Unlocking the power of Data and AI

Are you making the most of your data?

June 2023
Data and AI are foundational capabilities for the digital business

With the fall of data silos and an accelerated move to cloud platforms, data and AI have become a critical capability for fueling the future of businesses.

The move to cloud platforms facilitated a massively accelerated improvement in data availability and data access.

Although cloud is now a mainstream technology and data is seemingly widely available, only 12% of firms report that they’ve advanced their AI maturity enough to achieve superior growth and business transformation.

It’s time to take the next step on the Data and AI journey and extract the real value from the data available to organizations.

The typical obstacles that companies encounter when trying to mature their Data and AI capabilities center around three main issues:

1) Lack of trust in data accuracy and completeness
2) Lack of a clearly defined and industry-relevant data model that makes it easy to understand and use the data to innovate
3) Lack of a channel to integrate AI insights in a timely way into business flows and interactions

Most data architectures arose organically, with different areas of the business pushing various data sources to the cloud. Taking such a siloed approach has created multiple “versions” of the data with different levels of fidelity and accuracy. In addition, this siloed approach has limited the ability of businesses to create a well-defined and catalogued data model that is required for AI at speed. Finally, integrating AI into other applications that improve employee and customer interactions has lagged. These three issues have severely limited the scaling of AI, leaving many businesses unable to realize the full value of data.

Data and AI is now a foundational capability and critical for the survival and success of any business. For this capability to mature, data transparency and trust in the data is key—and this demands examining the flaws of current data platforms and remediating them at speed. When the data platform is trusted, secure, easy to use, and reliable, business focus can shift from merely solving data issues to using data to innovate and create value.


With the fall of data silos and an accelerated move to cloud platforms, data and AI have become a critical capability for fueling the future of businesses. The move to cloud platforms facilitated a massively accelerated improvement in data availability and data access.

Although cloud is now a mainstream technology and data is seemingly widely available, only 12% of firms report that they’ve advanced their AI maturity enough to achieve superior growth and business transformation.

It’s time to take the next step on the Data and AI journey and extract the real value from the data available to organizations.

The typical obstacles that companies encounter when trying to mature their Data and AI capabilities center around three main issues:

1) Lack of trust in data accuracy and completeness
2) Lack of a clearly defined and industry-relevant data model that makes it easy to understand and use the data to innovate
3) Lack of a channel to integrate AI insights in a timely way into business flows and interactions

Most data architectures arose organically, with different areas of the business pushing various data sources to the cloud. Taking such a siloed approach has created multiple “versions” of the data with different levels of fidelity and accuracy. In addition, this siloed approach has limited the ability of businesses to create a well-defined and catalogued data model that is required for AI at speed. Finally, integrating AI into other applications that improve employee and customer interactions has lagged. These three issues have severely limited the scaling of AI, leaving many businesses unable to realize the full value of data.

Data and AI is now a foundational capability and critical for the survival and success of any business. For this capability to mature, data transparency and trust in the data is key—and this demands examining the flaws of current data platforms and remediating them at speed. When the data platform is trusted, secure, easy to use, and reliable, business focus can shift from merely solving data issues to using data to innovate and create value.


Data and AI have become a critical driver of Total Enterprise Reinvention

Insights at speed
AI can improve the outcomes of multiple business processes. New ways to incorporate Data and AI into daily operations arise constantly, and it’s critical to be able to respond and embed insights at speed.

Good for the bottom line
Incorporating AI into operations reduces costs and increases revenue. Companies who invest in AI are 40% more likely to see share price increases.

Reduced risk
AI has helped companies become more compliant and has enhanced their audit and risk initiatives. Incorporating Data and AI into compliance processes has reduced risk and improved compliance across the enterprise.

Improved experiences
Embedding AI into engineering, operations, and business workflows can reinvint and improve customer interactions, product development, employee experience, and sustainability.

Source: 1 The Art of AI Maturity | Accenture
With the exponential growth of ChatGPT and Generative AI, businesses are more than ever looking into AI and eager to experiment with the new technology to understand how it can augment their operations. Accenture’s research suggests that up to 40% of business operations tasks will be impacted by Generative AI.

