Scenario Planning For Artificial Intelligence Implementation In Retailer Business In Indonesia

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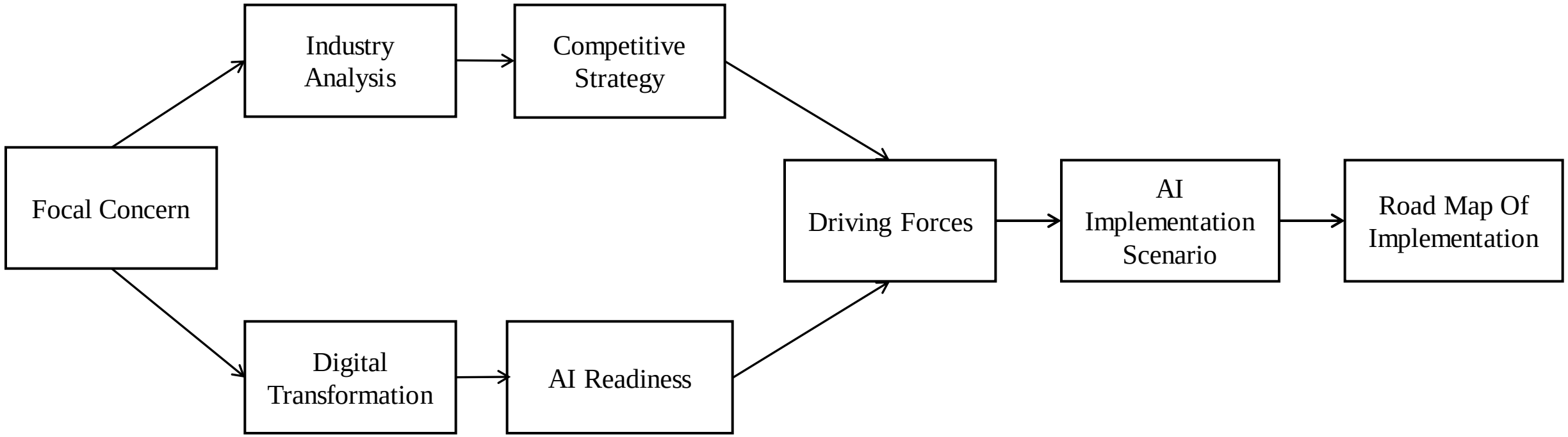
Objective and Framework

Research Question and Research Objective

Problem : The insufficient guidelines for AI implementation for retailer business in Indonesia

Question		Objective	
Q1	What is the level of readiness for AI implementation in retail industry?	O1	To assess the retailer industry readiness for AI implementation from several business aspect (Using Cisco Readiness Assessment) in Retailer X
Q2	What is the plausible scenario for AI implementation?	O2	To analyze scenario for AI implementation within the defined measurement in Retailer X
Q3	How should the road map of AI implementation be for retailer in Indonesia?	O3	To create road map for artificial intelligence as part of digital transformation for Retailer X

Research Framework



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Analysis

- Porter Five Forces Analysis
- PESTLE Analysis
- AI Readiness Assessment
- Scenario Planning with TAIDA methodology

Five Forces Analysis of The Retailer Industry

- 3,94 million of retail outlets
- Similar product offering for grocery retailer
- Aggressive store expansion of modern trade

- Trading term negotiation
- Trade and promotional fund support
- National brand domination, market share competition amongst suppliers

- Price sensitive, value for money
- Easy accessible price information
- Wide channel repertoire
- Similar basic needs

- The rising online and e-commerce

PESTLE Analysis Of The Retailer Industry

Politic — P

- Political stability
- Changing policy and regulation following the leader in charge
- Trading regulation

Economy — E

- Consumption driver factors :
- GDP growth
- Inflation/deflation
- Commodity pricing policy

Social — S

- Middle class as driver
- *Large population with complex behavior*
- *Basic grocery need*
- *Social media effect to shopping preference*

Technology — T

- *Industry 4.0*
- *The rising of e-commerce*
- *Technology adoption and scalability*

Legal — L

- Labor law
- Trade competition regulation
- *Data governance regulation*

Environment — E

- Plastic waste
- Sustainability initiative endorsement
- *Energy consumtion saving initiative*

