

# Certificate I: Understanding AI and Machine Learning in Africa

Course AIMLO2: AI and Machine Learning in Africa

Module 3: AI Business Strategy

Lecture 2: How to Choose Your First AI Project

**Carnegie Mellon University**  
Africa

# Learning Objectives

1. Summarize the **five traits of a strong AI pilot project**
2. Identify the **five key steps for setting up** a successful AI pilot
3. Explain why it is better to choose a **few small pilots** rather than one big one
4. Explain why it is better to **focus on automating tasks**, rather than jobs

# Lecture Contents

1. The impact of AI on businesses
2. Five traits of a strong AI pilot project
3. Setting up your AI project for success
4. Lecture summary
5. Recommended reading & references

# The Impact of AI on Business

It will create \$13 trillion of GDP growth by 2030

"Artificial intelligence (AI) is poised to transform every industry, just as electricity did 100 years ago."

(Ng, 2019)

Most growth will be in non-internet sectors including manufacturing, agriculture, energy, logistics, and education

# The Impact of AI on Business

Choose a small number of pilot AI projects: one to three

Two or three give you a greater chance of one succeeding.

"Implementing a company-wide AI strategy is challenging ... my advice for executives, in any industry, is to **start small**."

(Ng, 2019)

These projects will help your company gain a concrete understanding of what it takes to build an AI product or service, and build momentum

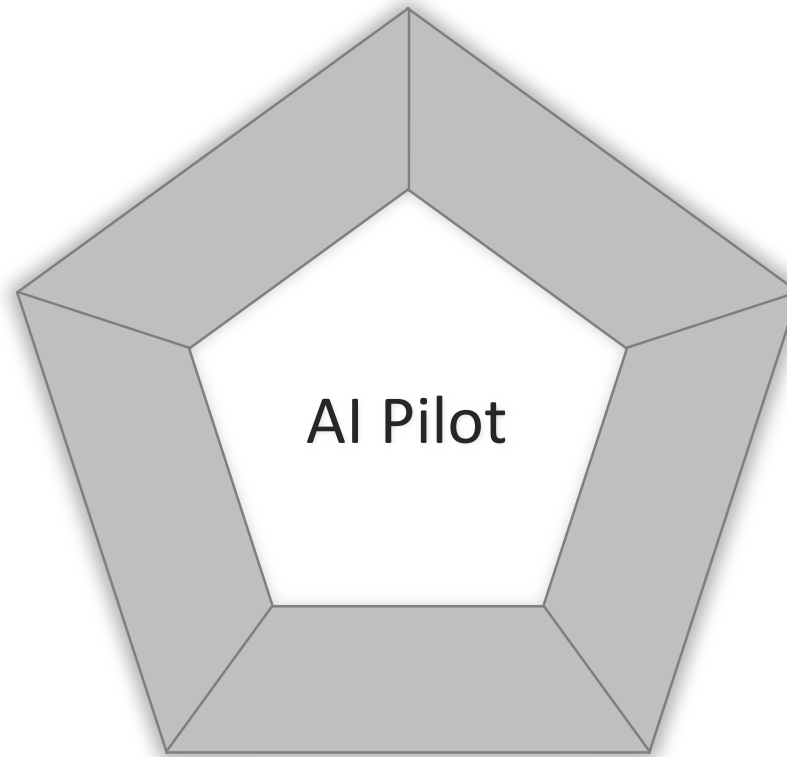
# Five Traits of a Strong AI Pilot Project

