OPTIMISE YOUR BUSINESS OPERATIONS WITH INSIGHTS: VALUE OF AUTOMATED DATA PIPELINES AND CLOUD ANALYTICS

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Introduction

Data is the currency of a modern business. IDC research shows that for nearly 87% of CXOs, becoming an "intelligent organisation" in the next three to four years is a top business priority.

This is because they see a strong correlation between data-driven insights and key business outcomes such as:

- Supply chain optimisation
- Improved resilience and risk management in a volatile, uncertain world
- Operational efficiency
- Boosting customer centricity
- Relevant products and services
- Attracting and retaining new data-native talent
- Building a trusted brand and organisation
- Meeting long-term objectives such as sustainability

AT A GLANCE

- European organisations see AI, ML and intelligent organisations as their "north star".
- Cloud is an access ramp to realise these data-driven objectives.
- But only 20% cited "better insights from data" as the business outcome of their IT modernisation/cloud strategy.
- Data silos, misconfigurations and inability to access data in one central repository are all key hurdles.
- Skills shortages, complex regulations and rising costs add to the burden.
- Savvy organisations use modern automated data pipelines, data cloud features and embedded security capabilities for success.
- Reimagine intelligent data movement to get the most from data clouds.

But becoming a data-driven organisation isn't accidental. What differentiates data-driven organisations is that they develop a data strategy to streamline operations and focus on data governance and quality, adopt an enterprise-grade data cloud platform and focus on business outcomes.

While accelerated cloud adoption has become a norm in Europe in the post-pandemic world, organisations are better aligning cloud adoption to business value. As a result, nearly 80% of strategic cloud conversations are focused on analytics, AI and ML as the outcome. This is because business leaders see cloud as an access ramp for their data-driven initiatives and data democratisation.

However, only 20% cited "better insights from data" as the business outcome of their IT modernisation and cloud migration strategy.

Data and IT leaders admit challenges such as data silos, poor data quality, legacy technology architecture, security and governance challenges, as well as skills and culture, as barriers to effectively leveraging data clouds. Data quality is a top bottleneck for 55% of organisations, alongside legacy infrastructure and data silos.

Even more significant challenges are lack of trust in insights, a data and analytics skills shortage, and complexities in synthesising multiple sources of information for effective insights.

It is no surprise then that IDC's *Rethink Data Study 2021* revealed that only 32% of data available to enterprises is put to work. The remaining 68% is unleveraged.

With data gravity shifting to the cloud, it's time to challenge the status quo by solving the data challenges in the cloud and better leveraging the cloud for business innovation.

A holistic strategy that covers end-to-end data life-cycle management, data movement, governance and cloud data capabilities is imperative for success.

By 2023, 40% of the top 500 European enterprises will have a data control plane architecture to enable DataOps, propel ML-based data engineering, improve data access, reduce data risks and boost innovation among data-native workers.

To this effect, savvy organisations are using a fully managed cloud data warehouse for:

- Rich, real-time insights
- Quickly creating reports, snapshots and dashboards with visualisation tools
- Protecting data with encryption

These capabilities jointly enable them to speed up development, scale analytics and improve their competitive edge.

Savvy organisations look to secure data pipelines with automated processes and a rich set of connectors to make the best use of hybrid data clouds.

IDC believes that data environments are brownfield environments. That's why, from a strategy perspective, organisations should consider thinking big, starting small and scaling fast. This should be enabled by a data cloud architecture that is scalable, highly automated, secure by design, extensible and encompasses all data sources. Such a strategy and data architecture together can help organisations execute their long-term data-driven vision.

In This Partner Spotlight

This IDC Partner Spotlight analyses the business value of using Google data cloud augmented by an automated data movement platform from Fivetran. It assesses the Fivetran platform's capabilities and its synergies with Google Cloud Platform (GCP) in helping organisations build an intelligent enterprise.

