

Impact of Technology on Real Estate Returns

Iberian REIT & Listed Conference

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Tuesday, 6 February 2024



Agenda



The Generative
AI opportunity



Delivering your
AI Ambition



How to set
yourself up for
success

Agenda



The Generative
AI opportunity



Delivering your
AI Ambition



How to set
yourself up for
success

BBC



100M
users in
7 years



The fastest
growing
consumer
product of
all time, in
1994

100M
users in
2 months



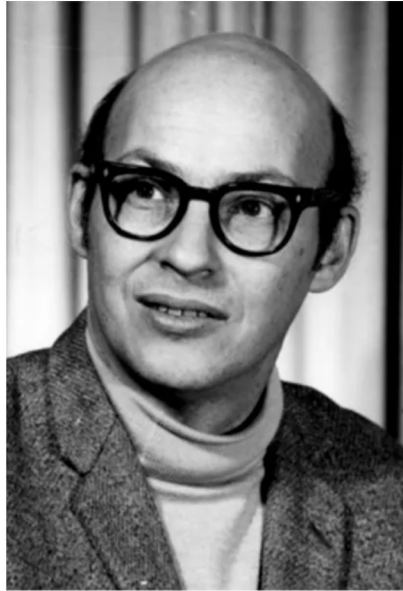
The fastest
growing
consumer
product of
all time,
today

1994 is
happening
again

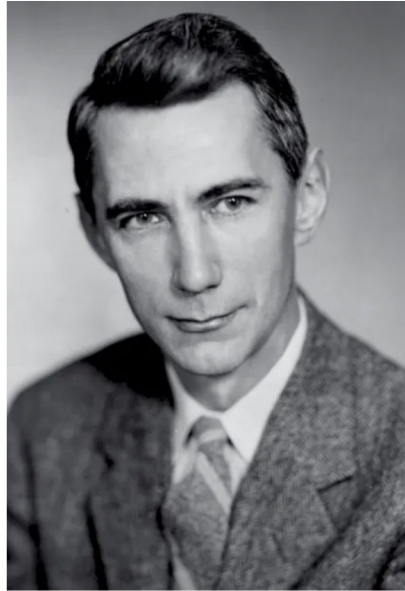




John McCarthy



Marvin Minsky



Claude Shannon



Nathaniel Rochester



1956 Summer
of Artificial
Intelligence
Conference

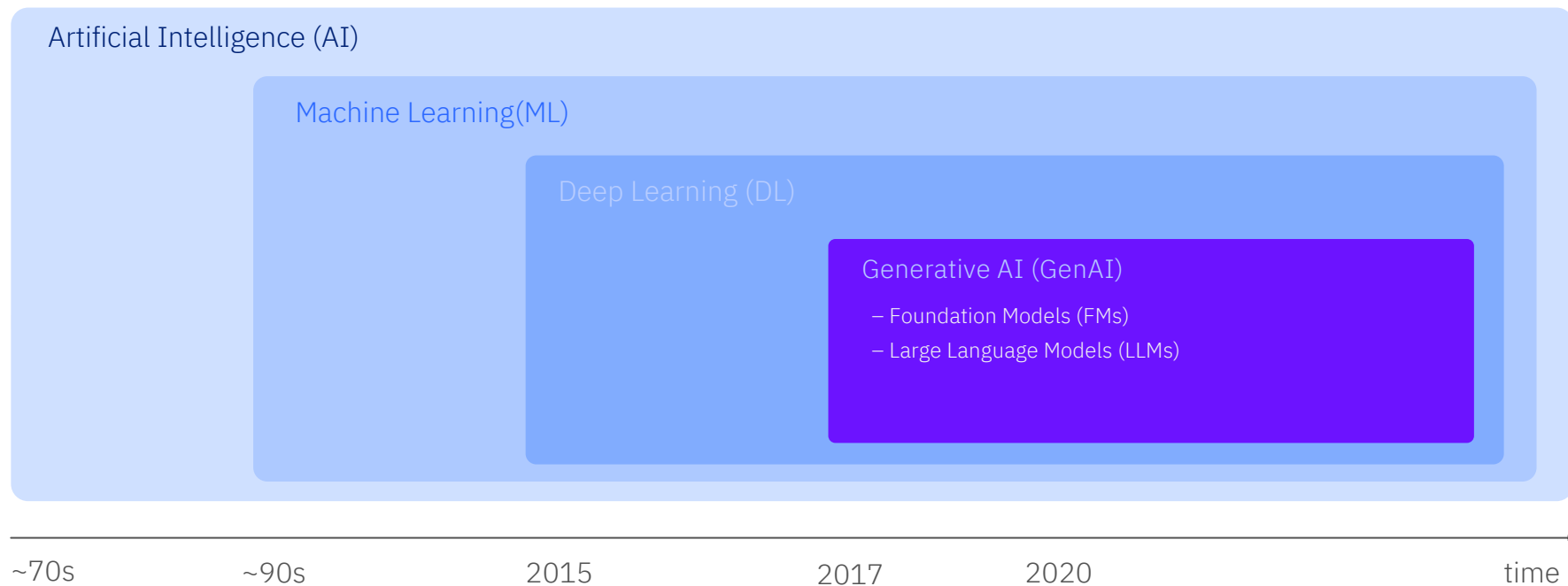


Once upon a time,



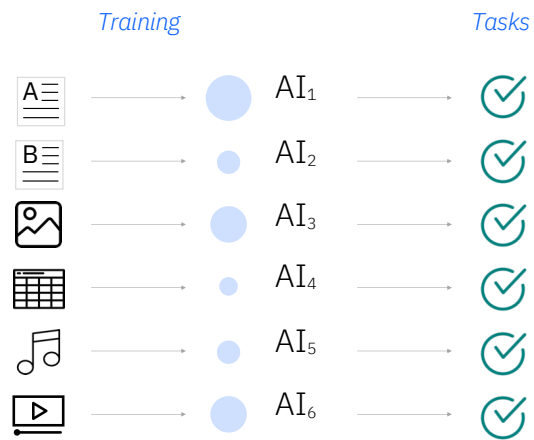
Generative AI in the Evolution of AI

Expert systems ranked among the first successful AI systems in the 70s & 80s.^[C] Machine Learning (ML) emerged as a special field of AI in the 90s; Deep Learning (DL) as a subfield of ML around 2015 and Foundation Models started to emerge around 2020 and represent a special kind of DL model.^[A]



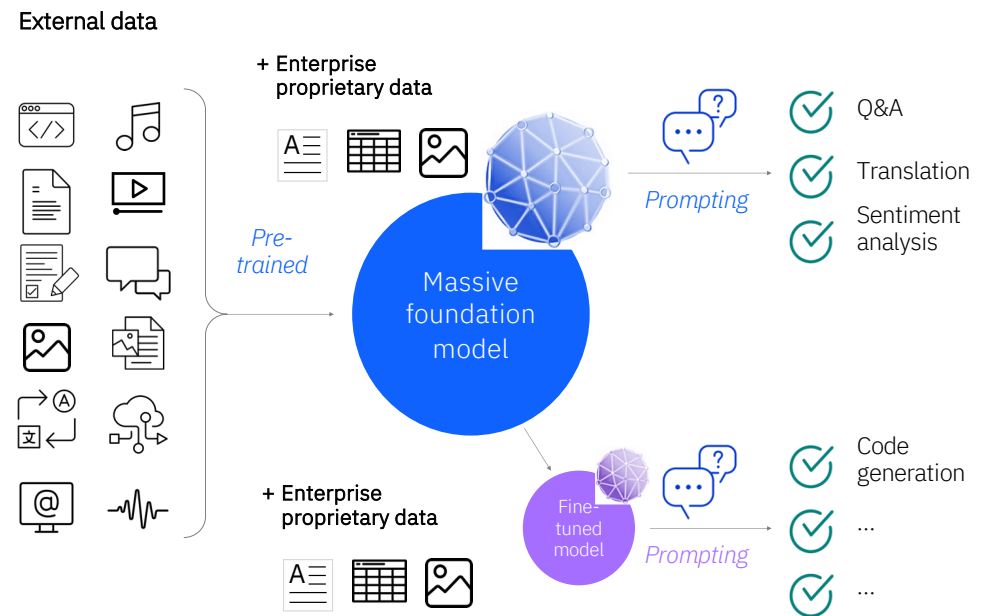
Foundation models establish a new paradigm for AI capabilities

Traditional AI models



- Individual siloed models
- Require task specific training
- Lots of human supervised training

Foundation models



- Massive multi-tasking model
- Adaptable with minimized training
- Pre-trained unsupervised learning

What Gen AI can do...