The purpose of your pilot projects is only partly to create value

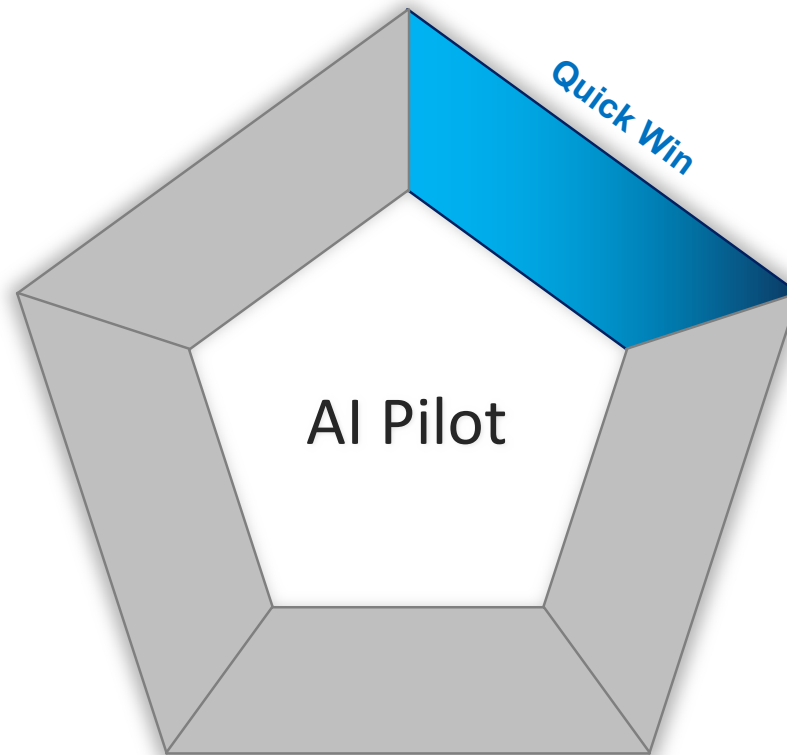
"The success of these first projects will help convince stakeholders to invest in building up your company's AI capabilities."

(Ng, 2019)

# Five Traits of a Strong AI Pilot Project



# Five Traits of a Strong AI Pilot Project

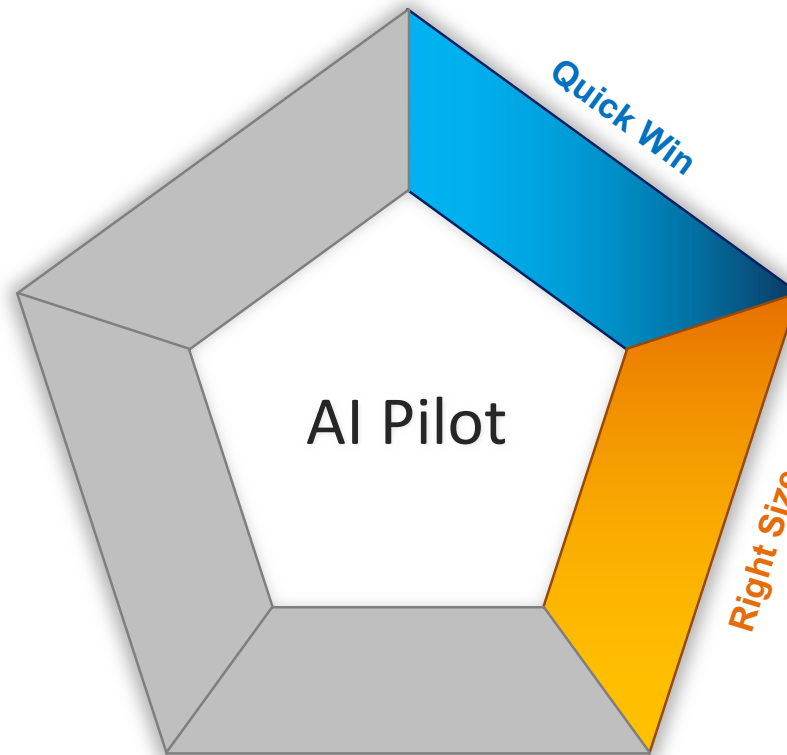


Choose a pilot project that can be done quickly, ideally within 6-12 months, and have a high chance of success

