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The Innovation Group
Innovating business and organizations through ICT

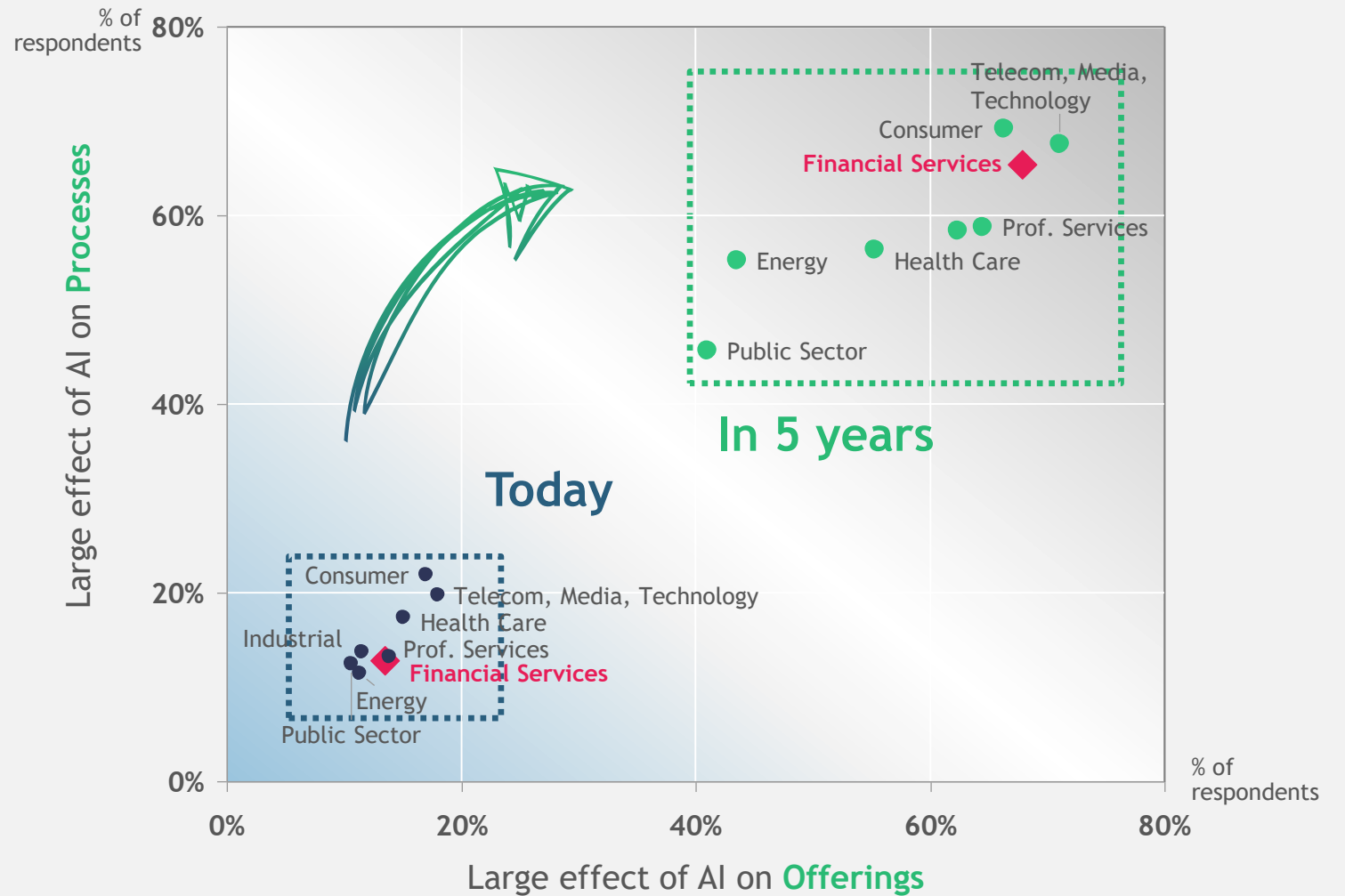
AI: ambition and action in Financial Services

Banking Summit 2018

STRESA, 5 OCTOBER 2018

Financial Services among the industries with the highest expectations on AI impact...

...despite the starting point



Note: Percentage of respondents who expect a large ('a lot' and 'great') effect on a five-point scale ◆ *Financial Services*
 Source: Joint BCG/MIT SMR Research Report 'Reshaping Business with Artificial Intelligence', September 2017

Across industries a gap between ambition...



