

AUTOMATION & ROBOTICS IN RETAIL

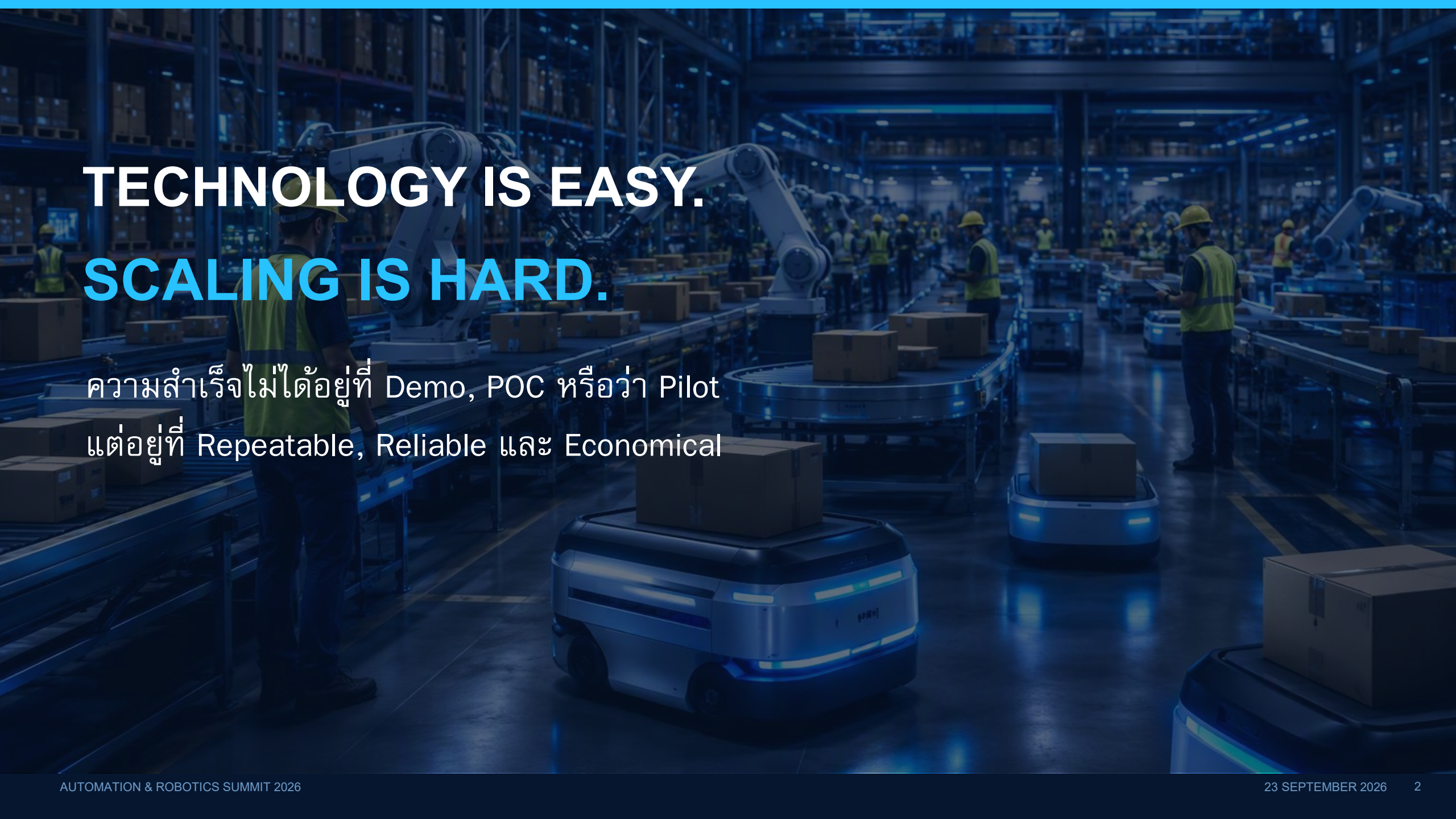
WHAT WORKS, WHAT SCALES

From Automation to Scalable Execution

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TECHNOLOGY IS EASY. SCALING IS HARD.

ความสำเร็จไม่ได้อยู่ที่ Demo, POC หรือว่า Pilot
แต่อยู่ที่ Repeatable, Reliable และ Economical