<table>
<thead>
<tr>
<th>WHAT CAN GENERATIVE AI HELP ACHIEVE?</th>
<th>HUMAN &amp; AI COLLABORATION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Everything + Everywhere</strong></td>
<td>63%</td>
</tr>
<tr>
<td>Generating text, images, sound, video is just the beginning.</td>
<td>LLMs will impact every category, ranging from 9% of a workday at the low end to 63% at the high end.</td>
</tr>
<tr>
<td><strong>Human + Machine</strong></td>
<td>98%</td>
</tr>
<tr>
<td>People have used data to inform and predict. Now we are using Generative AI to create data. It will expand human agency and creativity.</td>
<td>Of global executives agree AI foundation models will play an important role in their organizations’ strategies in the next 3 to 5 years.</td>
</tr>
<tr>
<td><strong>Automate + Create</strong></td>
<td>40%</td>
</tr>
<tr>
<td>Some applications of Generative AI will automate existing human tasks at unimaginable speed and scale. Other applications will create new things – insights, innovations and art -valued for their uniqueness and craft.</td>
<td>Of all working hours can be impacted by large language models (LLMs) like GPT-4.</td>
</tr>
</tbody>
</table>

Source: Accenture Technology Vision 2023: Generative AI to Usher in a Bold New Future for Business, Merging Physical and Digital Worlds | Accenture
Why the chasm between data aspiration and realization remains wide

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Data is bigger</td>
</tr>
<tr>
<td></td>
<td>The enterprise data landscape is expanding at a speed and scale that is hard to fathom.</td>
</tr>
<tr>
<td>2</td>
<td>Data is more complex</td>
</tr>
<tr>
<td></td>
<td>30% of corporations' data will be synthetic data.</td>
</tr>
<tr>
<td>3</td>
<td>Data remains siloed</td>
</tr>
<tr>
<td></td>
<td>These silos hamper their ability to capture, process, and extract value from today’s variety of data types and deliver insights with high agility.</td>
</tr>
<tr>
<td>4</td>
<td>Data velocity is faster</td>
</tr>
<tr>
<td></td>
<td>For AI and ML applications, faster access to operational data is required.</td>
</tr>
<tr>
<td>5</td>
<td>Data sharing is now critical</td>
</tr>
<tr>
<td></td>
<td>As companies increasingly seek operational and competitive advantage beyond the limits of their first-party data, there is a growing need to share data quickly, safely, and in multiple forms.</td>
</tr>
</tbody>
</table>
While most companies invest in Data and AI, only 12% have a mature AI capability that drives value for the business by using the wealth of available data. The remaining 88% of companies struggle on their journey to translate data into innovation and value for the business.
The differentiator is the ability to quickly use changing data

The leaders in extracting value from data have more mature data capabilities. They quickly add data to analytics models by using catalogued structured, unstructured, and external data. The winners in the Data and AI race are focused on getting their data ready for AI.

Source: The state of AI in 2022—and a half decade in review | McKinsey

1 Practices shown here are representative of those with the highest data success among AI high performers and other respondents. Not all practices are shown.

2 Respondents who said that at least 20 percent of their organizations’ EBIT in 2021 was attributable to their use of AI.
Storm clouds ahead

While most companies appreciate the value of data and plan to better use it, the journey to a mature Data and AI capability is not an easy one.

Reevaluate investments to date. While significant investments have been made in data platforms, very few platforms are mature enough to handle a spectrum of business needs, and companies often have multiple different solutions that operate in silos. Typical challenges such as siloed data, insufficient error handling, delayed or slow data ingestion, and limited data validation need to be resolved. Data platforms need to be consolidated to improve the reliability of data and reduce the cost to operate.

Clean up and catalog available data to get it ready for AI. Most existing data platforms have abundant data, but the quality and documentation of the data is typically insufficient to support AI and generate insights at speed and scale. Significant effort is required to clean up and catalog the existing data and set up automated processes to label and catalog future data sources so data can be added rapidly to new AI models.
Why Oracle when it comes to Data and AI?

