VISIUM

[A PRACTICAL ROADMAP]

The C-level guide to kickstart your AI journey

Content overview

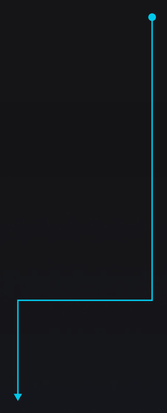
Information for all board members { 3 }

AI glossary { 5 }

Implications for the CHRO function { 9 }

Potential AI use cases { 11 }

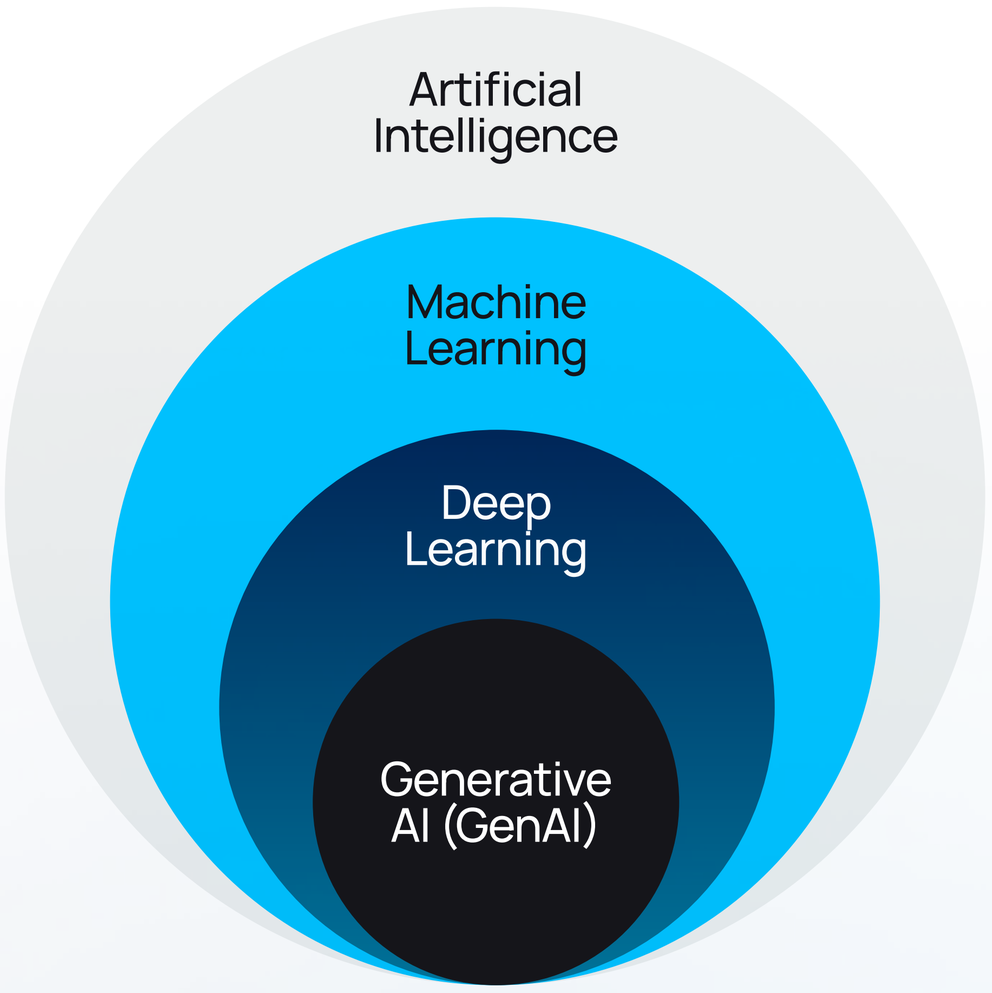
Case studies from Visium { 12 }



Many companies feel overwhelmed when beginning their AI journey, and as a leader, you may feel the same amid a sea of information and recommendations.

This guide will help you cut through the noise and navigate your AI journey one step at a time.

AI glossary



Artificial Intelligence (AI)

Refers to a field of computer science that creates machines capable of human-like tasks, such as perception, reasoning, planning, learning, and decision-making.

Example: AI optimizes scheduling for tasks like employee shifts or transportation.

Machine Learning (ML)

A branch of AI where machines learn to solve problems by generalizing patterns from provided examples.

Example: ML detects patterns and anomalies to identify fraud.

Deep Learning

A specialized area within machine learning using brain-like neural networks to process complex data such as text or images.

Example: Neural networks process camera sensory data for autonomous driving.