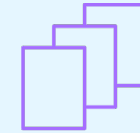
Summarization

summarizing documents, videos, call center interactions, analyst articles, emails, news, etc.



Content Generation

generate verbal or visual content for marketing, communications, user stories, translations, etc.



Classification

LLMs can classify content (e.g. negative/ neutral/ positive review; classify customer calling reason)



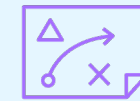
Semantic Search

smart search to find semantically related keywords in text, audio, image and videos files



Code Generation

providing a developers with a co-pilot & the automatic creation of technical documentation



Extraction

LLMs can extract keywords from text (e.g. filter out all customer names from conversation)

Foundation models
are bringing an
inflection point in AI...

...but how enterprises
adopt and execute will
define whether they
unlock value at scale

Generative AI has immense potential to accelerate digital transformation

Scale of impact points to swift adoption over next 3 years

\$3-4T forecasted economic benefits to the global economy across industries

80% of enterprises will have incorporated Gen AI into their business processes

80% productivity gains across classes of knowledge workers and creative tasks

70% of software vendors will integrate Gen AI in their enterprise applications

By 2030, global GDP will have grown by 14%, \$15.7T, due to Gen AI

Sources: Gartner



Gen AI could
generate \$110b to
\$180b or more in
value for the real
estate industry

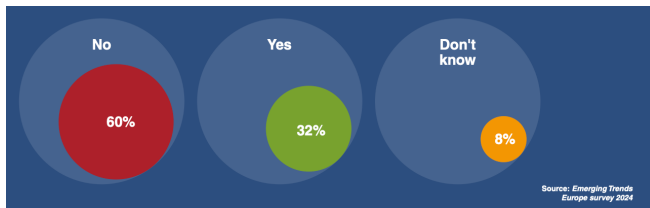
When working with AI, Real Estate companies gain more than **10% in net operating income** through:

- more efficient operating models,
- stronger customer experience,
- tenant retention,
- new revenue streams, and
- smarter asset selection.

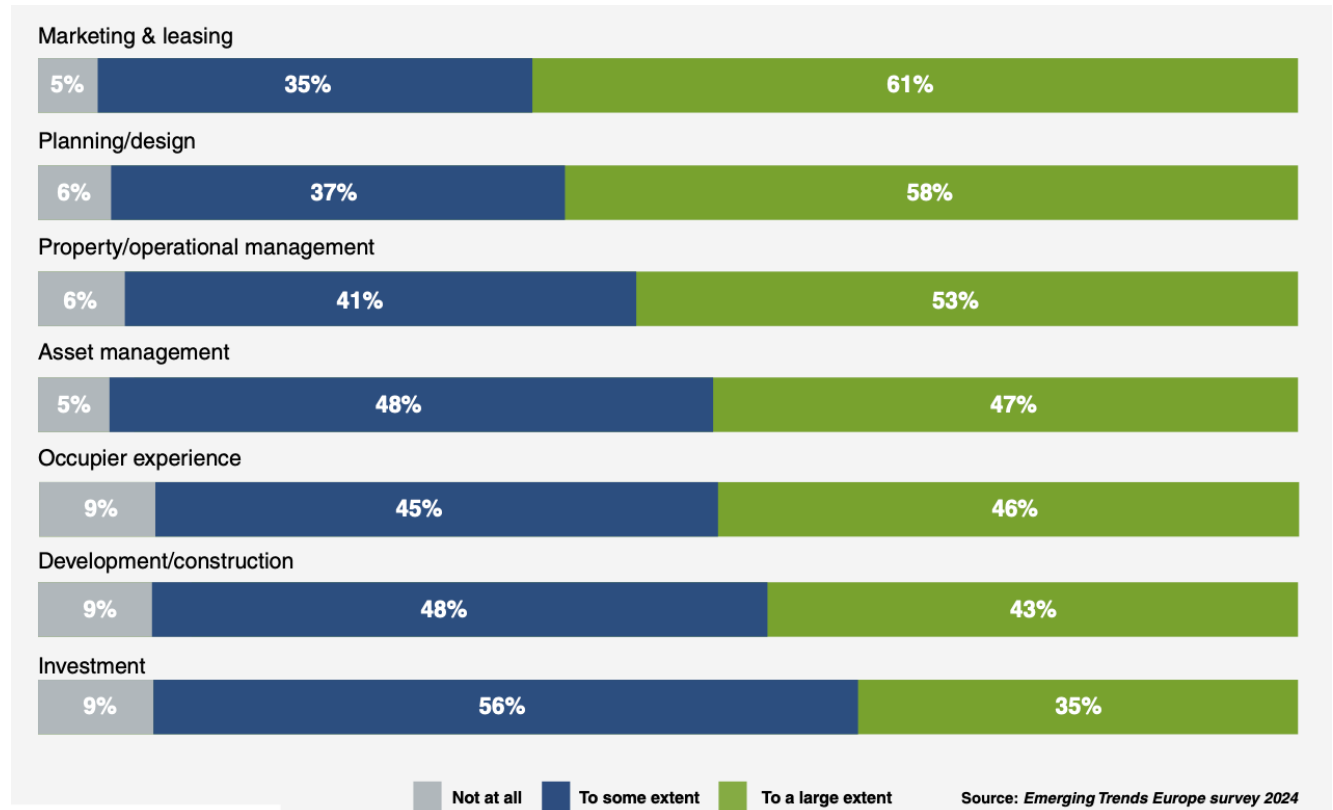


AI will impact the entire property management chain

Proportion of real estate industry that has used AI/machine learning to assist in real estate activities in the past 12 months?



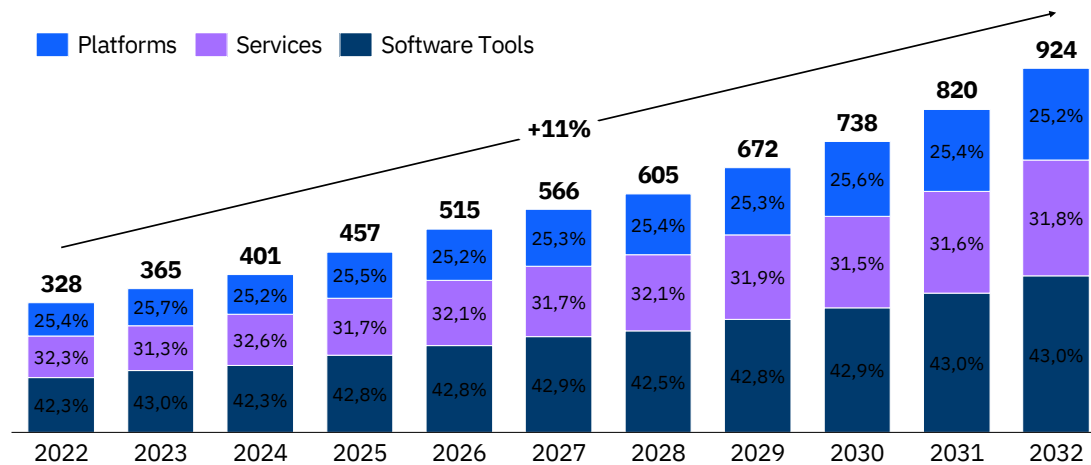
To what extent will AI/machine learning affect the following parts of the real estate value chain in the next 10 years?



