AI-ENABLED APPS
ACCELERATE YOUR DATA ANALYTICS STRATEGY

Leverage the power of AI to amplify your data and level up organizational intelligence.

Insight®

The power of AI-enabled apps

While AI has become an imperative for businesses, it can be hard to sort the hype from the practical use cases that allow organizations to take advantage of this technology to improve organizational intelligence. AI-enabled apps leverage AI's power to enhance an application's function and impact while promoting a positive user experience. Rather than using rule-based models, AI-enabled apps allow you to strategically interact with the knowledge contained in the Large Language Model (LLM) as part of the app functionality, without requiring a detailed understanding of data science or advanced neural networks. From improving patient care to accelerating manufacturing production, AI-enabled apps are the latest innovation to serving customers better, improving operations and capturing competitive advantage.

Unpacking organizational intelligence

Organizational intelligence describes the process of leveraging data to optimize resources for the benefit of the business. It helps organizations make sense of their data and amplify its value by leveraging knowledge gained from data assets to support and drive business decision-making. This practice is meant to act instantly on data that is generated and analyzed in real time.

3-step process: Organizational intelligence

1

Identify, capture and govern data assets and use AI/ML to…

2

Turn data into corporate knowledge for enhancing apps and business processes to…

3

Enable corporate intelligence, bring business value and capture ROI.

For this process to be successful, certain measures need to be in place. For example, data assets should be well governed and curated to ensure that high-quality corporate knowledge is developed. Additionally, the corporate knowledge should be actionable — this data should be able to be realistically leveraged for the benefit of the business. Lastly, the process should be continuous and allow the organization to learn, adapt and mature its use of data assets.

What impact does AI have on apps?

AI in apps isn't a new concept, but we are thinking more intelligently about practical applications that can result in real ROI. Here are some of the ways AI-enabled apps can drive business goals:

Improved automation and efficiency

Faster, more accurate decision-making

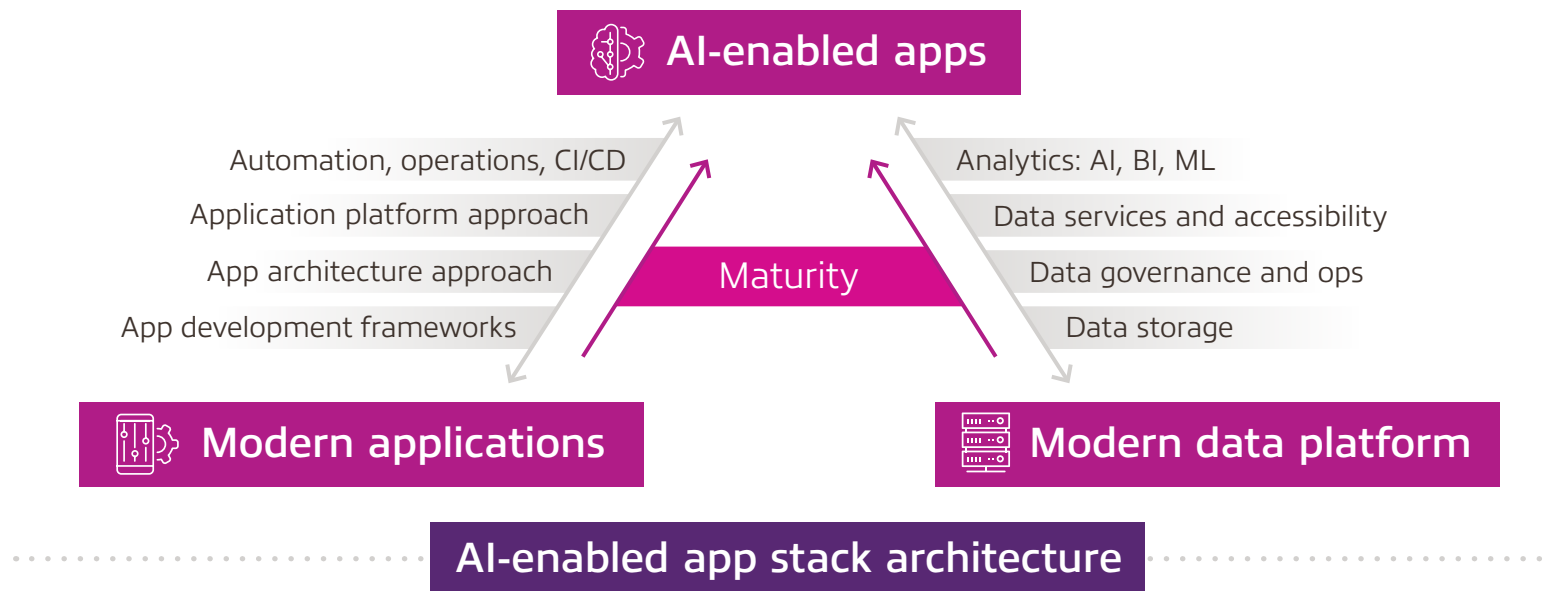**Enhanced customer experiences**

New product and/or service development opportunities

Competitive advantage

Illustrating the structure of AI-enabled apps

For successful implementation and business impact, AI-enabled apps require the orchestration of your modern data estate and your modern app landscape. To realize the benefit of organizational intelligence, AI-enabled apps require a level of maturity in both the data and app stack (as depicted below) to drive repeatable, scalable impact. Every organization will have a unique journey depending on its current data, app and architecture environments — and this guide can help you identify any gaps your organization may have. The specifics of each component will be explored in more detail in the coming pages.

AI-enabled apps

Automation, operations, CI/CD

Application platform approach

App architecture approach

App development frameworks

Maturity

Analytics: AI, BI, ML

Data services and accessibility

Data governance and ops

Data storage

Modern applications

Modern data platform

AI-enabled app stack architecture

3

Enabling AI apps with modern data and app estates

Depending on existing architecture and app or data landscapes, the process of AI-enabled apps can look very different from organization to organization. However, these apps have a multitude of business applications that can help you reach broader enterprise goals and move the needle. Understanding what's needed for AI-enabled apps can help accelerate your ROI during this process.

AI-enabled app maturity models

How mature is your app estate?

Development frameworks
Determine the right application development framework depending on your existing landscape and AI-enabled app use case.
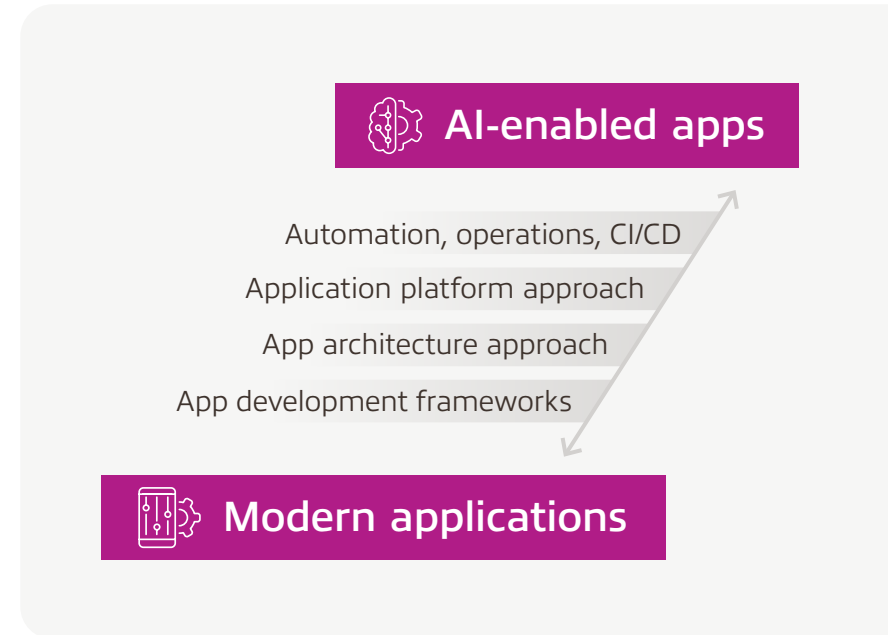
App architecture approach
Set up the app architecture appropriately to allow the solution to scale over time and be responsive to changes in your AI landscape of app needs.
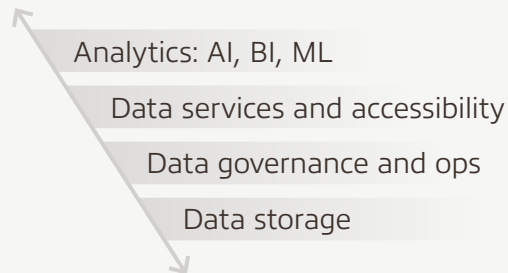
Platform architecture
Ensure the right platform is chosen for both internal and external users and that it supports the use of AI.

