



From Data to Decisions: A C-suite Guide to AI-Powered Growth

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The idea that “data is the new oil” is everywhere these days. But raw data, like crude oil, needs intensive refinement to reveal its true value.

For C-suite leaders, it’s not about amassing data, but about crafting insights that move the needle on strategy and innovation. Just as crude oil needs refinement to be useful, data must be processed and transformed to reveal the patterns and pathways that drive real impact. The challenge, and the opportunity, is in turning this raw resource into intelligence that pushes business forward.

In this guide, we’ll explore how to prove a robust data foundation, turning your organisation’s data into a strategic asset. By integrating AI and fostering a culture of data literacy and innovation, you can transform raw data into valuable insights that power decisions and fuel sustainable growth.

We will delve into key steps for building a data-centric culture, using AI as a competitive advantage, and embedding data into the fabric of your business to ensure data truly powers transformation - not just at the operational level, but at the strategic level where innovation and market leadership are forged.



Marv Gillibrand
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“Unlocking the power of your data requires more than just good infrastructure. Far too often, I see data and AI initiatives stall because they lack strategy, experience, and governance to support. With these elements in place, organisations don’t just start using data—they gain the insight and agility to start transforming their operations, improving customer experiences, and innovating with confidence”

Data is the new oil, but only with the right refinery

Data has become as essential to modern businesses as oil was to the industrial revolution. Just like crude oil, data in its raw form has limited value. Only once refined does it fuel innovation, efficiency, and growth.

To take this metaphor further, we can think more about "Data Refinement Ecosystems," where a well-built 'data refinery' transforms raw data into actionable insights. Similar to how crude oil processing yields valuable products like gasoline and jet fuel, proper data stewardship can yield not only valuable insights but also unexpected byproducts, much like the myriad products derived from crude oil refining.

Data is no longer just a by-product of operations; it is the fuel that powers growth, competitiveness, and innovation. According to [McKinsey](#), data-driven organisations are 23 times more likely to acquire customers, six times more likely to retain customers, and 19 times more likely to be profitable.

Data-driven organisations are:

23x

More likely to acquire customers

6x

More likely to retain customers

19x

More likely to be profitable

Establish a scalable, secure data infrastructure

The first step in extracting value from data is to deploy robust infrastructure, starting with a digital "data well" that captures raw sources of information from customer interactions, internal transactions, or external datasets. Just like crude oil, these wells hold untapped potential that requires refinement to create real value. The infrastructure supporting this must enable seamless integration across the enterprise with:

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Scalability

Scalability in your data infrastructure is key for ensuring it can grow with your data needs. As an example, Netflix's data infrastructure exemplifies how scalable platforms can transform data into a direct, revenue-generating asset by personalising the user experience.

Netflix's data infrastructure powers personalised recommendations, driving 80% of its watched content. This infrastructure not only enables personalised recommendations but also highlights how scalable, robust infrastructure turns data into a direct driver of growth and customer engagement.

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Security

The importance of security in your data infrastructure should not be underestimated. To make use of data from 'data wells', organisations need robust data pipelines - secure routes that transport raw data to various processing stages, ensuring each part of the organisation can access the data it needs safely and efficiently.

To manage diverse data sources efficiently, companies are increasingly adopting Unified Data Platforms (UDPs). These platforms allow for integrated data management, offering a unified view across structured and unstructured data and breaking down silos that hinder data access.

03

Interoperability

Seamless data integration across systems is essential for getting the most from your data and its infrastructure. "Data Lakehouses" are appearing as a best-of-both-worlds solution. You can think of a Data Lakehouse as the best of a hybrid refinery and distribution centre.

Just as an oil refinery processes crude oil into various fuels and sends them where they're needed, a Data Lakehouse combines the scalability of a data lake with the analytical capabilities of a data warehouse. It allows raw data to be efficiently stored, processed, and transformed into valuable insights on demand, ready to fuel decisions across the business.

Companies like Databricks are leading the charge with solutions that make data accessible, governable, and ready for instant use — a true ecosystem approach to data infrastructure.

Integrate AI as the key to refining data value

AI is the magic in the refinery that transforms raw data into high-value products. It is not enough to capture data; organisations need to refine it through machine learning (ML), natural language processing (NLP), and other AI-driven approaches. Each type of AI helps us in a different way:

01 Machine Learning (ML)

automates complex decision-making processes by learning from patterns within data, freeing up resources and enhancing efficiency.

02 Natural Language Processing (NLP)

extracts insights from unstructured text, enabling companies to better understand customer sentiment, trends, and market needs.

03 Predictive Analytics

forecasts future trends, empowering leaders to make proactive, data-driven decisions that can mitigate risks, seize opportunities, and inform strategic planning.



Marv said:

“When I first studied AI at University, the focus was on foundational algorithms and theory. Today, we have seen these foundations evolve into powerful, practical tools with the ability to process and refine vast amounts of data in real-time. This progression has transformed AI from a niche, mostly theoretical, field into a core part of data-driven strategies, allowing organisations to turn raw data into a continuous stream of insights that shape strategic planning, operational improvements, and innovation.”

“However, most companies I see are still only scratching the surface of AI’s potential, often using it in isolated projects rather than embedding it as a core element of their data strategy, which limits the transformative impact AI can truly have on their operations and decision-making.”

According to PwC, AI has the potential to add \$15.7 trillion to the global economy by 2030, underscoring its transformative power when used strategically.