AI Readiness Assessment – Cisco Survey

Cisco AI Readiness Assessment

Pacesetters
Fully prepared

Chasers
Moderately Prepared

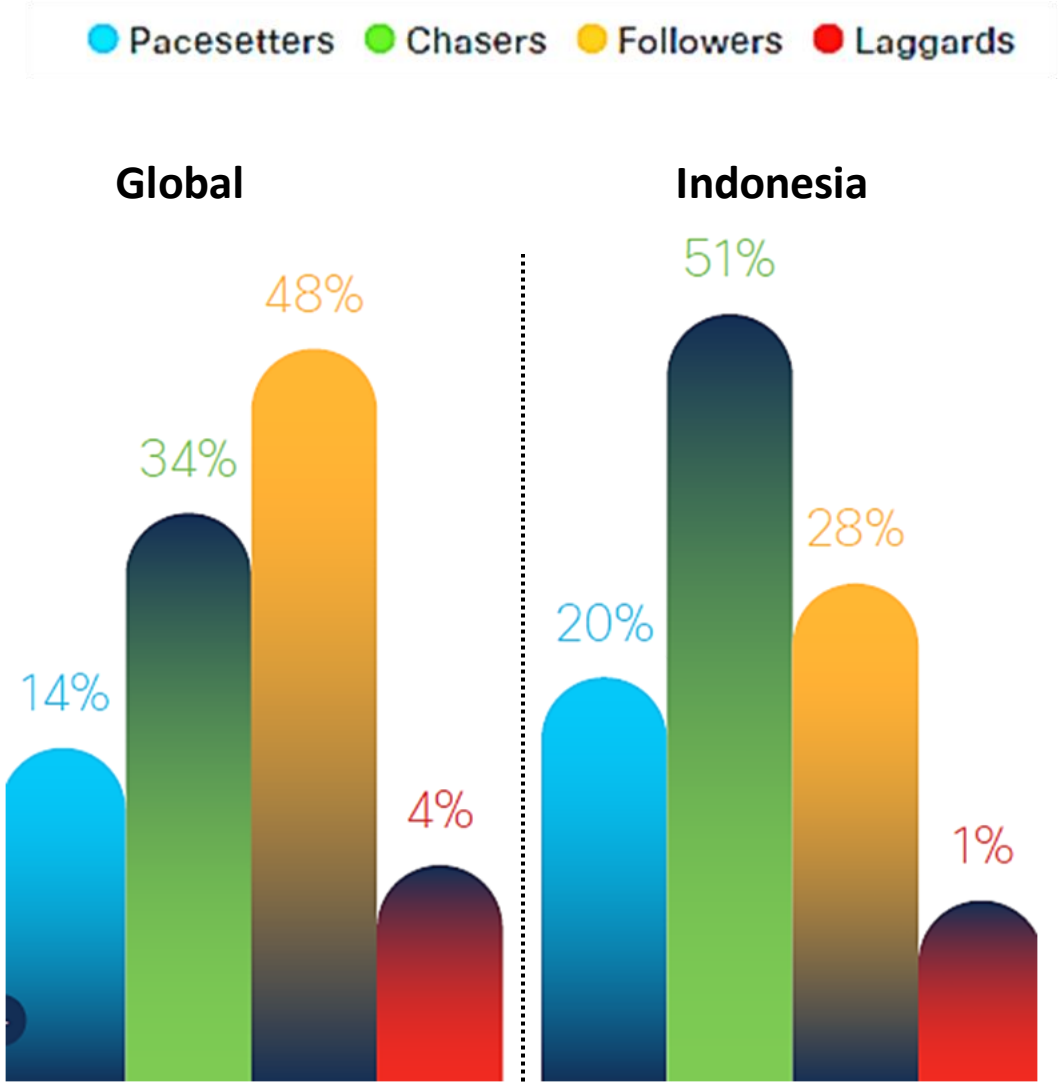
Followers
Limited Preparation

Laggards
Unprepared

Pillars of Readiness :