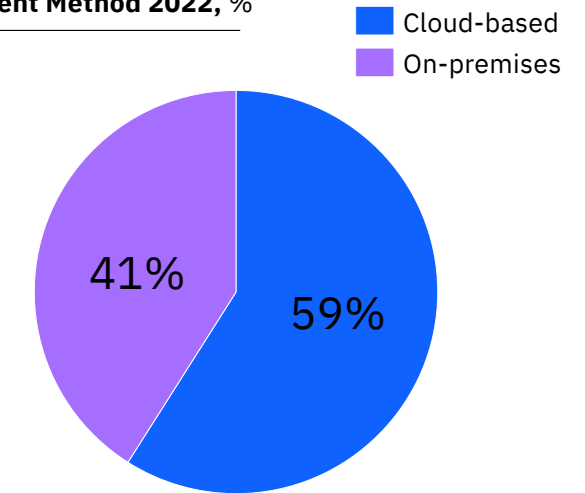
Source: PwC Emerging Trends in Real Estate, Europe 2024

Market analysts forecast a CAGR of 11-12% for Gen AI in the RE market by 2032, dominated by Cloud based solutions & services providers

Market Size by Component 2022-32, USD Bn



Share by Deployment Method 2022, %

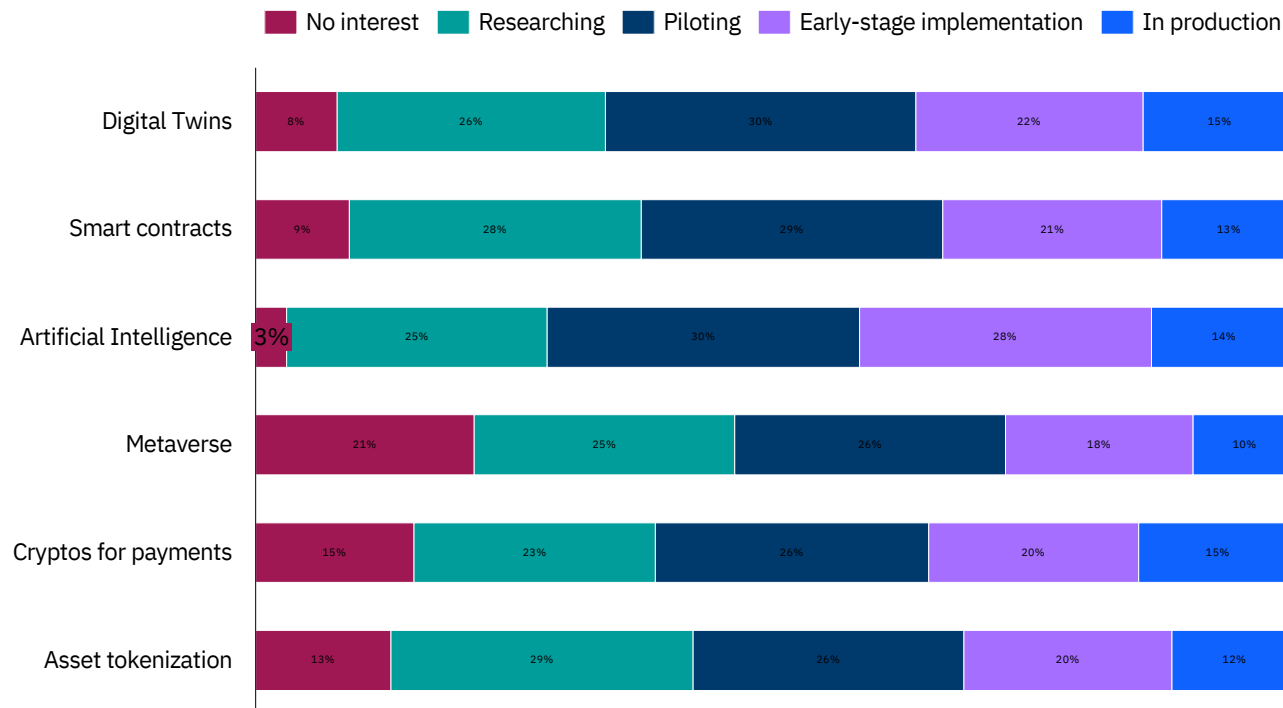


- Service providers offer AI-powered chatbots or virtual assistants that respond to customer inquiries, give details about the property, and aid with the purchasing or renting process.
- Service providers use the power of generative AI to analyse market data on real estate and produce complete reports and data that help businesses make educated choices.

- Cloud-based solutions can be accessed anywhere with an internet connection, allowing access to the applications and tools involving generative AI from multiple appliances.
- Cloud-based services can be scalable, allowing for more processing power, storage, and computational capability when required, making them suitable for large-scale datasets and complex AI algorithms.

Although GenAI is raising the most interest among main exponential technologies, most RE firms have been somewhat slow to embrace it

Maturity levels across emerging technologies for RE firms, % of respondents



Key Insights

- With the emergence of GenAI capabilities in early 2023, global real estate leaders appear to be interested in exploring its use cases for the industry.
- AI, far and away outpaced other technologies in hard dollar commitments.
- 72% of respondents say their organizations are either in piloting, early-stage implementing, or in full production with solutions enabled by AI.

Source: PwC Emerging Trends Europe survey 2024

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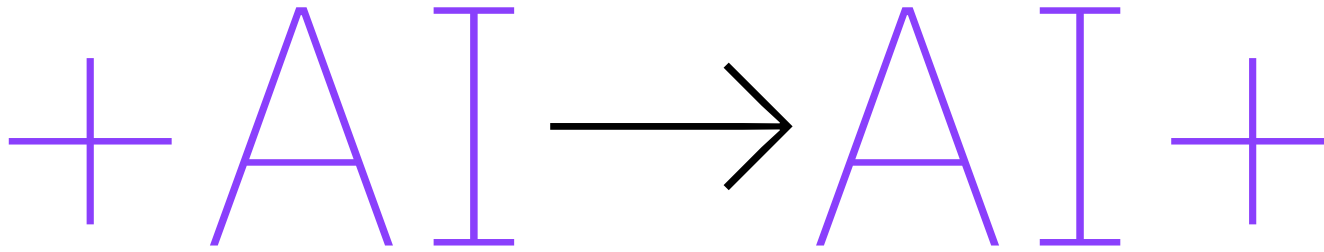
The Generative
AI opportunity