Situation Overview

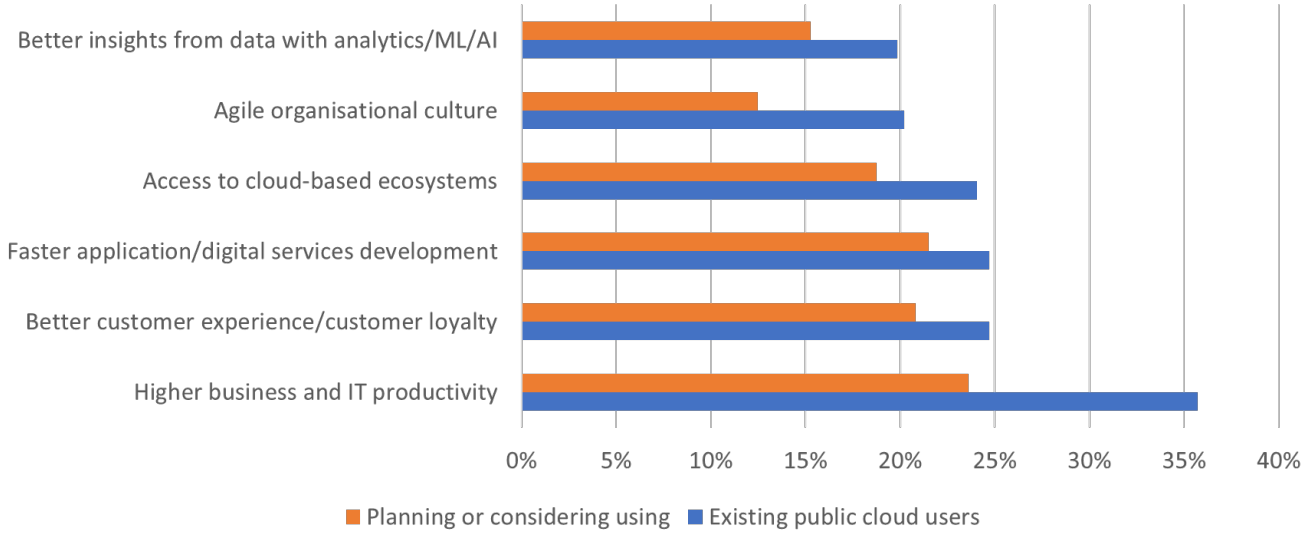
Many European companies are moving or planning to move their data to the cloud to leverage new possibilities for storage, connectivity and new economics — together with new dynamic cloud-native and AI/ML-based applications that are hard to implement on premises.

According to IDC's *2021 Multicloud Survey*, around 50% of cloud users cited plans to adopt public cloud infrastructure as a service (IaaS) or platform as a service (PaaS) as primary strategies for their AI, data warehouse and data lake workloads.

There Is a Gap in Aspiration and Reality

As seen in Figure 1, only 20% of cloud users cited "better insights from analytics, AI and ML" as a positive business outcome from their cloud migration strategies.

FIGURE 1
Positive Business Outcomes From Public Cloud Migration



Source: IDC 2021 European Multicloud Survey

In conversations with IDC, data professionals highlight the 80:20 ratio, where 80% of their time is spent on managing, governing, searching and preparing data and just 20% on analysing and using it.

Data silos, misconfigurations and an inability to connect all relevant data from legacy and modern technologies into one central repository are all cited as key pain points, according to IDC research.