- Strategy
- Infrastructure
- Data
- Talent
- Governance
- Culture

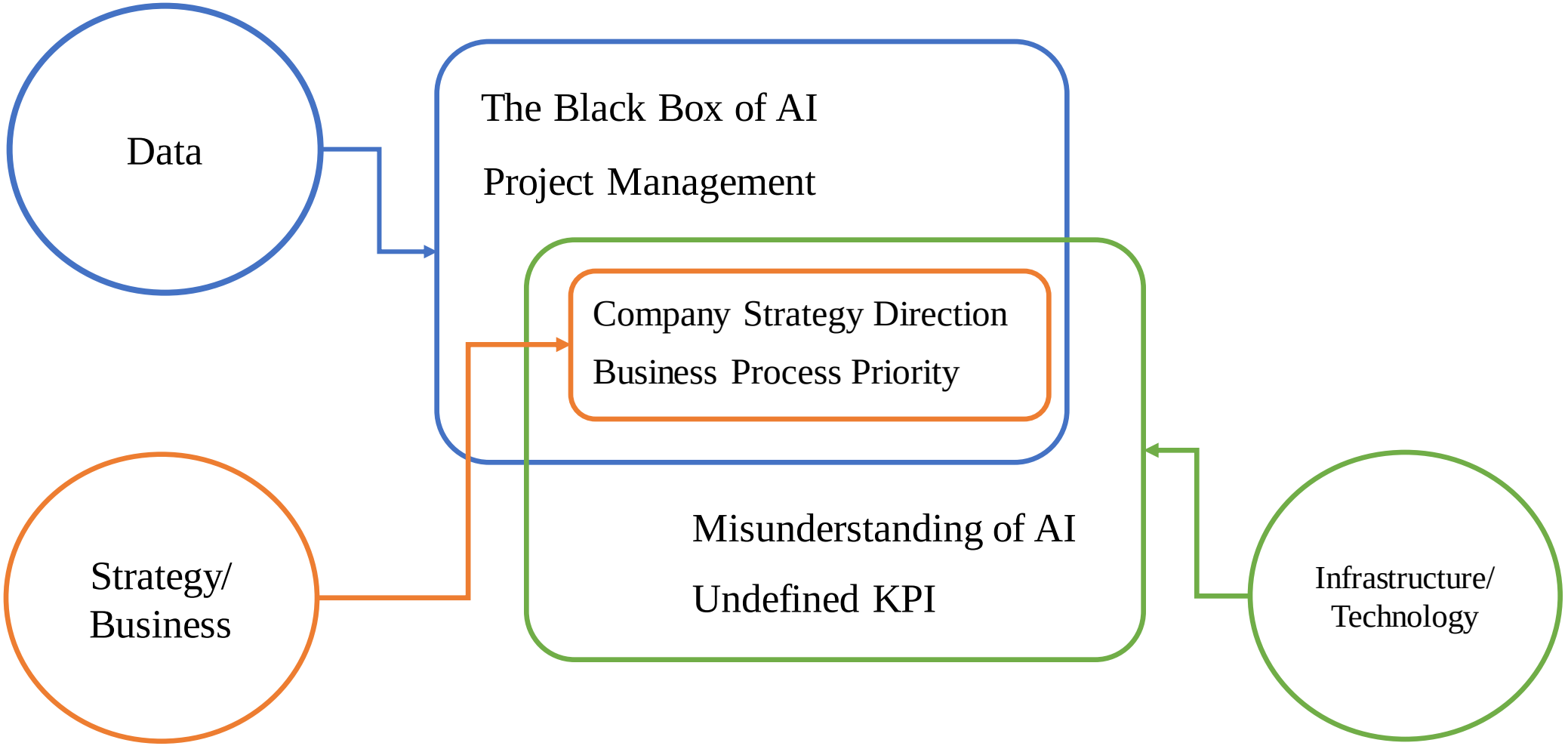
Weighted more than 50% to total readiness



AI Readiness Assessment – Retailer X

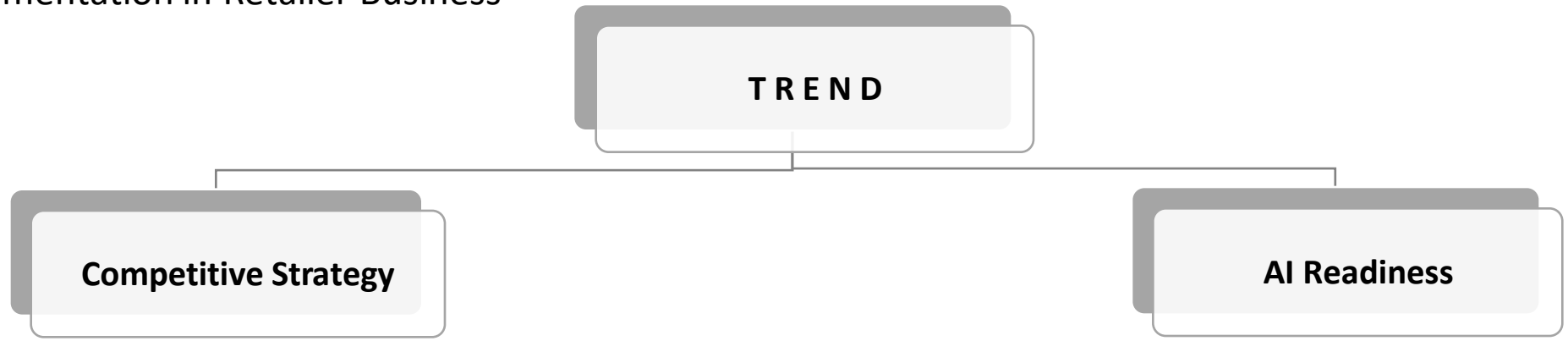
	Infrastructure	Data	Strategy
Assessment Level	Laggards	Followers	Followers
Reason of Assessment	• Misunderstanding of the capability of AI	• Inability to link AI function to internal system • Clarity in data architecture and management	• Limited data usage for commercial
Current Initiative	• Cloud centric operation • Increasing speed of computing and response	• Data lake migration plan	• Commercial data requirement completion • Elaborating digital channel for future use of AI
Challenge	• Technology adoption measurement • Transition from legacy system	• Data architecture design • Data governance	• Investment priority
Key enablers for AI implementation	• Company direction • Top leader involvement	• Business process focus • Data governance dedicated team	• Strategy focus

AI Readiness Assessment – Retailer X



Scenario Planning with TAIDA Framework - Tracking

Focal Concern :
AI Implementation in Retailer Business



- Broad target market
- Large number of competitors
- Strong buyer power
- Price sensitiveness of buyer
- Wide channel repertoire
- Moderate profit margin