Ops and CI/CD
Management of the app solutions should be practical and simplified, with the integration of the necessary tools. Additionally, the solution should be agile and continue to improve over time or respond to customer needs.

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How mature is your data estate?

Data storage
Ensure the storage modality used is appropriate for the use case and future of the solution.

Governance and ops
All security, compliance and privacy standards need to be in place and relevant to AI and the type of data being processed. Additionally, automation and other process orientation should be employed to improve the quality and speed of data management.

Services and access
The right access, service and platform should be brought together for necessary functions as relevant to the use case.

BI, AI, ML
Introduce the power of these technologies to the high-quality data to create business value.

Promoting the maturity model

Some of the finer details to ensure successful implementation and management of the maturity models include:

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High-quality data

The data must be usable for decision-making and the creation of business value, which requires a certain level of validation.

Containers

Compartmentalization and containerization helps ensure functionality, workload management and isolation for the appropriate aspects of your solution.

Edge

Depending on the use case, local collection and compute may be critical to allow for real-time decision-making from AI-enabled apps.

Automation

Streamlining processes to be faster while not requiring human intervention helps make the solution more viable in the long term.
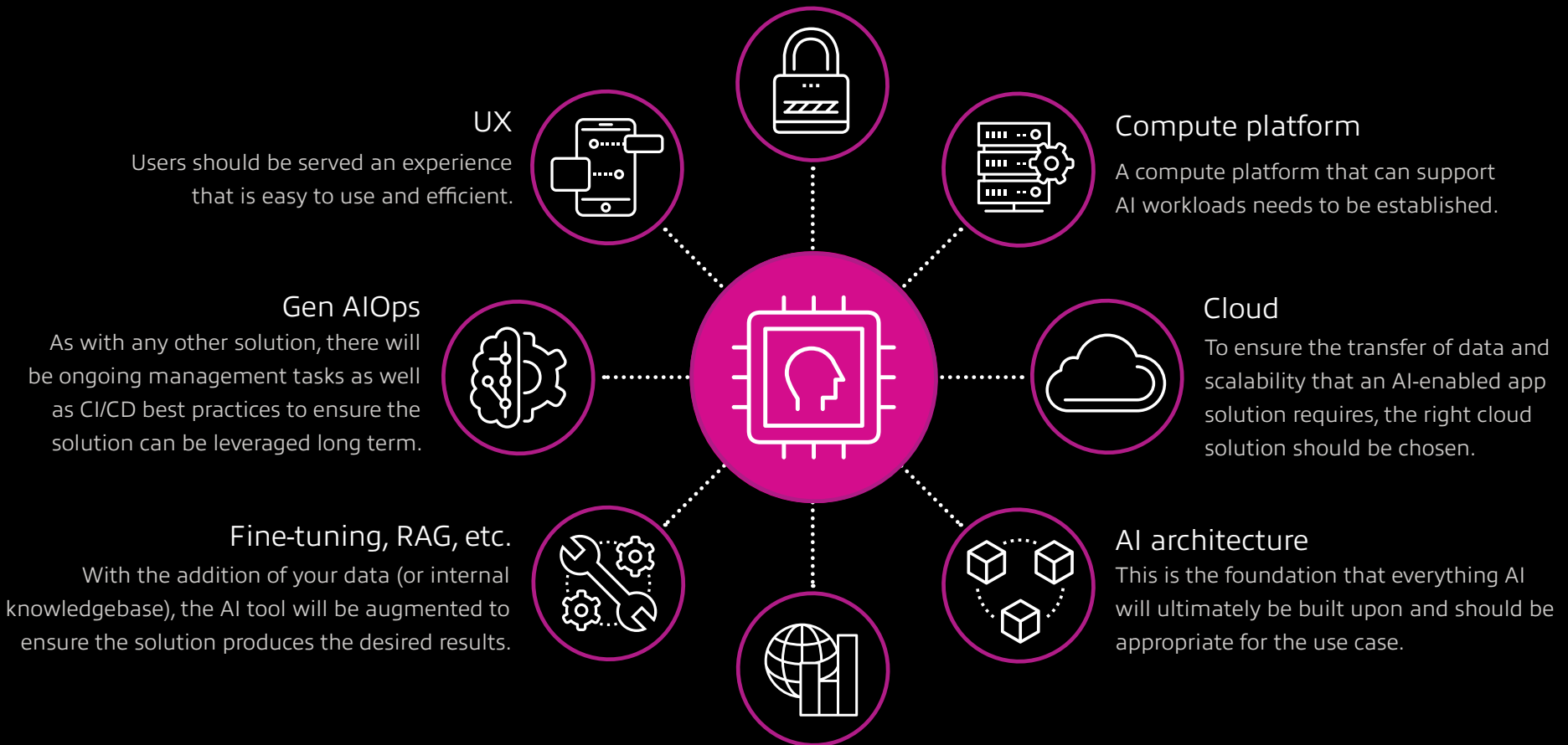
Approaches and frameworks

AI stack architecture

Outside of your modern data estate and app landscape, your solution will require architecture that can support AI. While your organization may have many of these elements already in play, let's break down the necessary components and their importance.