Delivering your
AI Ambition

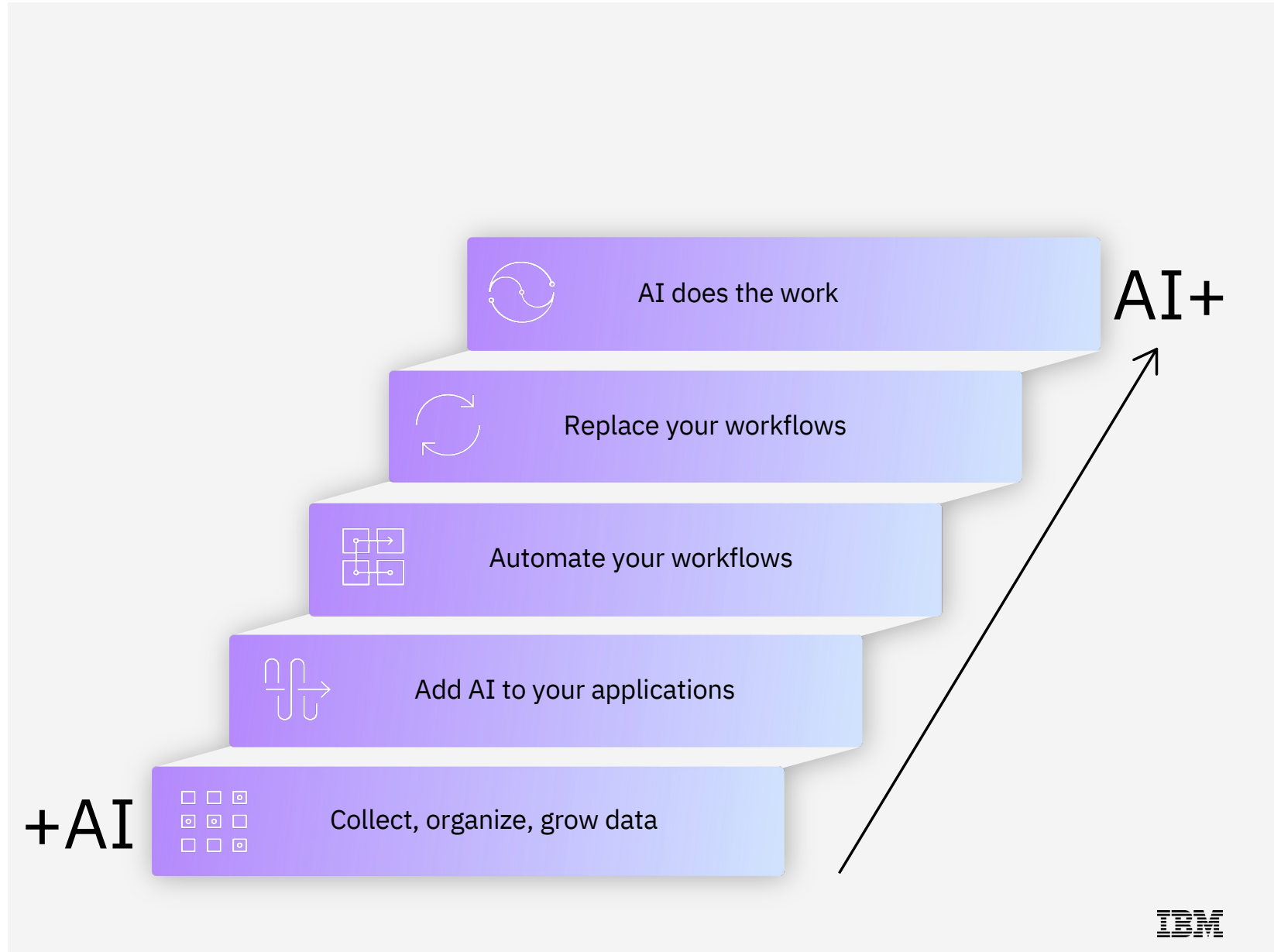


How to set
yourself up for
success



Reinventing how work gets
done across business domains
and industries

The modern-day AI ladder



50-60% of the work
that we do today

Can already be
automated, today

Employee productivity is expected to be a primary driver of economic value

- There is widespread interest in applying AI across business functions.
- Customer service and IT processes consistently emerge as top priorities across research studies.

¹Source: [IBM Institute for Business Value, May 2023](#)

Executives are embracing generative AI and large language models (LLMs) to optimize and automate¹:

63%

IT processes

57%

Customer service workflows

45%

Supply chain

41%

HR and talent management

40%

Sales and marketing

35%

Operations

34%

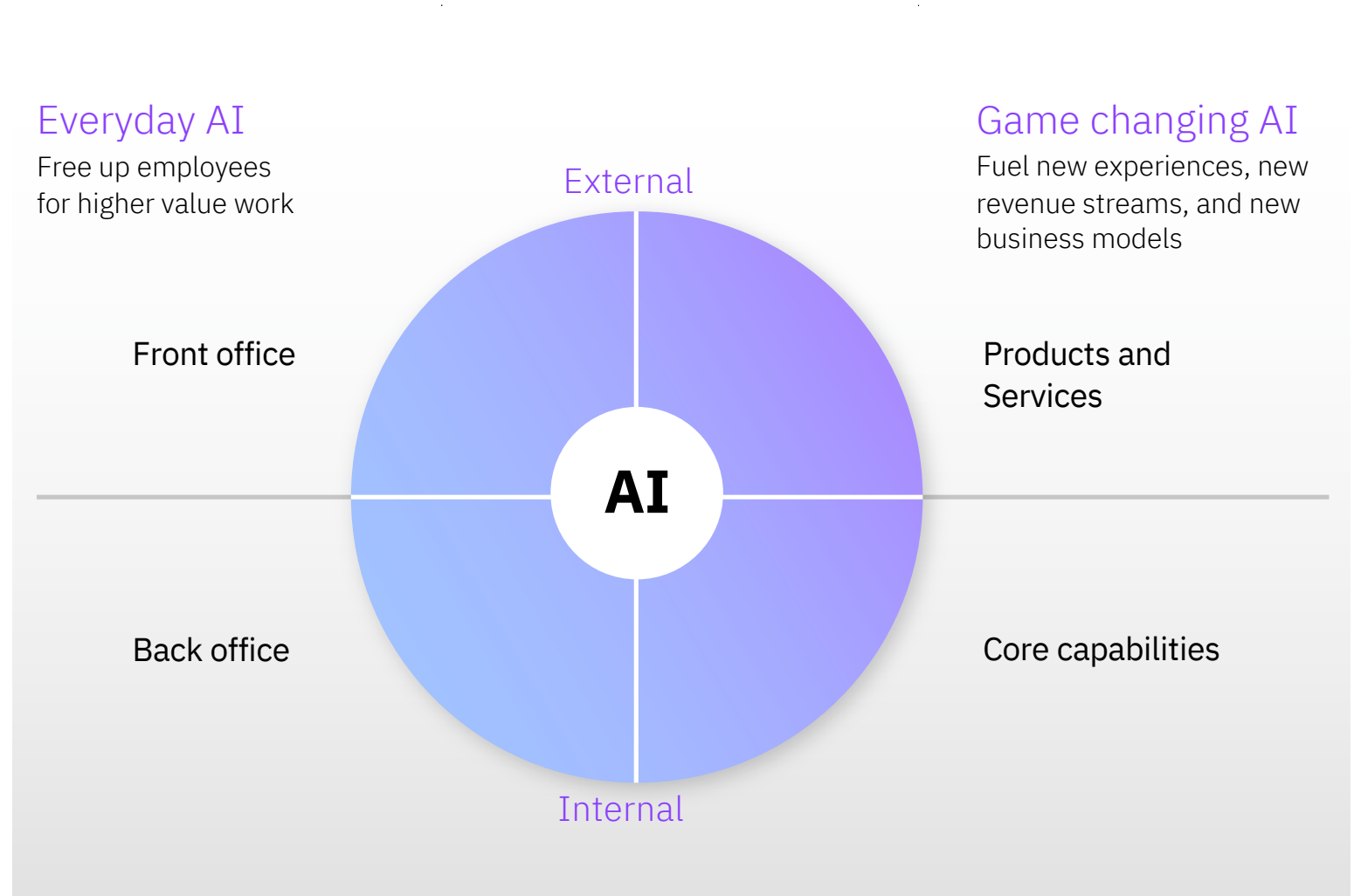
Finance

2023

the year of pilots

Customer-facing functions and experiences	HR, Finance, and Supply Chain functions	IT development and operations	Core business operations
<p>Customer service Empower customers to find solutions with easy, compelling experiences. Automate answers with 95% accuracy</p>	<p>HR automation Reduce manual work and automate recruiting, sourcing and nurturing job candidates. Reduce employee mobility processing time by 50%</p>	<p>App modernization, migration Generate code, tune code generation response in real time. Deliver faster development output</p>	<p>Threat management Reduce incident response times from hours to minutes or seconds. Contain potential threats 8x faster</p>
<p>Marketing Increase personalization, improve efficiency across the content supply chain. Reduce content creation costs by up to 40%</p>	<p>Supply chain Automate source to pay processes, reduce resource needs and improve cycle times. Reduce cost per invoice by up to 50%</p>	<p>IT automation Identify deployment issues, optimize application demand to supply. Reduce mean time to repair (MTTR) by 50%+</p>	<p>Asset management Optimize critical asset performance and operations while delivering sustainable outcomes. Reduce unplanned downtime by 43%</p>
<p>Content creation Ex. Enhance digital sports viewing with auto-generated spoken AI commentary. Scale live viewing experiences cost effectively</p>	<p>Planning and analysis Make smarter decisions, focus on higher value tasks with automated workflows and AI. Process planning data up to 80% faster</p>	<p>AIOps Assure continuous, cost-effective performance and connectivity across applications. Reduce application support tickets by 70%</p>	<p>Product development Ex. Expedite drug discovery by inferring structure with AI from simple molecular representations. Faster and less expensive drug discovery</p>
<p>Knowledge worker Enable higher value work, improve decision making, and increase productivity. Reduce 90% of text reading and analysis work</p>	<p>Regulatory compliance Support compliance based on requirements / risks, proactively respond to regulatory changes. Reduce time spent responding to issues</p>	<p>Data platform engineering Redesign the approach for data integration using generative AI. Reduce data integration time by 30%+</p>	<p>Environmental intelligence Provide intelligence to proactively plan and manage impact of severe weather and climate. Increase manufacturing output by 25%</p>

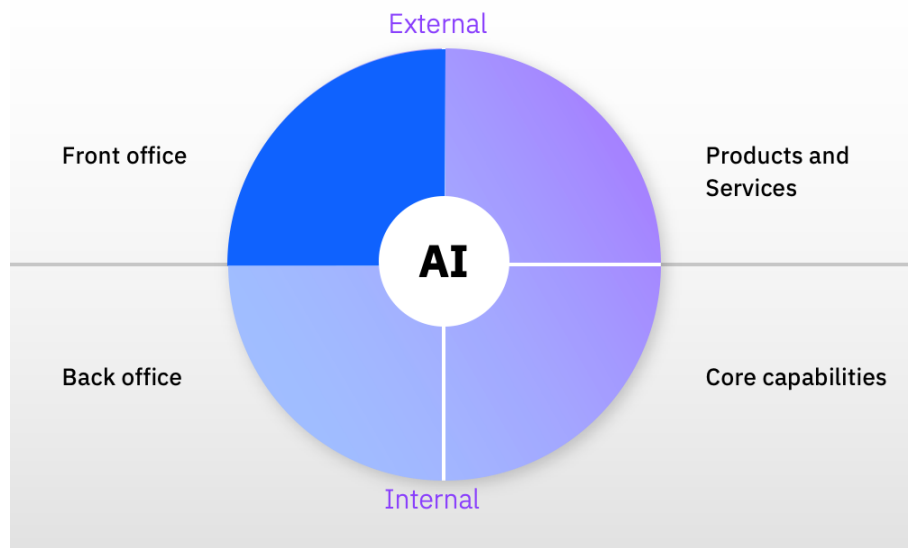
What's your **AmbI**tion?



Source: Gartner

Everyday AI - external

Free up employees for higher value work



Source: Gartner



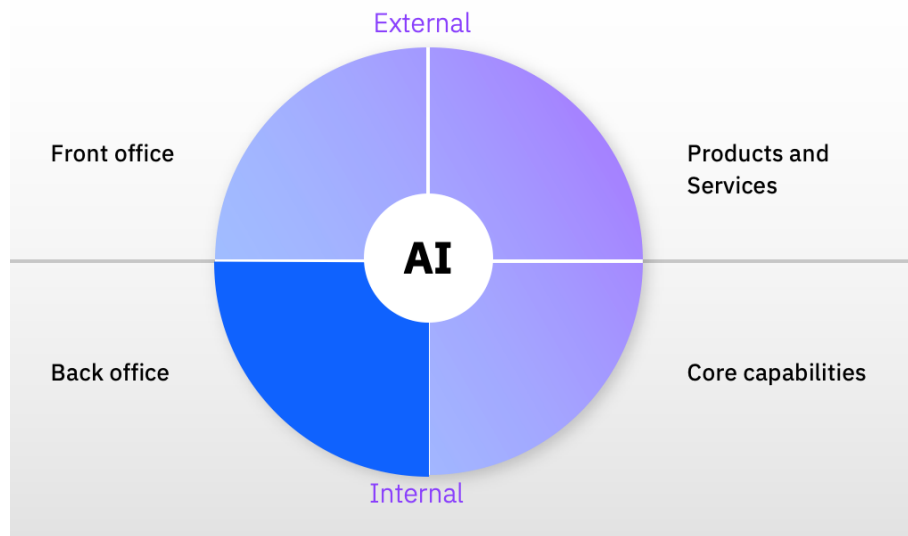
Co-piloting investors interactions

- Assisting with [tenant requests and lease negotiation](#), it can communicate with maintenance staff for routine requests.
- Gen AI [observes conversations and interactions and offers suggestions](#) for better communication.
- Gen AI to enable [answering investors queries](#) more efficiently through Chatbots
- Creating [targeted marketing campaigns](#), and [identifying](#) the most effective channels to reach these buyers

. Gartner. McKinsey: Generative AI can change real estate.

Everyday AI - internal

Free up employees for higher value work



Source: Gartner



Shifting through Documentation

- Gen AI can give asset managers the tools necessary to collect and analyze property-level data more effectively
- Gen AI to enable analytics, analyze risks and predict property values for finding, buying property, enabling optimal due diligence



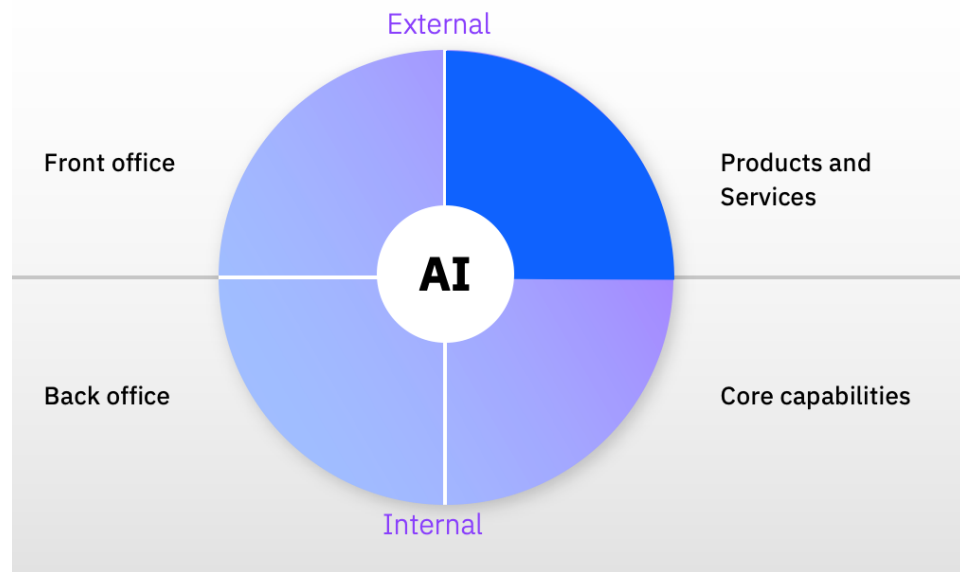
Making faster and accurate decisions/forecasts

- Gen AI to enhance budgeting and forecasting. Reporting and scenario planning can be streamlined
- Gen AI can automate routine compliance and reporting tasks, such as preparing financial statements and regulatory filings.
- AI can also be used to monitor changes in regulations and ensure that the REIT remains in compliance with all applicable rules and requirements.

. Gartner. Mckinsey: Generative AI can change real estate.

Game changing AI - external

Fuel new experiences, new revenue streams, and new business models



Source: Gartner

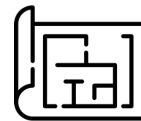
. Gartner. McKinsey: Generative AI can change real estate.