Use all types of data
Using structured and unstructured data for AI can mean more accurate results. Oracle is the only end-to-end data platform for integration, transaction processing, data warehousing, data lake, and more, backed by unlimited deployment options.

Apply AI at scale
Oracle offers scalable data technologies for data labeling and integration as well as a data science platform where raw data can be prepared for specific AI delivery.

Deliver AI in workflows
At times, the last step of integrating AI into business processes can be the most challenging part. But with AI and ML services on the same cloud along with Oracle business applications, it becomes easier to augment existing application workflows with AI—bringing AI closer to day-to-day activities for real business insights.

Harness AI with Accenture and Oracle
Success of AI relies on (a) the ability to use all types of data to solve broad spectrum of business challenges, (b) easy-to-use data technologies for labeling, data quality check, and synthetic data generation, and (c) delivering AI insights in business workflows for maximum usage with minimum friction.
Oracle uniquely offers a unified strategy and set of tools for making the most of data, advanced analytics, and AI.

Nearly half the world’s data runs on Oracle databases. As more organizations move that data—and the workloads that rely on it—to the cloud, it’s vital to ensure that the data is used, managed, and secured in the best way. That’s where Oracle Data Platform provides an all-important advantage.

Oracle Data Platform is a comprehensive suite of tools, services, and applications that help businesses manage their data effectively throughout its life cycle. It covers the whole data stack from Oracle, including Oracle transactional databases, data lake, data warehouse, AI/ML services, and more, while leveraging Oracle Cloud Infrastructure (OCI) and Oracle Cloud Applications (Fusion ERP, CRM and HCM) to provide a comprehensive solution for data management.

When you add Oracle Autonomous Data Warehouse to the mix, it provides an added edge: improving performance even more while streamlining database activity and increasing database analyst (DBA) efficiency. In addition, Oracle offers competitive Object Storage for collecting and analyzing all types of data including text, images, audio, and video recording.

Oracle Data Platform meets you where you are. Use as many or as few of the services as you need for your structured and unstructured data needs and integrate those services with your own trusted tools.

Sources:
9 Indicators Of The State Of Artificial Intelligence (AI) | Forbes
The art of AI maturity | Accenture
Apply AI at scale

With the fall of data silos and an accelerated move to cloud platforms, Data and AI have become a critical capability for fueling the future of businesses.

On applying AI at scale, Oracle offers OCI Data Labeling and OCI Data Science to enrich business data with annotations, generate synthetic data, develop scalable AI models, and automate data and ML pipelines. Large-scale customers use OCI Data Labeling monthly to annotate and enrich thousands of data objects to build custom AI models using OCI Vision, Language, and Document Understanding. OCI Data Science serves over 200 million inference calls for over 2,000 customers using over 1,000 ML models.

More than 10,000 customers run their businesses on Oracle’s SaaS applications, so Oracle enables delivering AI insights in conjunction with business processes for ease of use by decision makers. For example, supply chain leaders can consume AI insights such as demand forecasts, predicted ETA, and outliers in the SCM planning, transportation, and inventory workflows for seamless decisions. Furthermore, with its deep business knowledge in ERP, SCM, CX, and HCM segments, Oracle helps deliver AI insights into the diverse SaaS landscape through powerful data connector technologies including Oracle Integration Cloud, Data Integration, and Oracle GoldenGate.

The combination of these services ensures that AI can be delivered at scale in a more streamlined manner.

Sources:
9 Indicators Of The State Of Artificial Intelligence (AI) | Forbes
The art of AI maturity | Accenture
Deliver AI in workflows

Data science services and business applications need to work together seamlessly for real business impact. In the absence of such integrated delivery, AI will be narrow and available only to few, limiting its value.

Oracle, with its leading business applications portfolio and more than 40 years of experience in helping its customers to run a broad spectrum of businesses, delivers AI in business workflows for maximum impact with minimum friction. Furthermore, Oracle pioneers in bringing the best-of-breed AI with partnerships including NVIDIA and Anaconda.