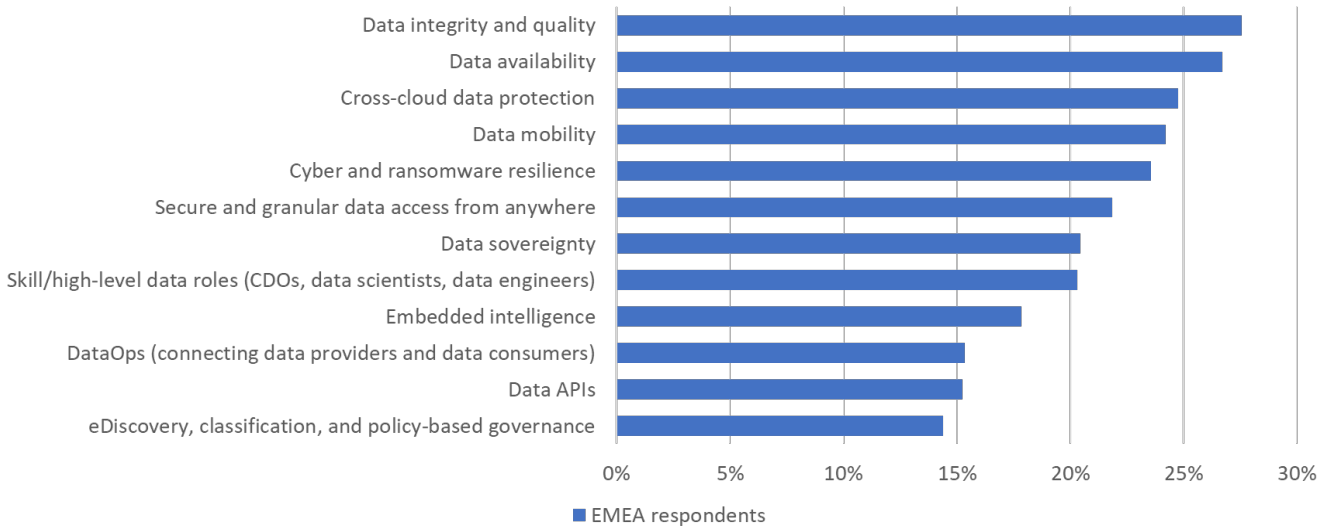
While organisations have embraced cloud data warehouses and data lake platforms, getting maximum value from these platforms requires them to modernise the end-to-end data life cycle.

Many European organisations admit to using ad hoc patchy tools such as spreadsheets to pull data and manually (DIY) build the connections and maintain it — spending 12–18 months on developing these capabilities and data access controls. Such ad hoc strategies result in delays, inaccuracies and general lack of trust in data. They also don't give organisations the speed and scale that development teams need as manually building connections for each database and SaaS application can be time consuming and costly. It also lacks the flexibility to help organisations get visibility into data usage and access patterns and expand to newer use cases.

IDC believes that a trusted and automated data movement platform that securely delivers data into the cloud data warehouse helps to eliminate one of the biggest barriers to accelerating data strategies. Automated data pipeline solutions with a consumption-based pricing model can also help retain cost efficiency as an organisation scales.

As seen in Figure 2, European organisations require data quality (accurate, timely, relevant and rich from multiple sources), consistent data availability, governance, compliance and data movement as key capabilities.

FIGURE 2
Desired Data Tech, Skills and Operational Capabilities



Q. What capabilities are essential for your organisation to ensure availability of data for the right users at all times, securely?
Source: IDC European 2021 Multicloud Survey

It is possible to turn the cloud aspiration into reality by taking a holistic approach that combines:

- Enterprise-grade public cloud infrastructure and platforms
- Scalable, secure and rich AI/ML features of a cloud data warehouse
- Cloud BI and visualisation tools
- Automated data pipeline services that connect to databases and applications of choice and centralise data into the data warehouse
- Strong data integration capabilities
- Ability to connect to modern (noSQL databases) and legacy database sources (Oracle, SAP)

This combination helps meet the attributes highlighted in Figure 2 to accelerate data-driven strategies. Cloud-native, automated data pipelines help customers leverage their many data sources more effectively.

Future Outlook

IDC predicts that by 2023, 60% of enterprise intelligence initiatives will be business specific and purpose built for business, shortening data-to-decisions time by 30% and driving higher agility and resilience.

Delivering Business Outcomes at the Core of IT Investments

As budgets tighten and economics become a prime decision factor, prioritising business use cases to justify the value of intelligence initiatives is taking centre stage. To thrive in uncertain markets, organisations need to get smarter, more agile and more efficient. That requires accurate, up-to-date data that encompasses every aspect of business operations. Combining and analysing this data holistically in one destination can have a positive impact on business outcomes. Increasing efficiency or leveraging market opportunities are traits of digital resilience, and failure in these areas might threaten an organisation's viability as a business. When designing enterprise intelligence strategies, 22% of EMEA organisations already cited data analysis and decision support (ad hoc exploration, scenario analysis, planning, predictions, data science, decision modelling, embedded analytics in business apps) as the most important outcomes of their technology investments, according to Wave 5 of IDC's *European FERS Survey* (June 2021).