- Awareness of AI trend and development in the industry
- Realization that AI will be beneficial for business
- Limited preparation for AI implementation
- Reliability to company's priority for development and implementation
- No detail plan yet on digital transformation, let alone on AI implementation

Scenario Planning - Analyzing

Positive Trend :

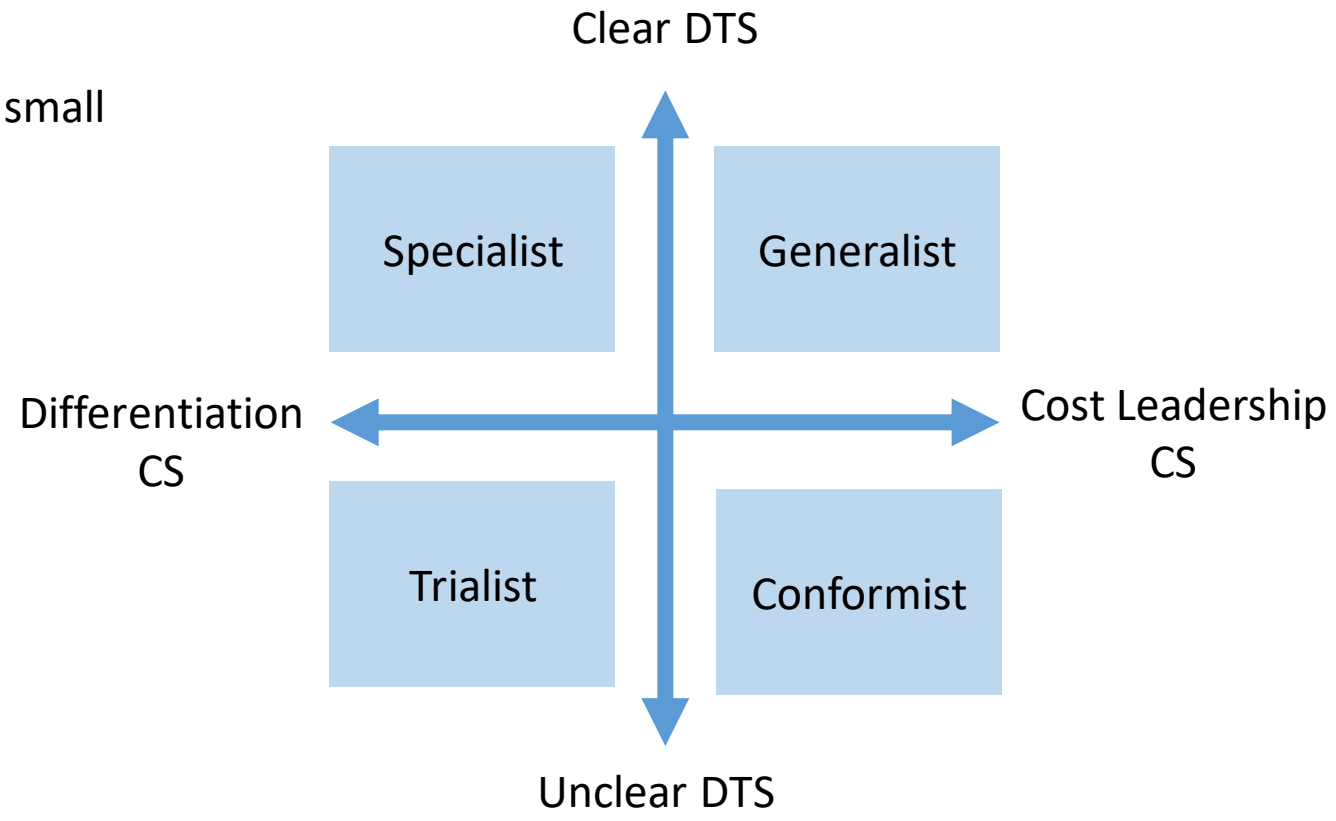
+ Realizing the need to have AI in the business
+ Awareness to acceleration of implementation
+ Willingness to invest if used case is strong, regardless small profit margin
+ The urge to stay ahead of the competition
+ Initiative taken by each business unit

Negative Trend :

- Lack of prioritizing for digital transformation
- Integration and alignment of initiative

Driving Forces :

- Competitive Strategy (CS)
- Digital Transformation Strategy (DTS)



Scenario Planning - Imaging

GENERALIST

- The company put digital transformation as its strategic plan, including AI implementation plan to the business
- Top management defined the goal of implementation
- Agreement and shared KPI amongst business unit
- Implementation focus on business process efficiency
- Scalable business is achieved due to affordable service/product offered to wide customers

SPECIALIST

- The company put digital transformation as its strategic plan, including AI implementation plan to the business
- Top management defined the goal of implementation
- Agreement and shared KPI amongst business unit
- Implementation focus on customer value proposition
- Business focuses on customer engagement, targeted marketing and personalized offer