Generative AI (GenAI)

A category of deep learning algorithms focused on creating realistic content from data such as text, images, or audio.

Example: Popular examples are ChatGPT (for text) and DALL-E (for images).

AI Glossary

Understand AI - from data to decisions

Unlike programming that operates on deterministic rules and predefined instructions, AI, particularly Machine Learning (ML), uses a probabilistic approach. Instead of following rigid rules, AI systems learn patterns from data, make predictions, and adapt over time based on feedback and observed outcomes. This adaptive, data-driven method allows AI to handle uncertainty and continuously improve, making it fundamentally different from the static, rule-bound nature of traditional computing.

AI's data dependency - balancing data and expert knowledge

The data needs of AI projects vary based on the specific problem and algorithm used. While having large amounts of labeled data can reduce the need for some types of expertise, expert knowledge remains key in building relevant and usable AI solutions. Experts provide the domain-specific insights needed to structure data, define meaningful objectives, and interpret results accurately. When data is limited, expert involvement becomes even more critical to ensure that AI models are not just technically sound but also tailored to the needs of end users.

Harnessing AI - key metrics for model performance and business value

The true measure of an AI model's success is measured by its technical performance but also by the business value it creates. To effectively assess AI models, it's important to distinguish between model-specific metrics and those that reflect broader business impact. For example, in a classification task like defect detection in quality control, model-specific metrics such as false positives (detecting a defect when none exists) and false negatives (missing an actual defect) are crucial for understanding model performance. However, the ultimate goal is to connect these technical metrics with business-relevant outcomes like operational efficiency and key financial outcomes like cost reduction, revenue growth, and improved profitability.

AI Glossary

Humans AI - augmentation, not replacement

While AI can mimic specific human tasks, it is still just one tool in the broader toolbox for creating value. AI can assist in thinking, planning, and decision-making processes, but it relies on human guidance to define, refine, and apply these capabilities effectively. This distinction is crucial for leaders to understand; AI accelerates and amplifies what humans can achieve but does not replace the nuanced judgment, creativity, and contextual understanding that only humans bring.

Scaling AI - the need for full pipeline support

Unlike traditional software, AI cannot be separated from its data, making it hard to break the system into smaller modules that can be easily managed or updated separately. This challenge is amplified by the lack of specialized tools for managing AI workflows, often turning simple AI pilots into unexpectedly complex scaling efforts, sometimes costing 10-20 times more than the pilot phase. Scaling AI requires continuous management of the entire so-called ML pipeline — a process that oversees every step from data preparation and model training to deployment and user interaction. Mastering AI at scale remains one of the biggest hurdles in business today.

Ownership of AI - make vs. buy

The decision to develop AI in-house or purchase an external solution isn't straightforward due to factors like strategic value, data ownership, customization, performance of external solutions, and total cost of ownership. In-house development offers control and tailored solutions but requires substantial investment in expertise, infrastructure, and continuous maintenance. External solutions provide quicker access to advanced capabilities and ongoing vendor support but may involve compromises on data privacy, integration complexities, and adaptability to specific needs. These implications, especially with their strong financial component, must be carefully considered to align with your business strategy.

Navigating AI ethics - mitigation bias

Ethical AI goes beyond compliance; it's about building systems that are fair, transparent, and aligned with your company's values. Addressing bias is crucial, as AI decisions are deeply tied to the quality and biases of its training data. Principles like 'equal treatment' require human intervention to define fairness, making us rethink whether treating groups 'on average' is sufficient. This underscores the critical role of human judgment as a safeguard, but also as an active guide in ensuring AI decisions are contextually aware and aligned with the broader ethical goals of the organization.

The AI opportunity

Most companies are still experimenting with AI, facing challenges in strategy and execution.

However, its impact is clear. AI can boost EBITDA by 20-30%, according to McKinsey and Accenture.

AI isn't just a technical upgrade; it transforms businesses at every level. Tools like LLM chatbots (e.g., ChatGPT) are changing how we work and learn. For companies, AI drives efficiency, sparks innovation, and reshapes operations, enhancing competitiveness. At the industry level, AI optimizes processes from R&D to distribution, redefining whole value.

To keep in mind

AI projects differ from traditional IT initiatives due to their experimental nature. The outcomes are not always guaranteed, and success often hinges on iterative experimentation and adaptation. Effective AI adoption requires significant data science expertise, strategic planning, and a shift in how leaders engage with data science.