\$15.7T

Added to the global economy by 2030 potentially

Cultivate a data-driven culture: Invest in people

The foundation of a successful data strategy is people, not tools, although your people should be enabled and empowered by the right technology. Leaders must foster a culture that prioritises data literacy, promotes learning, and recognises data-driven achievements.

Microsoft, for example, has implemented extensive data literacy programs, ensuring all employees from entry-level to executive are equipped to use data in decision-making. This kind of cultural investment is essential, as Gartner predicts that by 2030, data literacy will be the most in demand skill.



Marv explained:

"In my experience, it's often the people factor that gets overlooked when organisations plan their data strategy. Leaders get excited about new technology, but without a strong emphasis on empowering people - giving them the skills, confidence, and authority to make data-driven decisions - those investments rarely achieve their full potential. Too often, I've seen that real value comes not from the data itself, but from people who know how to use it effectively."

Data literacy predicted to be
the most in demand skill by

2030

Just as an oil refinery needs skilled engineers, an organisation's data refinery requires skilled data scientists, analysts, and decision-makers. Investing in data training is not a nice-to-have; it is essential for driving measurable value from your data initiatives.

Ethical considerations in data refinement



As data refining through AI becomes standard practice, ethical considerations are no longer optional. They are essential to sustainable growth. While refining data can unlock significant value, businesses must guard against data spills - accidental data leaks or breaches. Strong governance and security frameworks are crucial to prevent these spills and ensure trust with customers and stakeholders.

IBM, like many companies, now has an AI ethics board to oversee its projects, setting a strong example for other organisations.

Actionable steps for C-Suite leaders

It's one thing to talk about AI and data with a view to implementing it at some stage, but it's an entirely different ball game when it comes to putting your plan into action. Here are some actionable steps you can take to leverage the power of data and AI in your business.

Define a Clear Data Strategy with AI as a Core Component

To make data valuable, start with a clear strategy. Conduct a gap analysis to find where data and AI can create the most impact and develop a roadmap with KPIs to track success. Remember, AI should serve your broader business goals, not just exist in isolation.

When defining your data strategy, you must ensure it aligns with your business goals and shows board-level accountability. You should also link data investments to specific outcomes to make sure they drive value.

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Build scalable AI & data infrastructure: Your company's future lifeblood

AI is the key to refining data into actionable insights. Implement machine learning to automate decision-making and use AI tools to extract valuable patterns. AI elevates data from passive storage to active use, resulting in a direct impact on strategic goals.

A scalable, integrated data infrastructure is essential. It is the pipeline that transports your refined data to where it can drive the most value for your business. Invest in secure, interoperable systems that allow data to flow seamlessly across the organisation, enabling everyone to benefit.

Alibaba, for instance, has built an extensive data infrastructure that supports its vast e-commerce operations, ensuring seamless data flow and integration across its platforms. Alibaba's data-driven approach has been a key factor in its ability to remain competitive and process over \$80 billion in sales during the established Singles' Day event.

+92%

companies that promote continuous learning are 92% more likely to innovate

02

Cultivate continuous learning to keep pace with data evolution

Just as oil refineries evolve with innovative technologies, organisations must evolve their data capabilities too. To succeed, you should cultivate a culture that embraces change and continuous learning with mentorship that fosters skills development and creates a sense of belonging and motivation. It is also important to upskill your workforce to improve data literacy and ensure everyone can contribute to the data-driven transformation.

Training and development are key for implementing data and AI strategies. You will need to identify key roles needed in your business, from data scientists and engineers to AI specialists if you do not already have them. You can control change management here too, by finding existing team members who may be interested in a role change, career development, or learning new skills. You may also need to deploy a strategy for attracting top talent in the data and AI field, whether you partner with educational institutions or professional development programs.

According to Deloitte's Leading in Learning report, companies that promote continuous learning are 92% more likely to innovate, underlining the importance of fostering a learning culture.

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Data and AI at Colibri Digital: Our approach to transformation

At Colibri Digital, we go beyond technology implementation. Our team collaborates with leaders to design the right data strategies, find hidden opportunities, understand the investment returns, mitigate the risk, and integrate data and AI in ways that drive tangible outcomes, from operational efficiencies to strategic growth.

Data may be the new oil, but without the right refinery, it is just a pool of potential. At Colibri, we're here to help you build that refinery, transforming your organisation into a data-driven powerhouse equipped to thrive in a data-first world.



Data Refinement Ecosystem Glossary

Data Wells: Initial sources of raw data collected from various channels, ready to be tapped for analysis.

Data Pipelines: Secure channels that transport raw data from sources to processing stages, enabling seamless data flow.

Data Reserves: Storage locations where raw or lightly processed data is held until ready for further analysis and refinement.

Data Refining Process: The transformation of raw data into enriched, structured insights through cleansing and processing techniques.

Data Distribution Network: A system that delivers refined insights across the organisation, ensuring teams have timely access to actionable data.

Data Byproducts: Additional insights or secondary findings that emerge as a result of data processing and analysis.

Data Spill: An unintentional release of sensitive data, typically due to security lapses, which can lead to data breaches.

About the Author

Marv Gillibrand

A seasoned venture builder and product leader with a deep focus on driving innovation and scaling digital businesses. Over the past two decades, he has led data transformative initiatives, product transformations, and startup scaling. From launching new businesses to spearheading global product strategies, Marv's expertise lies in finding the value from high-impact digital solutions and modernising ways of working for large-scale organisations. Most recently, he has been at the forefront of generative AI development.





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