TRIALIST

- Digital transformation is not yet on focus in company strategy
- Business process runs as usual
- On one hand, there's the need for customer engagement to endorse loyalty
- Data is already there, but not yet integrated amongst sources
- Business tries to do specialized offer based on manual behavioral tracking
- If the specialization works, it could endorse the company to have firmer digital transformation strategy

CONFORMIST

- Digital transformation is not yet on focus in company strategy
- Business process runs as usual
- Scalable business can still be achieved through affordability, but it risks price war in the industry
- As all players serve the same wide market, it triggers low customer loyalty

Scenario Planning - Deciding

Generalist

Implication	Strategy
The company put digital transformation as its strategic plan, including AI implementation plan to the business	- Top Leaders equipped themselves first with firm understanding of digital transformation and AI Implementation
Top management defined the goal of implementation	- Define the goal and milestone for definite period (as DT is actually an inifinite process)
Agreement and shared KPI amongst business unit	- If necessary, forms dedicated team/leader managing the digital transformation - Set common and shared KPI for implementation amongst business unit involved
Implementation focus on business process efficiency	- Choose business process to focus on AI Implementation, focusing on process that will impact the operational cost the most
Scalable business is achieved due to affordable service/product offered to wide customers	- With efficient operational cost, affordability increase, margin is healthy and topline sales brings direct impact to profitability

Scenario Planning - Acting

Objective : To have AI focus in digital transformation strategy that is aligned with cost leadership as competitive strategy

STEP 1

- Understanding AI
- Understanding organizational capability

- Challenge :
  - Transparency
  - Analog Process

STEP 2

- Understand current business model
- Understand potential of business model

- Challenge :
  - Misunderstanding of AI

STEP 3

- Develop and refine the capability needed to implement AI

- Challenge
  - Transparency

STEP 4

- Reach organizational acceptance
- Develop internal competencies

- Challenge :
  - Misunderstanding of AI
  - Lack of trust to AI from employees

Road Map : Step 1

Organizational Capabilities for AI Implementation and Manifestation in Practice

STEP 1

- Understanding AI
- Understanding organizational capability

- Challenge :
  - Transparency
  - Analog Process

Organizational Capability	Manifestation in Practive
AI Project Planning :	
The ability to identify, evaluate and prioritize suitable AI use cases	Developing an understanding of AI
	Systematically identifying AI use cases
	Assessing and prioritizing AI use cases
Co-Development of AI Systems :	
The ability to communicate with and integrate stakeholders into AI implementation	Integrating diverse expertise
	Translating AI models to business function
	Considering the workforce in AI implementation
Data Management :	
The ability to collect, curate and provide data for AI implementation	Making AI-relevant data available
	Collecting data for AI implementation
	Curating data for AI implementation
AI Model Lifecycle Management :	
The ability to orchestrate the evolution of AI models, including development, deployment, and maintenance	Orchestrating itirative development procedure
	Deploying AI models to multiple context
	Operating AI systems in productive use