AI allows us to obtain/sustain a **competitive advantage** (84%)



AI is a **strategic opportunity** (83%)



AI allows us to **move into new businesses** (75%)



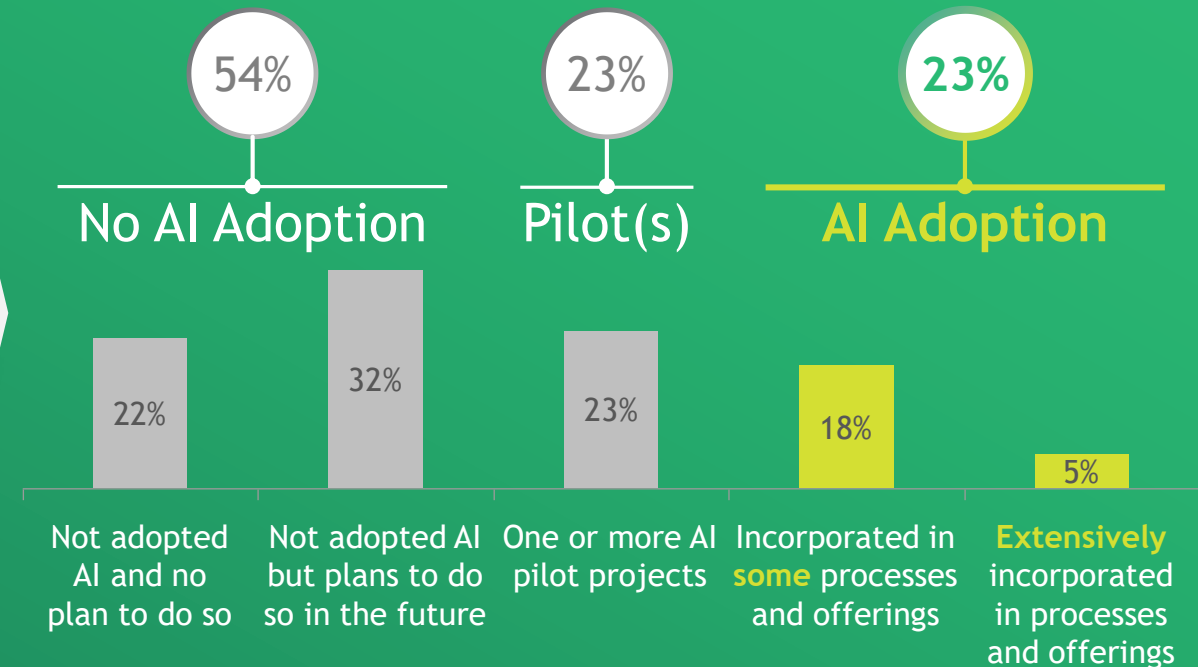
New organizations using AI will enter our markets (75%)



Incumbent competitors will use AI (69%)














Note: Percentage of respondents who somewhat or strongly agree
Source: Joint BCG/MIT SMR Research




...and execution



38% We have an **AI Strategy** in place

In Financial Services Corporate Center, Customer-facing functions and IT seen as the most affected areas





INDUSTRY	FUNCTIONAL AREA		
	RANK 1	RANK 2	RANK 3
Technology, Media, Telecom	 Information Technology	 Customer Service	 Marketing
Consumer	 Supply Chain Management	 Sales	 Marketing
Financial Services	 Customer Service	 Finance/Accounting	 Information Technology
Professional Services	 Strategy	 Information Technology	 Marketing
Health Care	 R&D	 Operations/Manufacturing	 Information Technology
Industrial	 Operations/Manufacturing	 Supply Chain Management	 Information Technology
Energy	 Operations/Manufacturing	 Information Technology	 Supply Chain Management
Public Sector	 Information Technology	 Customer Service	 Operations/Manufacturing
OVERALL	 Information Technology	 Customer Service	 Operations/Manufacturing

 Operations, including Manufacturing, SCM, and R&D
  Information Technology
  Customer-facing Functions
  Corporate Center Functions

Note: Functional areas that respondents expect to be affected the most by AI
 Source: Joint BCG/MIT SMR Research Report 'Reshaping Business with Artificial Intelligence', September 2017