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Enabling Visualizations

- Gen AI tools enhance the [visualization of spaces for potential tenants](#). Allowing them to see customized designs and furnishings, improving prospect-to-lease conversion and guiding CapEx decisions.

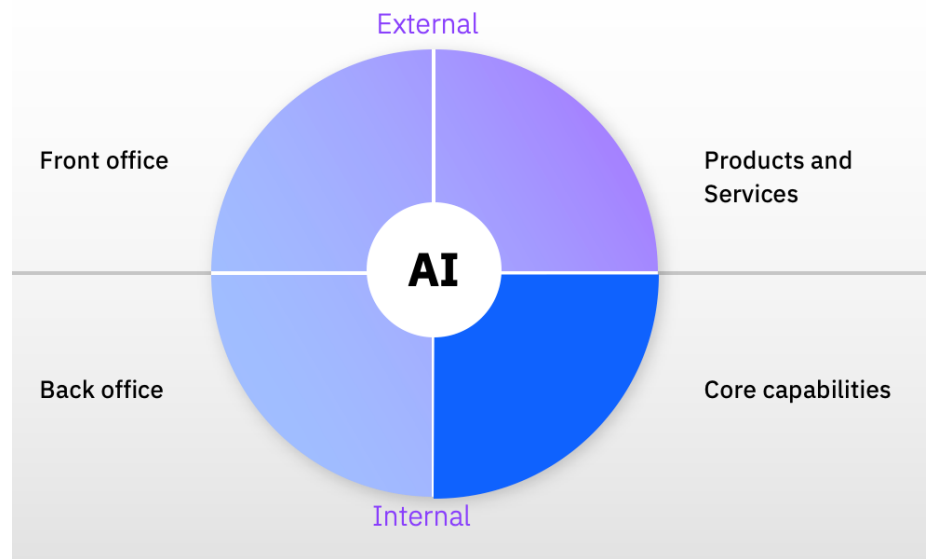


Drawing architectural plans

- GenAI can enhance [website design by leveraging known patterns and design choices](#) that drive e-commerce sales and click-through rates.
- In the physical world, GenAI can [utilize IoT sensors and computer vision algorithms to collect data on space usage](#), combining it with outcome data to optimize architectural plans.

Game changing AI - internal

Fuel new experiences, new revenue streams, and new business models



Source: Gartner



Making faster investment & portfolio reporting

- Creating new internal digital products to enable and manage portfolio
- GenAI tools [streamline investment decision-making](#) by providing comprehensive data analysis.
- It will sort through internal and third-party data [to identify and prioritize assets](#) for further investigation.
- Gen AI can leverage non-numerical data to [make forecasts more robust](#) through transformer-based forecasting

. Gartner. McKinsey: Generative AI can change real estate.

Gen AI will benefit the entire Real Estate Value Chain



Report	Solicit Investors	Asset Management	Compliance	Set up funds	Acquire Manage RE	Sell RE
<i>Return profits and report on position of funds</i>	<i>Identify fund management needs of each investor</i>	<i>Manage and operate portfolio leveraging know-how</i>	<i>Being a listed company, it needs to comply with the country's REIT regime</i>	<i>Set up funds to meet investors needs</i>	<i>Acquire RE that the funds will manage, to enhance value</i>	<i>Sell based on fund mgmt. period and market conditions</i>
Potential AI Impact	Potential AI Impact	Potential AI Impact	Potential AI Impact	Potential AI Impact	Potential AI Impact	Potential AI Impact

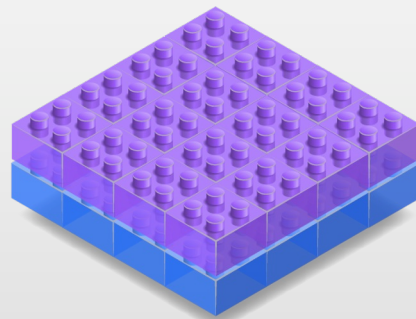
Potential AI Impact
 Shifting through documentation
 Co-pilot investors interactions
 Enabling Visualizations
 Making faster and accurate decisions & forecasts
 Drawing architectural plans

Mckinsey: Generative AI can change real estate.

What's your **AmbI**tion?

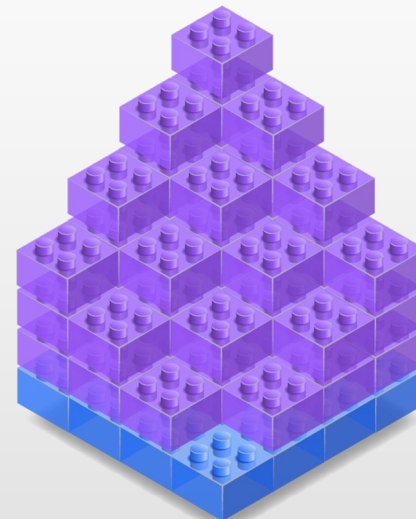
Raise the floor

Increasing accessibility to technologies and capabilities previously requiring specific resources, skills, and expertise.



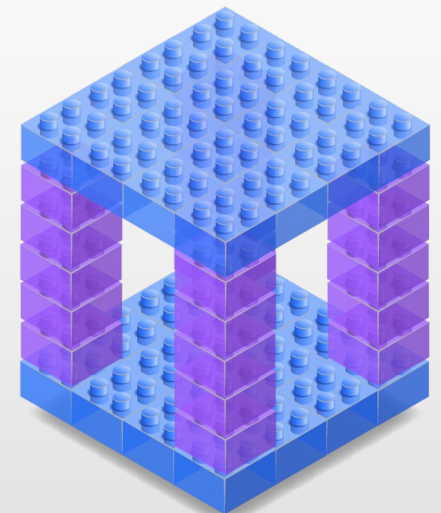
Scale human capability

Enhancing productivity and existing human skills—freeing us all for higher value.



Raise the ceiling

Solving problems previously unsolvable—fueling new experiences, new revenue streams, and new business models.