Road Map : Step 1

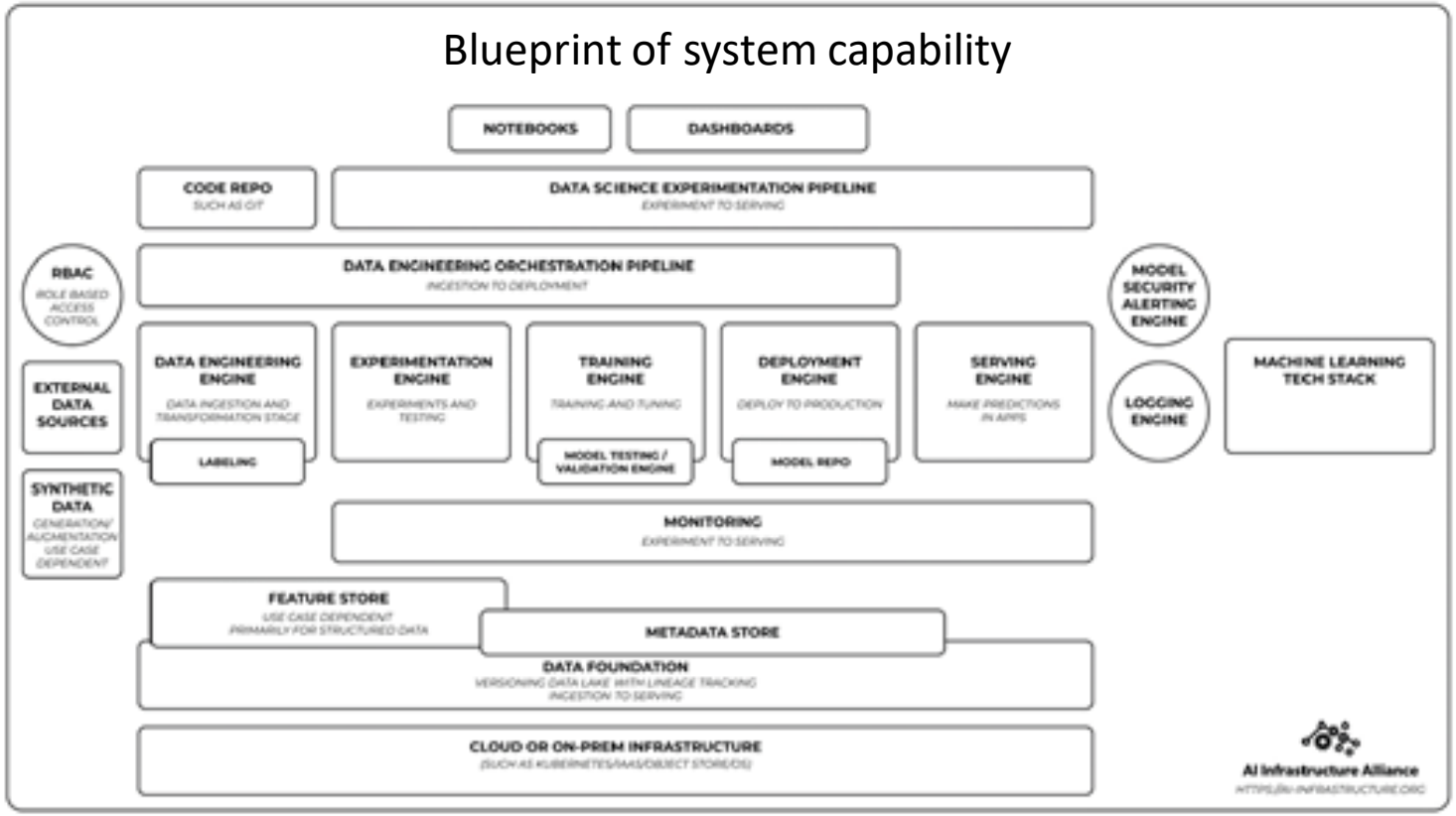
STEP 1

- Understanding AI
- Understanding organizational capability

- Challenge :
  - Transparency
  - Analog Process

Building data infrastructure approach :