AI use cases emerge across functions and business lines

Examples

	 Retail	 Credit Cards	 Insurance	 Wealth Mgmt
Client/ Marketing	Personalization			
	Next Best Action (Cross-sell, Up-sell, etc.)			
	Churn Management			
Risk/ Finance & Controlling	Underwriting and Pricing		Pricing	
	Early Warning		FA Compliance	
	Fraud		Claim Fraud Scoring	
	Report creation			
Operations	Robo Agent		Claims Mgmt	Robo Advisor
	Complaints and Disputes Resolution			
	Contract Analysis			
HR	Resume screening			
	Expense audit			
IT / Security	Performance monitoring			
	Intrusion detection			



Striking differences between leaders and laggards

Example: Insurance

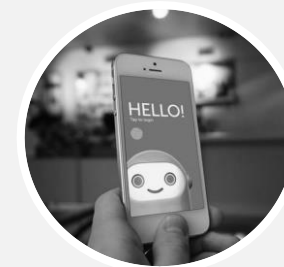
Examples

PING AN
Insurance • Banking • Investment



Leaders developing record-breaking AI

- Developed technology that recognizes faces with 99.84% accuracy (human eye: 97.53%) and won LFW¹ contest
- Technology verified >300m faces in various uses at Ping An
- Currently 30 CEO-sponsored AI initiatives



Laggards testing simplest AI applications

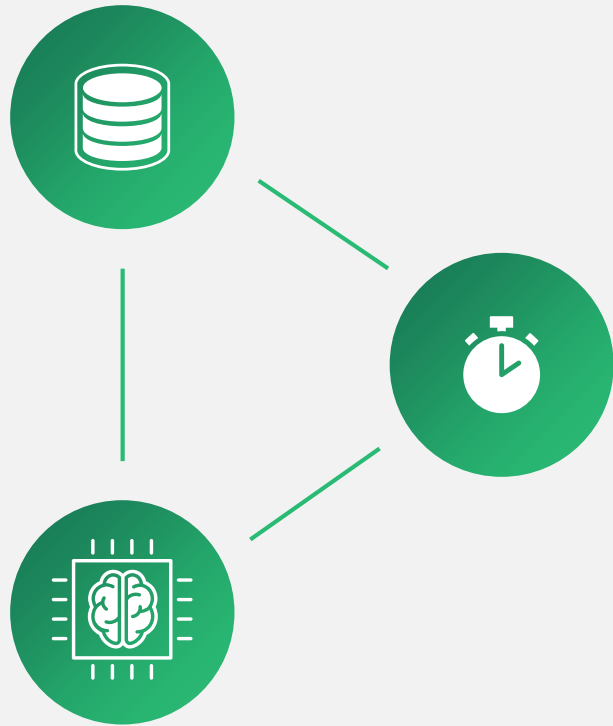
“ We don't really have active AI initiatives. But we recently received a demo for a chatbot from a third party provider.

Senior executive of US Insurer

“ We are testing a two AI-driven applications in a beta phase. [...] It is not clear yet how we will price them or deploy them in our company.

Senior executive of German Insurer

Understanding the triad of data, training & algorithms differentiates leaders and laggards



Data

Misunderstandings

“ They’ll bring us in to build a predictive maintenance solution for them, and then we’ll find out that there are very few, if any, recorded failures.

Jacob Spoelstra, director data science, Microsoft

Training

Make vs. buy

“ The products of AI vendors are like very young children. The amount of effort it takes to get the AI-based service to age 17, or 18, or 21 does not appear worth it yet.

Chief information officer, large pharma company

Algorithms

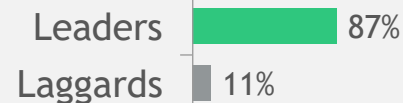
Privacy & regulation

“ Regulatory requirements oftentimes demand [financial model] solutions be less ‘black box’ and something the regulator can see very clearly.

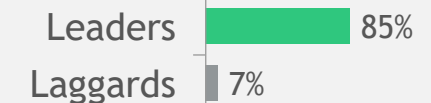
Agus Sudjianto, EVP corporate model risk, Wells Fargo



We understand the **data** required for algorithm training.



We understand the **processes** for algorithm training.



Note: Percentage of respondents who somewhat or strongly agree
Source: Joint BCG/MIT SMR Research

Make-or-buy



Market is growing offerings...