With pressure to justify technology investments, the highest priorities for IT and business leaders are aligning intelligence initiatives with business objectives and ensuring they work with managed data warehouse and low-code or no-code data mobility tools to overcome the skills shortages. By investing in a no-code, SaaS data integration platform, organisations can do more with less and move resources off daily pipeline building and maintenance to focus on higher-value data transformation, exploration and analytics initiatives, generating new insights to remain competitive.

Technology Profile — Fivetran and Google Cloud

Fivetran is an automated data integration and data movement platform that helps organisations to unify and centralise data from hundreds of disparate sources including databases, applications, files and events. It maintains pre-built connectors that automatically adapt as schemas and APIs change, to ensure consistent, reliable access to data.

By automating data integration and the managed service model, organisations can be more strategic with their investments in cloud and highly skilled data professionals. It also redefines extract, transform, load (ELT) processes and makes it fit for the digital world where data is dynamic and varied and requires special handling from a governance perspective:

- **Extract:** The hundreds of pre-built, fully managed connectors enable high-volume data movement across multiple clouds and on-premises data platforms. The connectors span use cases such as marketing, finance, sales and customer success with new connectors added continuously.
- **Load:** Fivetran provides entity relationship diagrams for each connector, and handles automatic schema management.
- **Transform:** Data can be transformed using pre-built data models for dbt Core to turn raw data into analytics ready data sets. Fivetran helps to visualise the data pipeline from connector to output model, with in-platform data lineage graphs to see how data changes. Fivetran offers database replication capabilities including change data capture

(CDC) log-based replication and support for enterprise databases including SQL, Oracle, SAP and IBM.

At a business level, Fivetran improves the accuracy of data-driven decisions by continuously synchronising data from hundreds of source applications, so organisations spend time on strategic tasks such as analytics and insights rather than on tedious pipeline building, maintenance and overhead.

For European organisations that prioritise resilience, security and compliance of their data landscape, Fivetran comes with security compliance accreditations such as CCPA, GDPR, HIPAA, ISO, PCI and SOC2. The SaaS application also delivers 99.9% uptime and SLAs for data delivery. This can ensure that fresh data will always be feeding downstream analytics workflows.

Fivetran has over 4,000 customers across professional services, finance, retail, manufacturing and healthcare, including household brands such as The Very Group, Lufthansa and Nando's.

While Fivetran delivers data to any data warehouse, it is a Google Cloud Priority Partner in EMEA and the vendors aim to solve data challenges together.

Fivetran automates data movement into Google BigQuery for enterprises seeking real-time analytical insights and business operations optimisation. According to IDC's 2022 EMEA Public Cloud Tracker data, Google Cloud IaaS is the fastest-growing IaaS in EMEA, growing at 43% YoY (compared with an average of 32.7% YoY).

In addition, 54% of European cloud users that IDC surveyed in its *2021 Multicloud Survey* said they use Google Cloud, with 24% citing "extensive usage". About 20% of respondents also rated Google Cloud as "best in class" for attributes such as openness, trust and sovereignty, and value for money.

Fivetran acts as a bridge between organisations' disparate data sources and Google's analytics solutions. It has deep integration with Google's BigQuery, Looker, Cortex and Anthos. It was awarded Google Partner of the Year 2021. But the collaboration is more strategic. For example, Fivetran is a foundational partner for Google Cloud Cortex Framework, which aims to unlock data from SAP workloads for business insights.

IDC sees this as significant at a time when reimagining ERP data is a top consideration for EMEA organisations. Around 34% of European cloud users said they will modernise, refactor or reengineer their core business applications — such as SAP — with cloud to fully reimagine their ERP environments. Google's recognition that Fivetran can manage complex, high-volume data needs essential for the Cortex Framework will help more European organisations adopt the framework.