- To build their own
- To buy an end-to-end
- **Best of breed**



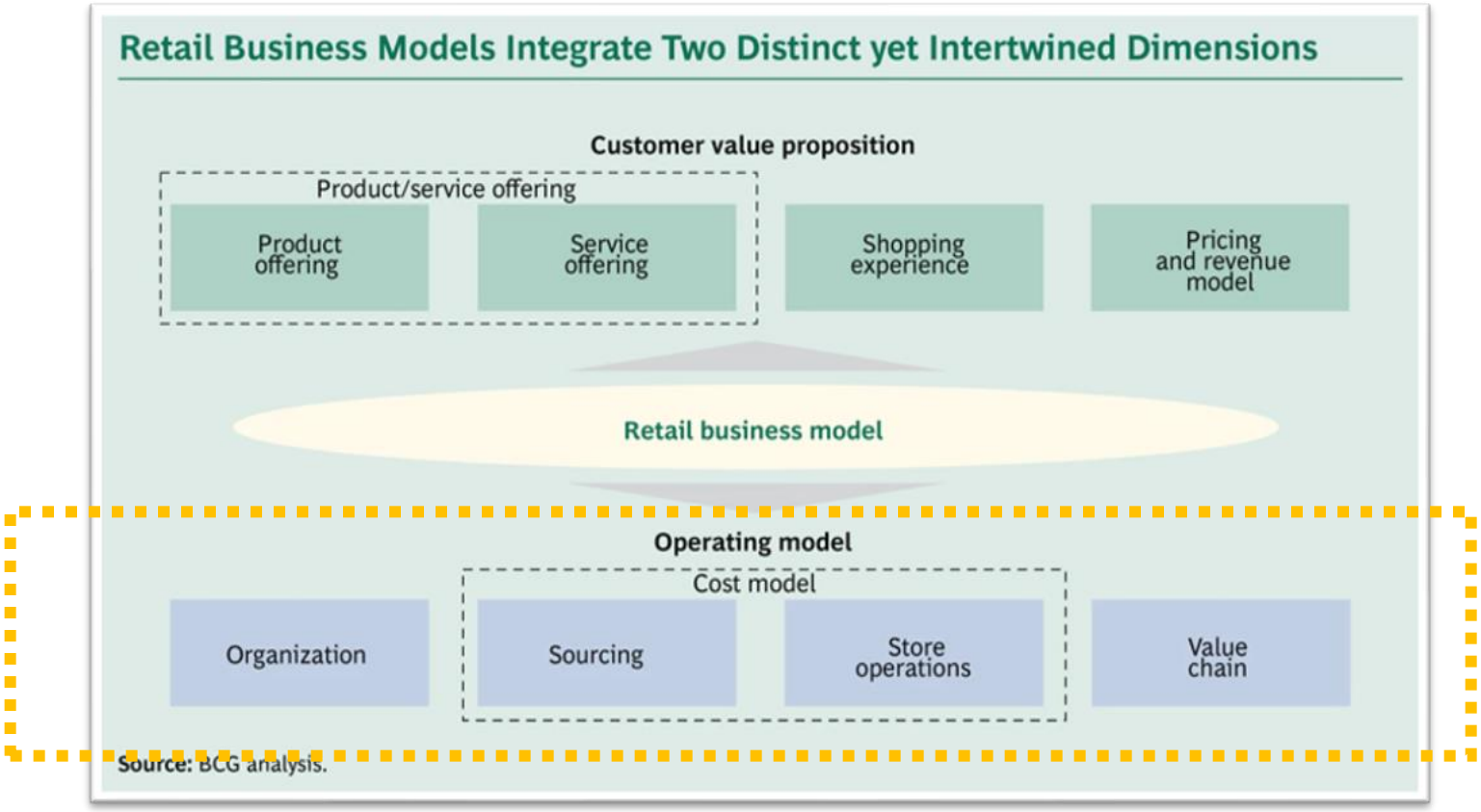
Road Map : Step 2

STEP 2

- Understand current business model
- Understand potential of business model

- Challenge :
  - Misunderstanding of AI

Focusing on the operating model first and broke down the business process for potential AI implementation