AI platforms available as a Service

AI data architectures and AI building blocks

Cutting-edge AI algorithms

Raw cloud computing power and hardware to process many task in parallel on premise

...



... but Banks need internal skills

Training AI algorithms involves a variety of skills, including understanding:

how to build algorithms

how to collect and integrate relevant data

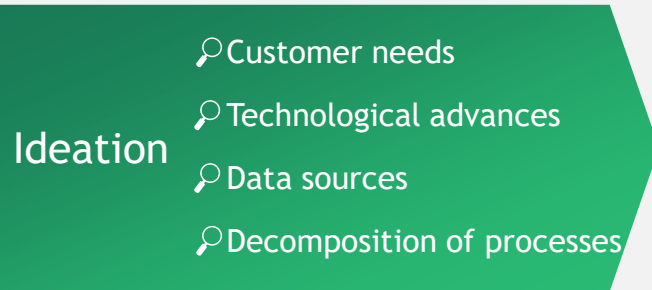
how to supervise the training

...

The journey towards AI strategy and roadmaps

Ideation and testing

Weeks



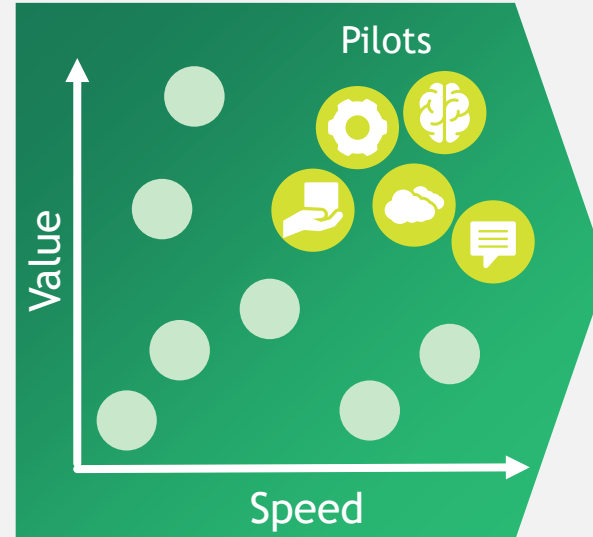
↕ Familiarization with AI and identification of largest needs

Testing of AI in action



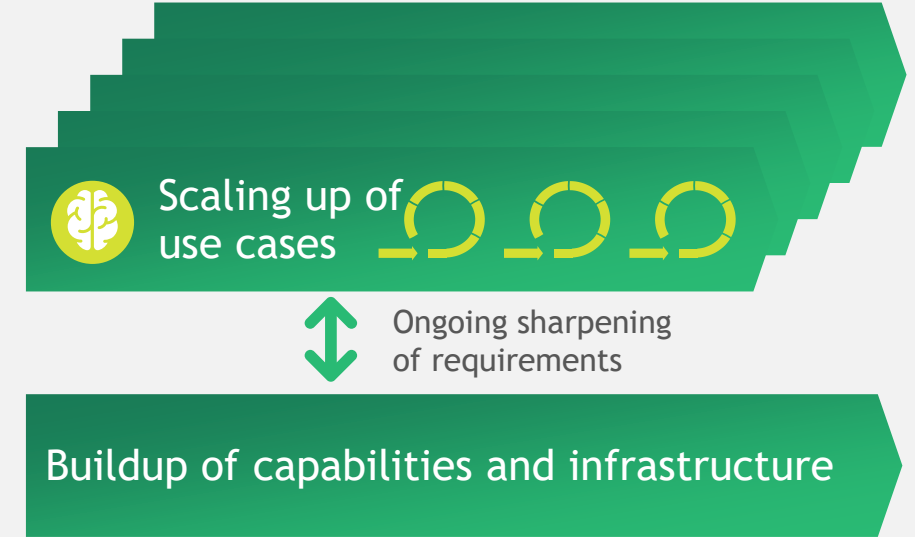
Prioritization and piloting

Months



Scaling and roadmap

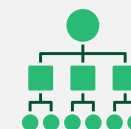
One year or more



Develop an intuitive understanding of AI



Perform an AI Health Check



Organize for AI

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The image features a dark green rectangular area on the left containing the BCG logo and company name. The background is a complex composition of overlapping curved shapes in various shades of green and yellow, with a fine grid pattern overlaid on the right side.

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