- The vendors share a common vision around digital trust, sovereignty and data governance, and offer the complete data management foundation to propel customers' analytics and AI/ML journeys.
- Fivetran is also a member of Google Cloud's Data Cloud Alliance, which ensures open data sharing between storage, analytics and database providers.

In IDC's *2021 European Multicloud Survey*, organisations highlighted user experience (ease of use), openness, value for money, security and data-related capabilities among the top attributes when choosing a strategic cloud platform. The joint Data Cloud Alliance vision will help win customer confidence on the joint offering. Having access to an automated data pipeline with a consumption-based pricing model can help organisations to manage costs as they scale.

GroupM, a Google Cloud customer, wanted to give its clients insights into how and where to spend advertising budgets. It wanted to deliver marketing data from multiple sources into Google BigQuery and used Fivetran as the automated data pipeline tool. Its traditional pipeline approach failed due to issues that were hard to detect and resolve, and ran into problems because of manual errors.

GroupM used Fivetran's self-healing and zero-maintenance architecture, along with preconfigured connectors that accelerated ingestion from 15 data sources. Fivetran also backfilled GroupM customers' historical data, saving the team further time and avoiding time-consuming manual syncs. This freed up the data team from having to manage and maintain pipelines.

"The big win for us is that all sources are gathered into one place using Google Cloud for Storage and DataStudio for visualisation, which would normally be viewed manually in different reports across different systems." Herman Mull, Data Analyst, GroupM

Now GroupM has identified new use cases beyond marketing to use data for sales modelling and to better leverage Google Cloud's analytics capabilities.

Challenges

The speed at which European organisations get ROI from their intelligent technology investments is becoming an increasingly important success factor. Agile methods and cloud technologies are now as essential in enterprise intelligence as they are in business and technology operations.

While this presents opportunities, Fivetran and Google Cloud need to be aware of the broader challenges that organisations and C-suites face:

- Changing environmental regulations
- Inflationary pressures
- Talent and skills shortages
- Government interventions and political risks
- Cybersecurity threats
- Supply chain disruptions
- Ongoing COVID variants, slow vaccination rates and disruptions

IDC calls these "storms of disruption" and for many European enterprises addressing this is a priority in the near term. Many organisations are also taking a specialist approach when it comes to data-driven strategies, adopting niche cloud platforms specifically for their data needs.

Organisations, especially in risk-averse EMEA geographies, are also still looking to capitalise on their existing, traditional analytics platforms. These organisations are also more cautious of standardising on cloud capabilities for their core data and applications.

But IDC believes these are near-term challenges and that over time the direction of data travel is towards cloud. Google Cloud and Fivetran should keep up the momentum of innovation and share the business impact of their joint solutions.

Conclusion

It is time to reimagine data architectures for maximum value and use enterprise-grade data clouds for speed, scale and analytics capabilities. As organisations undertake such a data strategy, they need to reimagine data movement — and automated data integration is critical to get the most from data clouds. In conversations with IDC, many organisations admit they are stuck at PoC stages due to lack of automated data movement from all key sources. Ensuring that use case, data pipeline and data warehouse plans are strong is the first step to embark on data-driven strategies.

But it's also about adapting operations, processes and skills. Many BI projects fail because they are tech focused. Savvy organisations that get it right understand that data is a brownfield environment. They seek platforms that help them to extract value from legacy as well as new sources. These organisations think big, start small and scale fast as they bet on extensible platforms.

Identify your data "north star" but have a clear vision of your starting point to make fast progress. As you do that, ensure you leverage managed services, automation capabilities and trusted technology stacks. Organisations that are serious about their data-driven plans should evaluate Google Cloud and Fivetran's joint offerings.

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About the Analyst

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Archana Venkatraman's primary research coverage is cloud data management. She covers multiple topics including data protection, edge to cloud data trends, application and data availability, compliance, data integration, intelligent data management, DataOps, data quality, and multicloud priorities and trends. She also co-leads the cloud practice and contributes to IDC Europe's DevOps and AI research practices. Before joining IDC, she was the datacentre editor at *Computer Weekly*. She has a master's degree in journalism from Mumbai University.

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