Security
The entire solution needs to be wrapped in the appropriate security and governance controls as determined by law and internal policy. Also importantly, the identification of your information assets not only drives your AI capabilities, but also aligns with your security risk assessment strategy.

UX
Users should be served an experience that is easy to use and efficient.

Compute platform
A compute platform that can support AI workloads needs to be established.

Gen AIOps
As with any other solution, there will be ongoing management tasks as well as CI/CD best practices to ensure the solution can be leveraged long term.

Cloud
To ensure the transfer of data and scalability that an AI-enabled app solution requires, the right cloud solution should be chosen.

Fine-tuning, RAG, etc.
With the addition of your data (or internal knowledgebase), the AI tool will be augmented to ensure the solution produces the desired results.

AI architecture
This is the foundation that everything AI will ultimately be built upon and should be appropriate for the use case.

AI platform, frameworks, algorithms and foundation models
This will entirely depend on the use case of the AI-enabled app. For example, a medical organization would require a specific algorithm and foundation model for diagnostic intelligence.

Operationalization of AI

Similar to <u>generative AI</u>, the AI in AI-enabled apps goes through a lifecycle. Understanding this lifecycle will help you operationalize your AI solution:

Business challenge:

What are you using AI to solve?

Selection:

What algorithm and/or foundational model fits the use case?

Augmentation, optimization and evaluation:

How will your internal knowledgebase improve the AI solution, and does the solution help solve the business challenge?

<u>Continuous improvement</u>:

How can the solution be optimized to better solve the business challenge?
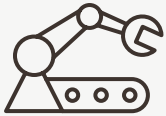
Monitoring and management:

How is the solution going to be upheld and used long term?

What's possible? Examples across industries

Healthcare

A medical organization could develop a predictive model for a severe disease. That organization could create an AI-enabled app that allows doctors to input patient information and receive preventative recommendations related to the disease.

Manufacturing

A technology component manufacturer could develop a powerful recommendation engine. In an app, a sales representative could provide details of a customer's current technology and needs, and receive a custom list of suggested compatible components.

Financial services

An investment firm could develop a predictive retirement or savings model. Customers could log in to their accounts and see a variety of retirement scenarios based on their current account balances.

Real-world client story: Leveling up operational efficiency across the enterprise

A utilities, retail, and transportation and holdings company was looking to support internal operations through a series of generative AI web apps. The client leveraged Insight Lens™ for Gen AI to develop generative AI solutions for legal, security, and tax and audit use cases.

Outcomes:

- Saved 120+ hours/week
- Enhanced operational efficiency in multiple departments
- Delivered stellar user experience
- Enabled secure generative AI use

Real-world client story: Construction firm captures competitive advantage

This construction firm sought to overhaul its current data estate and analytics capabilities to improve internal operations and carve out a competitive advantage. With the help of Insight, the client developed an app for its customers where they could build custom reports using the client's newly modernized data and analytics.

Outcomes:

- Completed in rapid 13-week timeline
- Gained a competitive advantage in market
- Carved out new avenue for revenue generation

Getting started

Key considerations

Are you ready to get started? Here are some quick steps for getting started with AI-enabled apps at your organization:

1. Define organizational intelligence for your organization.

2. Work backward from your desired end state.

3. Understand how AI-enabled apps could support that desired end state.

4. Determine if your existing data estate supports these objectives and what gaps may need to be filled.

Why Insight for AI-enabled apps

Insight understands that every AI-enabled app journey is unique to the client. Most importantly, we can support the full scope of your journey from modernizing your app landscape and evaluating your modern data estate to architecting an AI solution. Our deep partnerships with leading technology and service providers give you access to curated solutions from our expert teammates.

insight.com

Accelerate your data analytics strategy.

Discover how AI-enabled apps can transform your organizational intelligence.

See how we can help ⟶

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