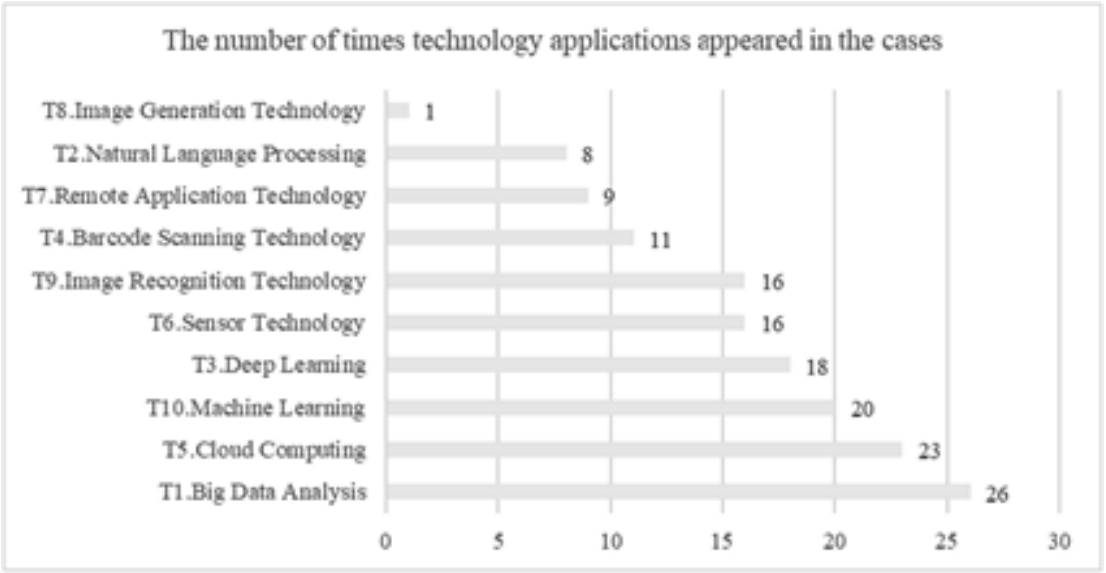
Road Map : Step 3

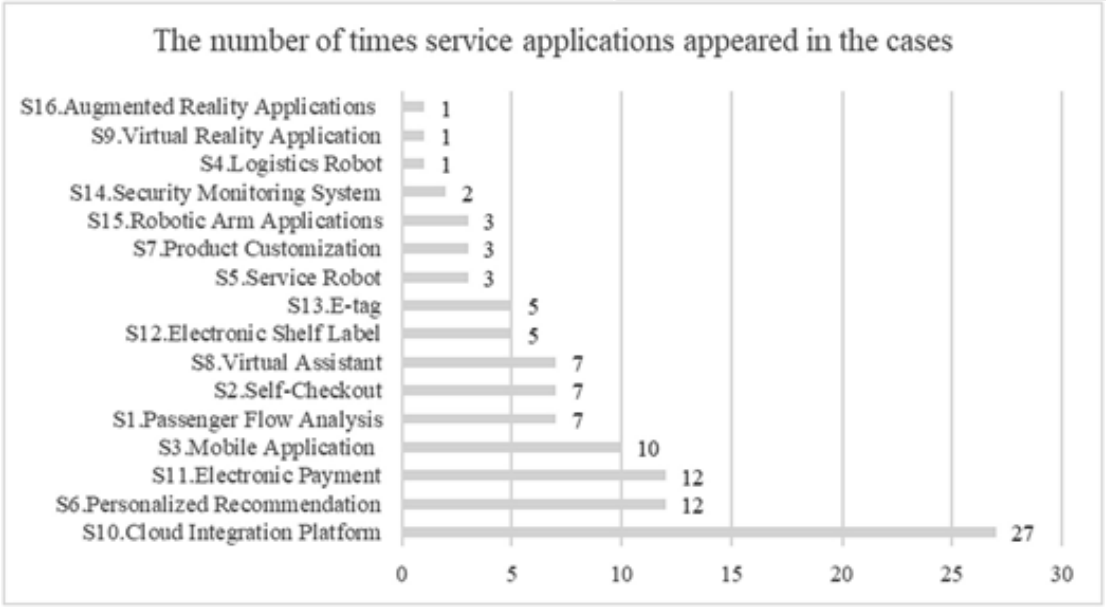
STEP 3

- Develop and refine the capability needed to implement AI

- Challenge
  - Transparency

- Technology should have their own road map on this stage





- **Big data analysis and cloud integration platform as the starting point**

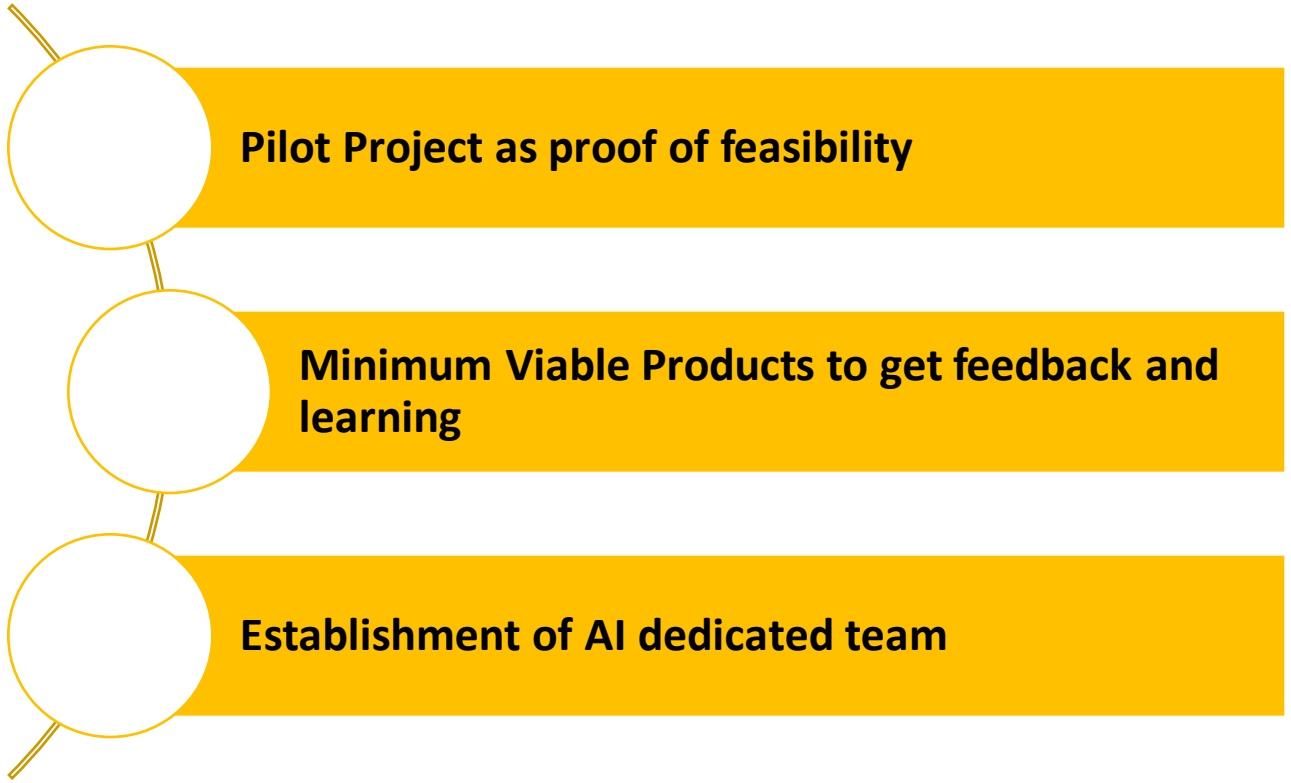
Road Map : Step 4

STEP 4

- Reach organizational acceptance
- Develop internal competencies

- Challenge :
  - Misunderstanding of AI
  - Lack of trust to AI from employees

How to get the trust that AI works and have sustainable process



Conclusion

- AI implementation readiness in retailer in Indonesia was on the Followers level, meaning the preparation was still limited. Awareness of benefit was instilled, but the practice of preparation was still at minimum level

- The scenario planning for implementation needed to consider digital transformation strategy and business model. Minimum disruption shall be reached when business model remained as the current practice

- Road map for AI implementation needed to start with strong conceptual understanding of both AI and organizational capability. This lead to top management involvement in setting the firm ground of understanding

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Research Framework