Agenda



The Generative
AI opportunity

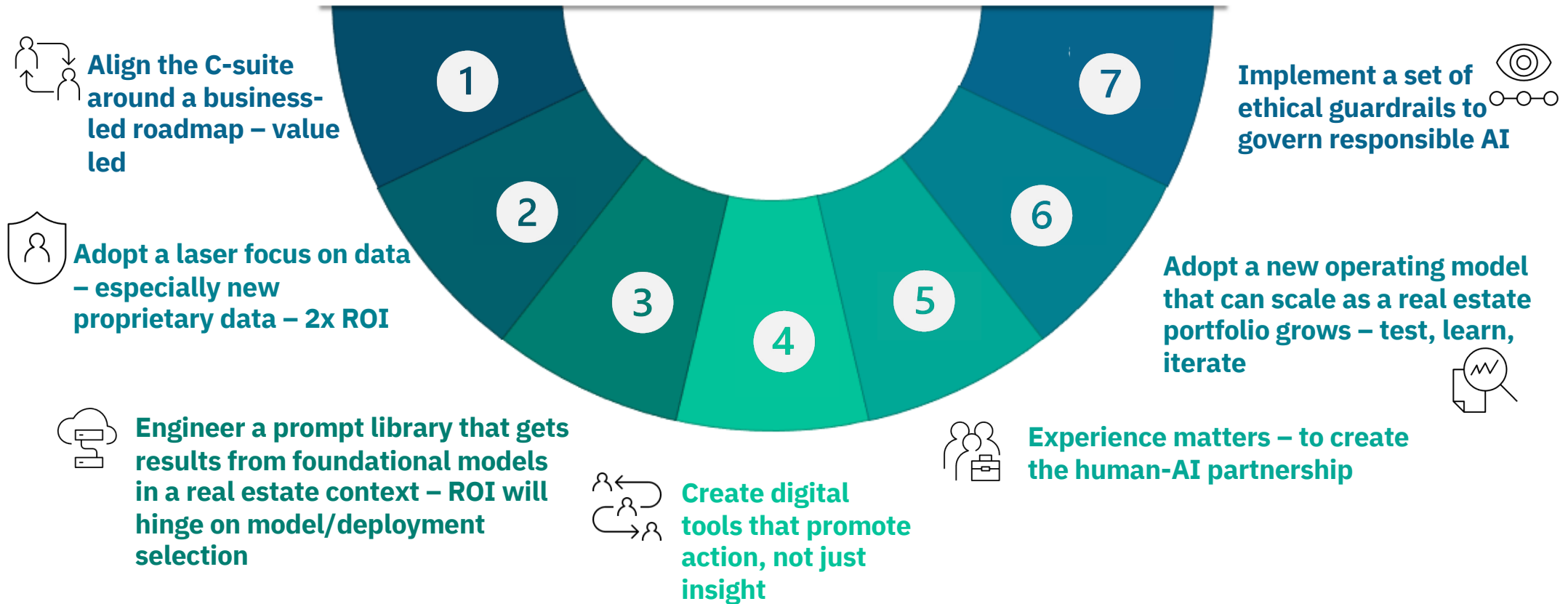


Delivering your
AI Ambition

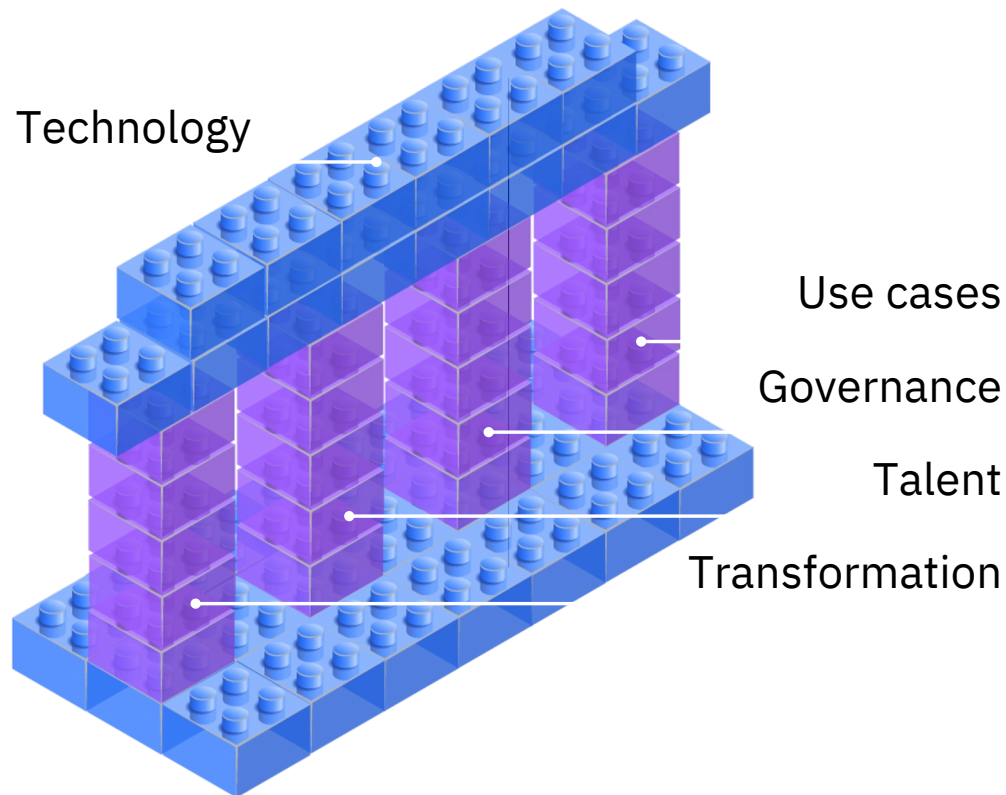


How to set
yourself up for
success

There are seven pivotal actions real estate players should take to unlock the full value of GenAI and differentiate themselves strategically



Technology isn't enough to scale



Use cases

Strategy
AI model
ROI

Talent

Experience
Skills
Culture
Adoption

Governance

Security
Ethics
Compliance

Transformation

Stakeholders
Process
Platform



Generative AI isn't replacing people



but people who use Gen AI are replacing people who don't.





→ You ←

Your AI



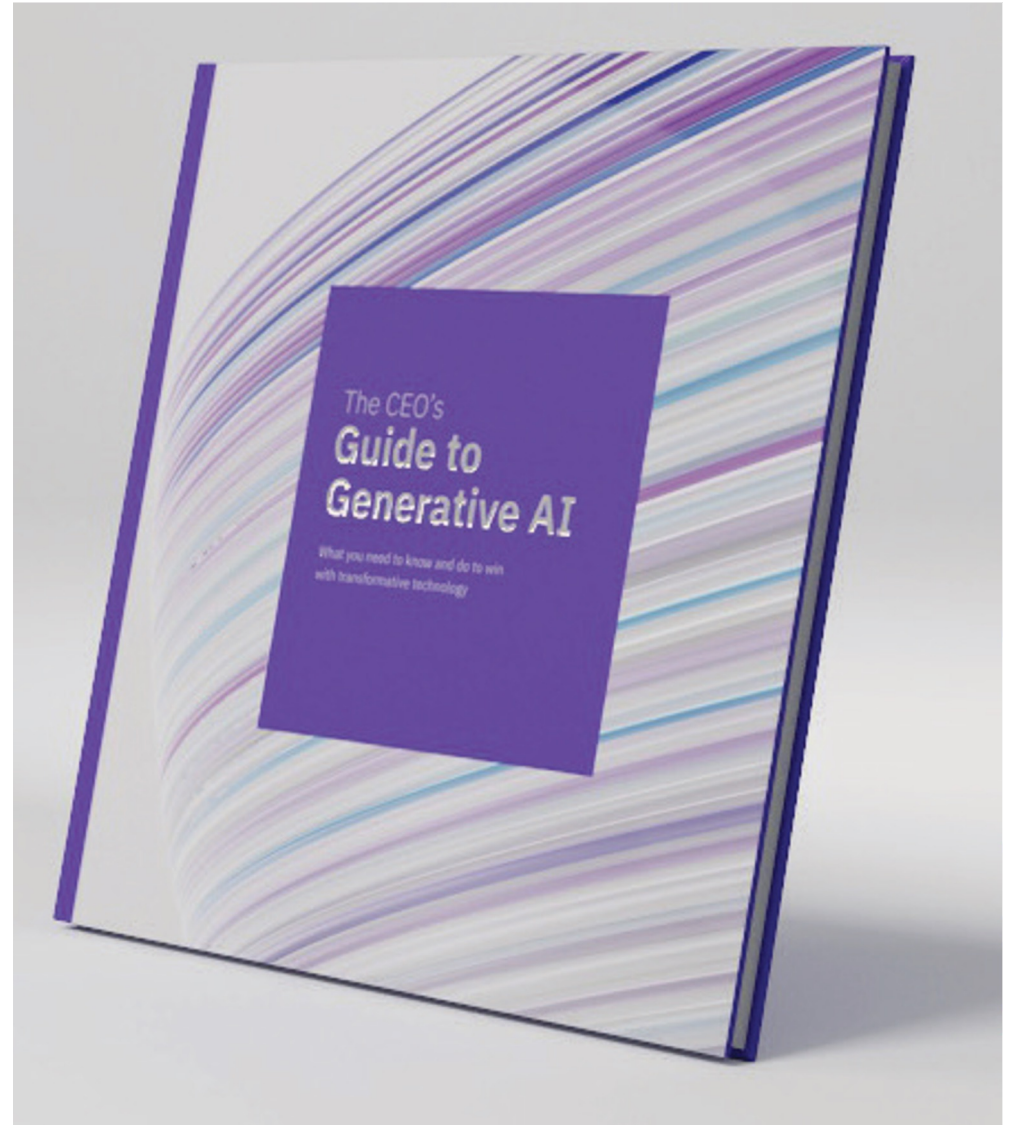
Questions?