It doesn't have to be the project that gives the greatest value



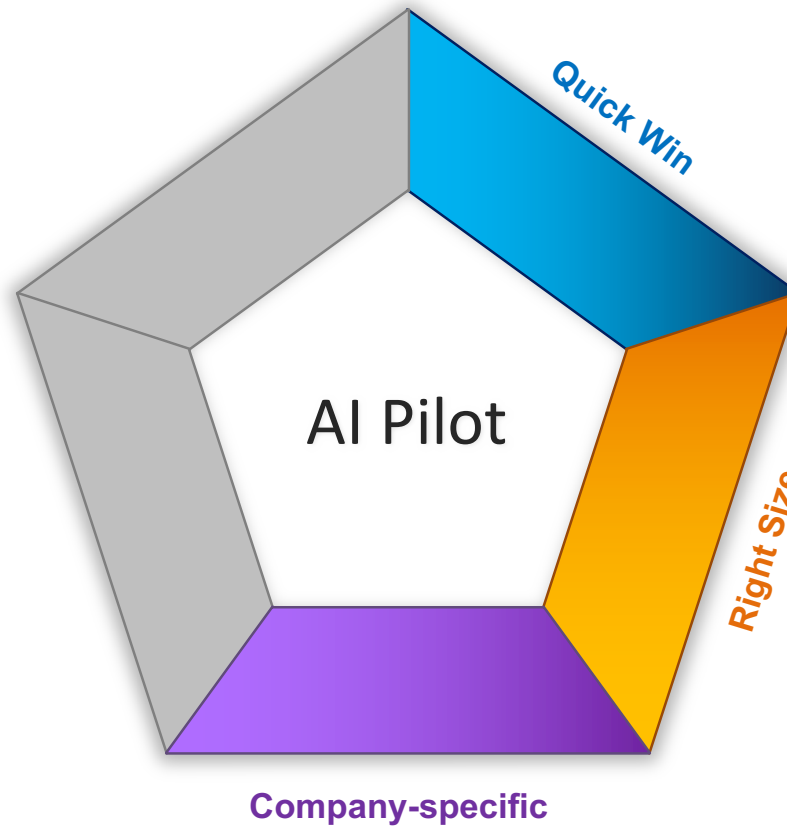
# Five Traits of a Strong AI Pilot Project



Choose a project that is not too trivial and not too large

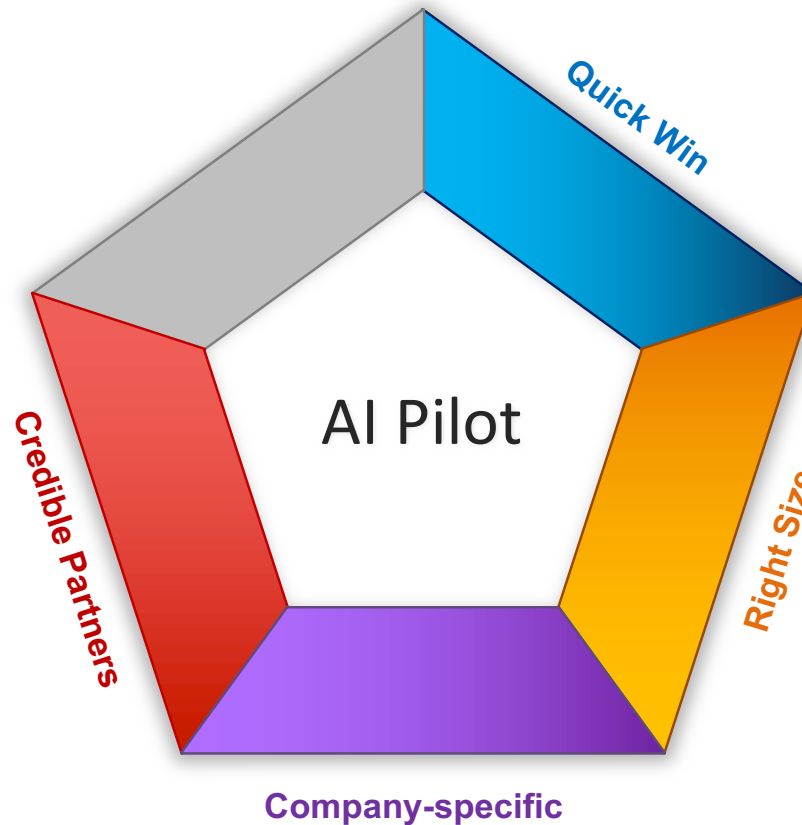
It should be meaningful enough, in business terms, so that success will convince other company leaders to invest in other AI projects

# Five Traits of a Strong AI Pilot Project



Choose company-specific projects so that your internal stakeholders can easily understand its value

# Five Traits of a Strong AI Pilot Project



If you are still building your AI team, work with external partners to bring in AI expertise quickly

Eventually, you will want to have your own in-house AI team, but don't risk delays that mean you are not keeping pace with others