Implications for the CHRO function

Implications for the CHRO function

Core responsibilities

01 Talent, skills, and reskilling

The AI transformation is redefining job roles and increasing demand for technical skills like data science and machine learning. The CHRO needs to specify how such necessary skills can be developed internally or acquired externally, and how talents can be retained successfully. For internal roles impacted by AI, the CHRO, in collaboration with business managers, must define clear reskilling paths, implement targeted training programs, and actively communicate these professional growth opportunities. Conversely, attracting external AI talent demands specific incentives and a tailored work environment. These measures start with access to data, providing advanced tools, challenging projects, and flexible work arrangements to appeal to this scarce talent pool. Success in both hiring and retention heavily depends on these factors.

02 Culture and change management

All board members will be challenged to both imagine and manage the transition towards an AI-driven business landscape, but HR is most directly affected by employee concerns. Navigating the cultural shift requires active communication from the CHRO about the impact of AI, offering clear, relevant, and easy-to-understand information as a first step. Beyond formal communication and training programs, informal opportunities for interacting with AI need to be created. By fostering a culture of engagement and understanding, the CHRO can reduce resistance and guide the company through this transformation.

03 HR processes

One of the most frustrating aspects of using AI in HR processes is the lingering bias around gender, skin color, and more. Yet, AI offers the potential to make HR operations more efficient, systematic, scalable, and transparent. The challenge is balancing these benefits with the risks. But, AI's systematic measurement of recommendations helps reveal biases, allowing direct corrections through targeted adjustments. HR must stay ahead of these technologies to advise on their use, so fairness and performance can be improved. And it is the CHRO's role to lead and champion ethical AI practices in the organization.

Implications for the CHRO function

Example of AI in action: Use cases

Use cases	Description
Strategic skills mapping	Providing the CHRO with key insights, AI analyzes internal skills data to identify gaps and align capabilities with business needs. By leveraging data from performance reviews and training records, it informs recruitment strategies and pinpoints areas for targeted upskilling.
Knowledge management	AI-driven knowledge management systems centralize company documents, training materials, and best practices in one digital hub, making information accessible. These systems can also recommend relevant learning resources, supporting continuous learning among employees.
Employee assistance chatbots	AI-powered chatbots provide 24/7 HR support, answering employee questions on policies, benefits, and more. They streamline processes like onboarding and leave requests and reduce HR workload, while speeding up response times.

Dynamic AI knowledge base

The challenge

Customer support agents lacked a single source of truth, making it difficult to find accurate information quickly. This caused inefficiencies, lowered customer satisfaction, and drove up operational costs. This challenge highlighted the need for a unified, intelligent knowledge management system.

The solution

Visium developed a cutting-edge NLP algorithm for semantic text matching to power a dynamic knowledge base, accessible through an easy-to-use web application. This tailored solution lets support and sales teams ask questions and get precise answers instantly. It also centralizes internal company knowledge, training materials, and best practices, making it adaptable and valuable for internal use.

The outcome

- Secured a 90% accuracy rate in delivering relevant answers.
- Enhanced customer satisfaction by significantly reducing response times.
- Enabled productivity gains by saving 30 minutes per query, totaling over 10,000 hours saved annually.

AI-powered workforce planning

The challenge

Our client in the Logistics and Postal Services industry faced challenges with fluctuating work volumes due to volatile market conditions, unpredictable demand, and promotions from suppliers or competitors. Managing complex workforce requirements made it difficult to balance productivity, control costs, and maintain employee satisfaction.

The solution

We developed an AI tool with a user-friendly interface that predicts demand and required manpower weeks and months in advance. The tool analyzes internal data, like historical sales, operational metrics, and supplier information, along with external factors such as calendar events, weather conditions, and special events like Black Friday.

The outcome

- Improved forecasting accuracy by over 15%, cutting workforce costs by 2.4% and saving CHF 640,000.
- Advanced demand predictions gave our client a competitive edge in both national and international markets.
- Improved long-term planning of workforce needs which is used to inform the recruitment roadmap.

About Visium

Visium is a leading Swiss AI & Data consultancy helping enterprises turn their most strategic AI initiatives into measurable business outcomes. Since 2018, we've delivered over 250 solutions for global leaders like Roche, Novartis, Nestlé, and dsm-Firmenich; helping them drive efficiency, unlock new revenue streams, and scale solutions that deliver long-term value.

Built on a foundation of ethical innovation, our mission is to make AI work for business, people, and long-term impact.

70+

Engineers and consultants throughout Europe

50+

Happy enterprise clients

250+

AI & data engagements

Pan-European presence

Recognized leaders

2nd fastest growing company in Europe by Financial Times

Our partners

Academia

Technology

Get in touch

contact@visium.com

www.visium.com

VISIUM

AI initiatives delivering real impact at scale

www.visium.com