Companies seek more forecasting capabilities to gain an edge over the competition. With AI, businesses can generate forecasts by using historical sales, promotions, product attributes, holidays, and other extraneous factors to achieve improved accuracy and reliability. Oracle delivers AI-based finance and sales forecasts to Enterprise Performance Management (EPM) customers.

Automating back-office tasks with AI improves business efficiency and customer experiences. Oracle automates general ledger account management in EPM Account Reconciliation Cloud with AI to automatically assign new account combinations and help match transactions with more than 99% accuracy.

AI can be powerful in consuming and organizing all forms of business data. Document Understanding AI automates invoices and other documents uploaded to Oracle NetSuite to help automate business transactions.

Businesses run on executive dashboards because they help organizations monitor and proactively address disruptions. AI deliveries such as anomaly detection, forecasting, sentiment analysis, and image detection in Oracle Analytics Cloud help business users consume AI insights where they make their business-critical decisions.

Data quality is fundamental to AI’s success, and Oracle’s SaaS applications collect a broad spectrum of business data. Anomaly Detection, classification, and outlier detection AI help in organizing data and identifying data quality issues to help route them to the right personnel for remediation.

OCI Data Science helps several healthcare ISVs, including Ronin, which empowers clinicians with an oncology solution by delivering health record summation, comparative insights, and decision support to treat patients individually instead of by a set of averages.
Data and AI have become a critical driver of Total Enterprise Reinvention

**Data is a strategic asset**
Enterprises must treat data as a form of capital and invest in its acquisition, growth, refinement, safeguarding, and deployment.

**Extricate data from functional silos**
Data must be analyzed together in one place to unlock its value. This can be done through cloud computing or a distributed computing strategy like data mesh.

**Foundational models can create exponential impact**
Foundational models can be fine-tuned to solve specific industry problems and embed data intelligence into business flows and across the enterprise to enable the Total Enterprise Reinvention.
Accenture offers a full spectrum of services to help companies unlock the value of dormant data.

We work with you to help your business capture the full value of data, using our experience of over 100 Data and AI projects in nearly every industry with an unparalleled ecosystem of alliance partners.

Accenture can help put cloud to work for your business with solutions from one of our leading providers, Oracle.
About Accenture

Accenture is a leading global professional services company that helps the world’s leading businesses, governments and other organizations build their digital core, optimize their operations, accelerate revenue growth and enhance citizen services—creating tangible value at speed and scale. We are a talent and innovation led company with 738,000 people serving clients in more than 120 countries. Technology is at the core of change today, and we are one of the world’s leaders in helping drive that change, with strong ecosystem relationships. We combine our strength in technology with unmatched industry experience, functional expertise and global delivery capability. We are uniquely able to deliver tangible outcomes because of our broad range of services, solutions and assets across Strategy & Consulting, Technology, Operations, Industry X and Accenture Song. These capabilities, together with our culture of shared success and commitment to creating 360° value, enable us to help our clients succeed and build trusted, lasting relationships. We measure our success by the 360° value we create for our clients, each other, our shareholders, partners and communities. Visit us at www.accenture.com.

About Oracle

Oracle is a global provider of enterprise cloud computing, empowering businesses on their journey of digital transformation. Oracle Cloud provides leading-edge capabilities in software as a service, platform as a service, infrastructure as a service, and data as a service. Oracle helps customers develop strategic roadmaps and advance their journey to the cloud from any point: new cloud deployments, legacy environments, and hybrid implementations. Oracle’s complete, integrated approach makes it easy for companies to get started in the cloud and to expand as business grows. 430,000 customers in 175 countries use Oracle technologies to seize opportunities and solve real challenges.

DISCLAIMER: This document is intended for general informational purposes only and does not take into account the reader’s specific circumstances, and may not reflect the most current developments. Accenture disclaims, to the fullest extent permitted by applicable law, any and all liability for the accuracy and completeness of the information in this presentation and for any acts or omissions made based on such information.

Copyright © 2023 Accenture. All rights reserved.