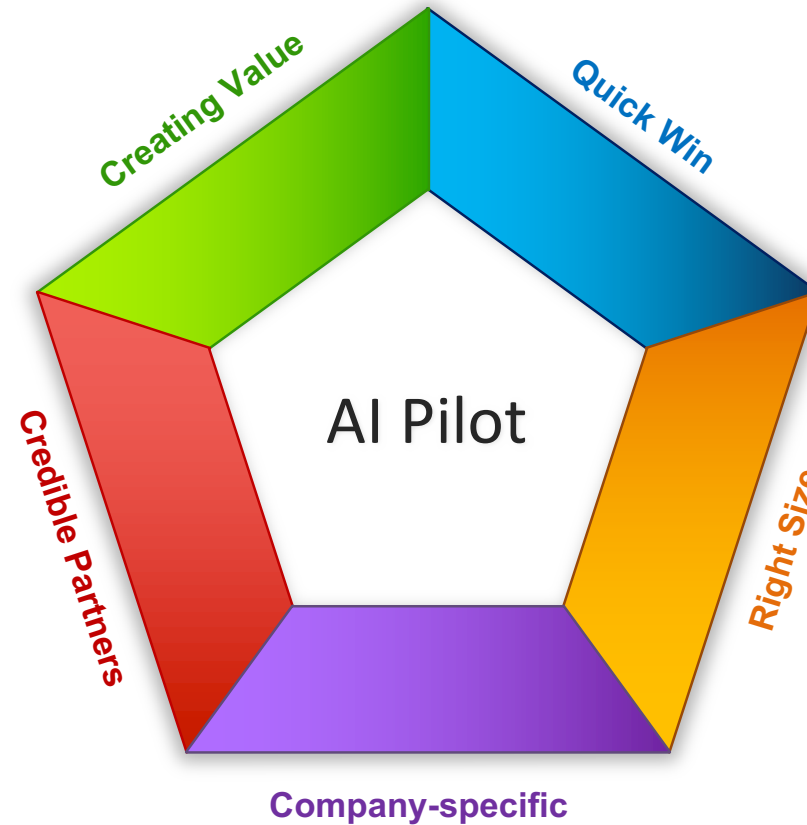
# Five Traits of a Strong AI Pilot Project

AI projects create value in three ways:

Reducing costs  
(e.g., through process automation)

Increasing revenue  
(e.g., through recommendation systems)

Launching new lines of business  
(e.g., with new AI-enabled functionality)



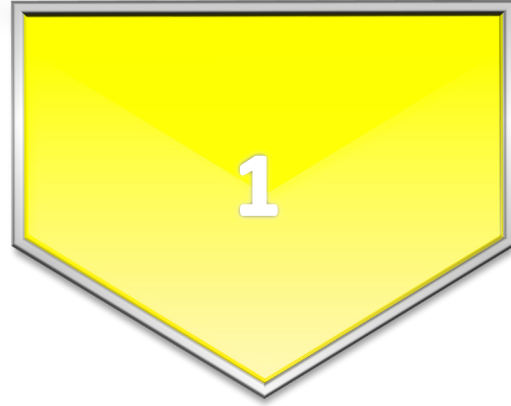
# Setting up your AI Project for Success

A good source of ideas for AI projects can be found in automating tasks that humans are doing today.

"AI is good at automating tasks, rather than jobs."

(Ng, 2019)

Try to identify the specific tasks that people are doing, and see if any can be automated

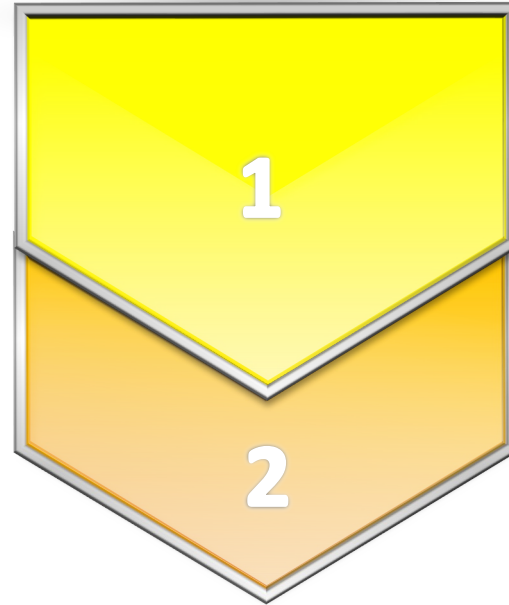


### **Set the parameters**

Clearly state the desired timeline, the desired outcome, and allocate a reasonable budget