The CEO's Guide to Generative AI



Order a copy to be shipped to you via this QR code, or digital download



Thank you



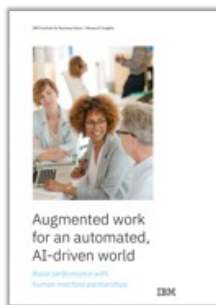
Gracias

Appendix

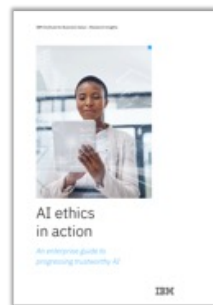
Our GenAI Thought Leadership published by the IBM Institute of Business Value (IBV)



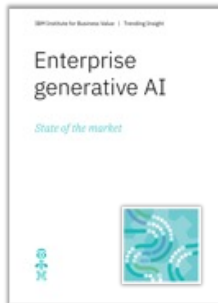
[CEO decision-making in the age of AI](#)



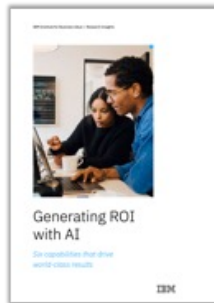
[Augmented work for an automated, AI-driven world](#)



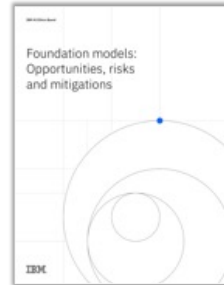
[AI ethics in action](#)



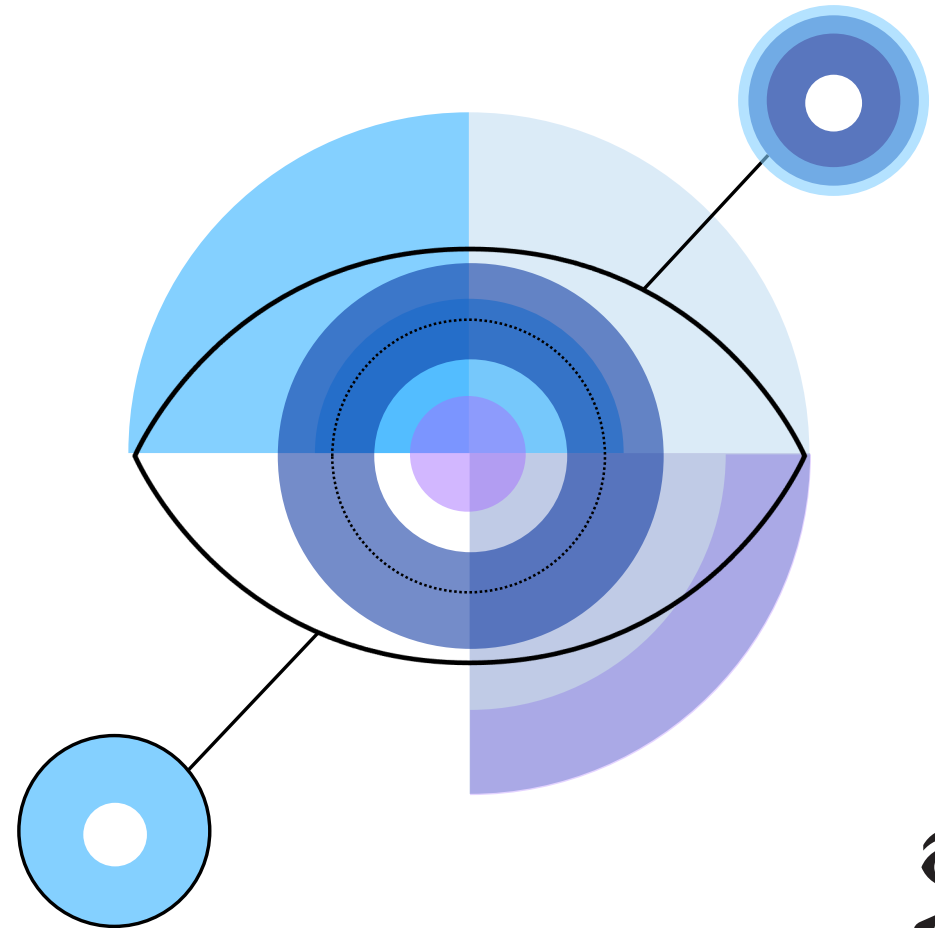
[Enterprise generative AI: State of the market](#)

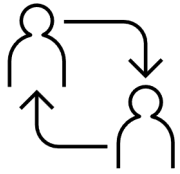


[Generating ROI with AI](#)



[Foundation Models: Opportunities, Risks & Mitigations](#)





Align the C-suite around a business-led roadmap

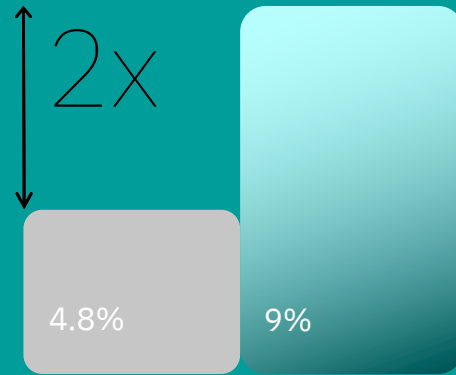
1. Assess your role within the real estate value chain - define your AI Ambition to serve as your North Star

2. Lead the adoption of new & agile ways of working – experiment, iterate, & self disrupt

3. Lead from the top but elevate and empower your teams to have impact



Adopt a laser focus on data



Companies with high data wealth are gaining an edge

1. Those with access to and control over unique, informative data will be able to generate insights that others cannot

2. Many early pilots have not made it to production because of challenges with data quality, access, and security



Engineer a prompt library that gets results from foundational models in a real estate context

1. Foundational Gen AI models are only as good as the questions (known as “prompts”) asked of them.

2. Engineer a prompt library that allows for personalized outreach emails, follow-ups, and tailored concessions.

3. To create a playbook, a rigorous process of testing and refining to ensure questions return expected answers is essential.



Create digital tools that promote action, not just insight

1. AI Platform and Capabilities deliver and scale realizable, explainable and sustainable AI based solutions with business impact

2. Having a clear process to scale AI use cases from discovery to operation is crucial for aligning AI projects with business objectives, managing risks effectively, and ensuring optimal use of resources.

3. This structured approach enhances scalability and replicability, allowing for the adaptation and reuse of successful AI solutions in different contexts.



Experience matters – to create the human-AI partnership

Every leader should know → Every leader should do

Generative AI is a seismic shock to Experience

Customer trust is the new currency

Gen AI opens the door to reinventing Employee Experience

Find the friction & obliterate it

Create ethical journeys that build customer confidence

Give your employees what they want ...and more

62% of global executives say generative AI will disrupt how their organization designs experiences—and personalization is at the core of this evolution.



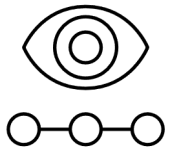
Adopt a new operating model that can scale as a real estate portfolio grows

1. AI Enablement sets up the right structures, enables the organization, and fosters adoption

2. *“The strongest power for innovation is people, and creating a culture of trust that allows them to surface their ideas is critical”*

3. Organisational Readiness for Gen AI can be addressed with 3 pillars

- Organisational Setup
- Talent & Skills
- AI+ Culture



Implement a set of ethical guardrails to govern responsible AI

1. AI Governance ensures responsible handling and use of AI and mitigates the risk of a reputational, regulatory and operational damage

2. Why it matters?

- Scalability & efficiency
- Regulation
- Brand & Reputation

3. Pillars of Trust

- Explainability
- Fairness
- Robustness
- Transparency
- Privacy