a specific industry or issue at hand.

## **Best Practice**

Stay agnostic with multi-cloud and multi-Al applications. Use technologies that can build rich applications and be surfaced in marketplaces.

# **Technology Solution**

Because Qlik is agnostic, multi-cloud and multi-LLM, you're not locking yourself in or limiting your options. A vast ecosystem of customers and partners rely on the platform to build and use rich, mission-critical applications for supporting and growing their businesses.





# Data as a product that can be traded

# How has AI become the tipping point for monetizing your organization's data?

Start to apply principles of product management to data, asking questions about what problem(s) we are solving, what it is going to be used for and by whom. This will emphasize the importance of data quality, governance and usability for end users.

The concept of treating data as a valuable asset or product means it can be surfaced in a catalog and used both indirectly (internally) to create huge value through improving internal systems and processes and directly (externally) to evolve into a tradable good.

This opportunity will encourage organizations to use their own data to further train Large Language Models (LLMs), like ChatGPT, which can then be monetized. The more the data product is used, the more valuable it will be.

### **Best Practice**

Focus on governance and metadata first. Then you can start on the path of transforming your data assets into products for reuse internally and also externally.

Implementing a data fabric approach will be key to realizing value. This requires ingestion, transformation, orchestration, governance, security, preparation, quality, and curation — enabling insights and analytics that accelerate use cases quickly.

# **Technology Solution**

Qlik creates Al-ready data products. With the recent acquisition of Mozaic Data (Mozaic), Qlik has all the critical components to simplify data handling for businesses, enabling a data product-oriented approach for better data quality and governance. Qlik can help you build a data fabric, using data mesh principles, resulting in data that can be productized, combined with analytic products that turn the data into business value.

With a SaaS-based Data Product Catalog, Qlik can offer a more efficient and user-friendly experience in data lifecycle management, while also reinforcing a solid foundation for Aldriven data management.



# Conclusion

Opportunity is knocking, but who will answer?

What are you waiting for?

Those who are complacent will get left behind.

It's really a case of now or never.

If this feels overwhelming or you don't know where to start, remember that you don't have to do it alone. In fact, you shouldn't.

# Let us help move you forward

Qlik transforms complex data landscapes into actionable insights, driving strategic business outcomes. Serving over 40,000 global customers, our portfolio provides advanced, enterprise-grade Al/ML and data management. We excel in data integration and governance, offering comprehensive solutions that work with diverse data sources. Intuitive and real-time analytics from Qlik uncover hidden patterns, empowering teams to address complex challenges and seize new opportunities. Our Al/ML tools, both practical and scalable, lead to better decisions, faster. As strategic partners, our platform-agnostic technology and expertise make our customers more competitive.

**Get in Touch Today** 