# Setting up your AI Project for Success

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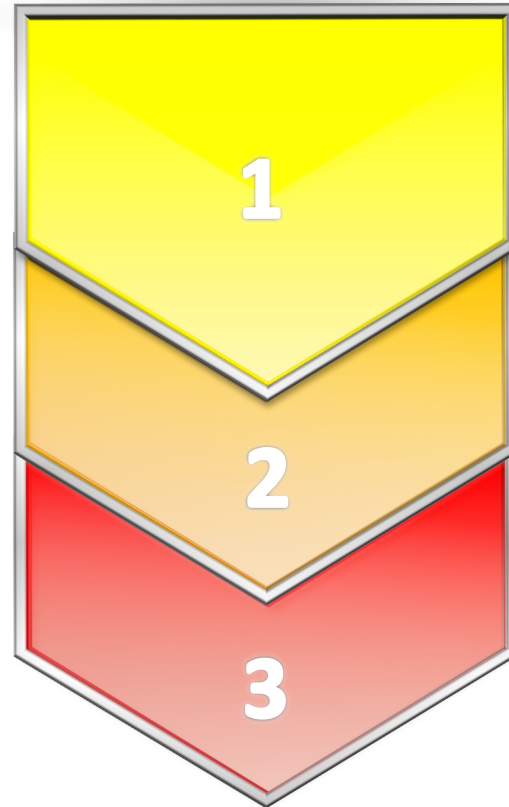
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## **Appoint a Leader**

Choose someone who can act as a bridge between AI experts and your industry's domain experts

# Setting up your AI Project for Success



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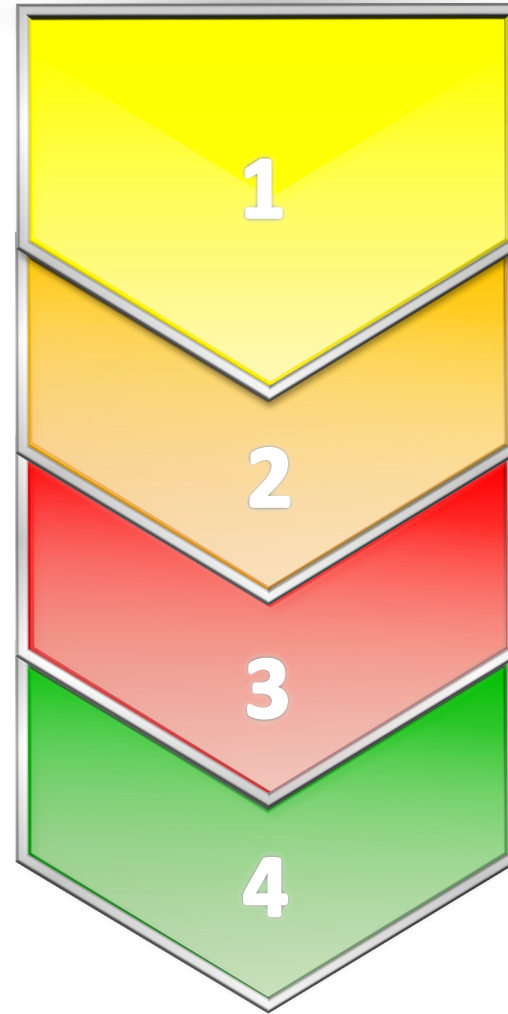
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## **Conduct business value and technical diligence**

Get agreement that the project can create value for the business  
Check that the project is technically feasible



# Setting up your AI Project for Success



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## Build a small team

A team of five to 15 people is best. A small team ensures that everyone will know everyone else and understand each other's work

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## Communicate

When the pilot project achieves its milestones, let people know, from the CEO down. Give the business team credit and reward for success.

# Lecture Summary

1. Implementing a company-wide AI strategy is challenging so start small by selecting a **small number** (two or three) **pilot projects**
2. These pilots should have the potential of providing a **quick win**, they should be the **right size**, **company-specific**, involve the **right partners**, and **add value to the business**
3. AI is good at automating tasks, rather than jobs, so focus on tasks
4. Successful pilots have **clear parameters**, **clear business value**, are **technically feasible**, have a **cross-sector leader**, involve a **small team**, and access to **communication channels** that allows successes to become known throughout the company

# Recommended Reading

Ng, A. (2019). How to Choose Your First AI Project, in Insights You Need from Harvard Business Review – Artificial Intelligence, Harvard Business School Publishing Corporation.  
<https://hbr.org/2019/02/how-to-choose-your-first-ai-project>