AI Is Moving Into the Physical World

Perceive

Sensor and vision

Reason

Context and real-time decisions

Act & Learn

Physical action and adaptation

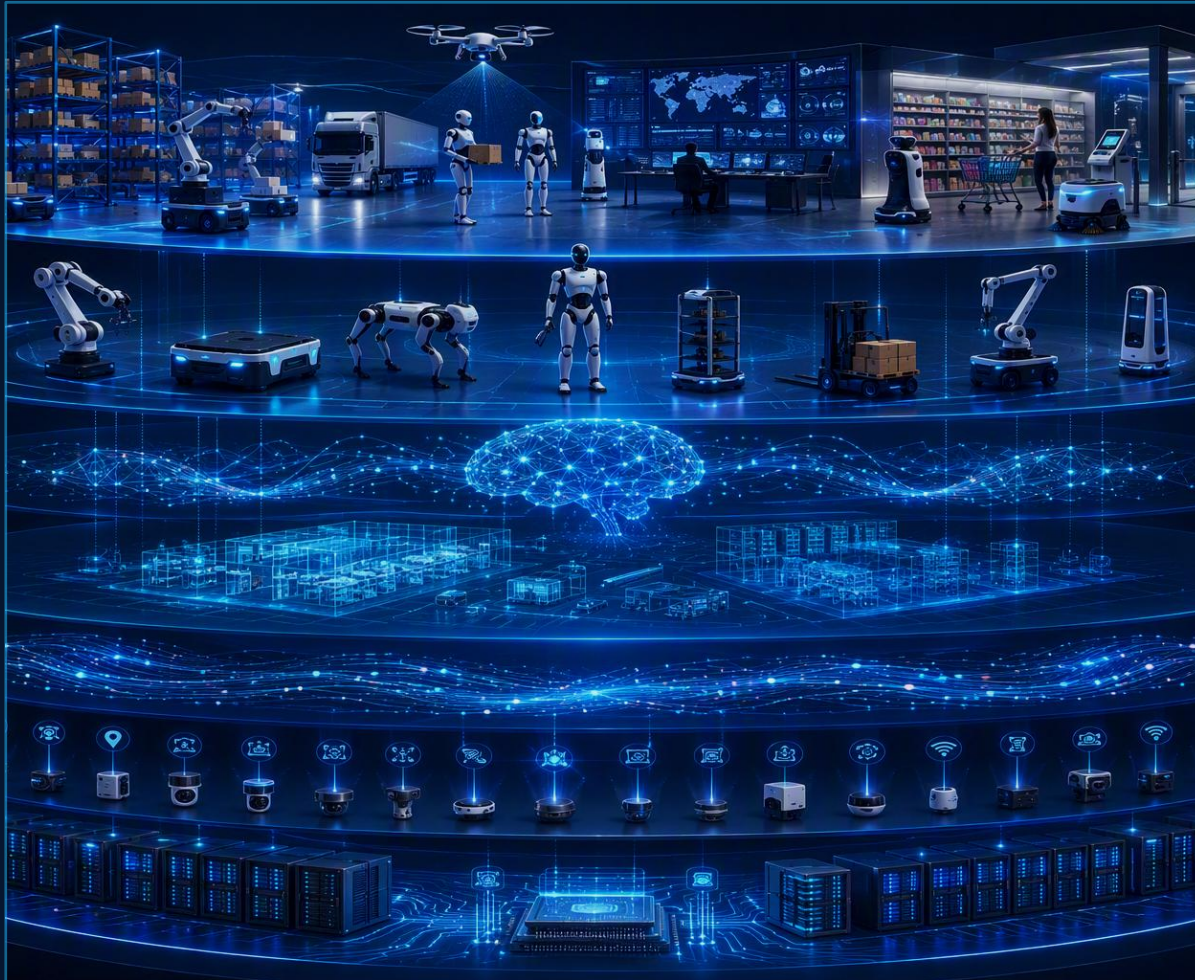




“Physical AI has arrived. Every industrial company will become a robotics company.”

“ยุคของ Physical AI ได้มาถึงแล้ว และทุกบริษัทอุตสาหกรรมจะกลายเป็นบริษัทด้านหุ่นยนต์”

Robotics Is Becoming a Full Technology Stack



06 AUTONOMOUS OPERATIONS

05 ROBOTICS

04 AI MODELS

03 DIGITAL TWIN

02 TRUSTED DATA

01 INFRASTRUCTURE (COMPUTE + CONNECTIVITY)

From Automation to Autonomous Operations

01 Physical AI has arrived



02 Humanoids are moving into Reality

03 AMR is Winning Today

04 Ai is becoming the brain of Robotics

05 Digital Twin is becoming the Training Ground



The Journey Is Moving Towards Autonomous Execution



01 AUTOMATE TASKS

02 AUTOMATE DECISIONS

03 AUTONOMOUS EXECUTION



FOUR WAVES OF DIGITAL TRANSFORMATION

The first wave of digital transformation connected systems.

The second wave connected data.

The third wave connected intelligence.

**And the next wave will connect intelligence to the physical world through
Robotics and Physical AI.**

Retail Complexity Has Outgrown Manual Execution

01 Margin pressure

02 Speed expectation

03 Omnichannel complexity

04 Workforce challenge



Automation empowers retailers to effectively manage scalability and fluctuations in the business.

Automation Must Cover the Retail Value Chain



Automate Repetitive Flow, Not Broken Process

01 **Transport & storage** Conveyor, AMR, AS/RS

02 **Sortation** Sequencing and flow

03 **Picking assistance** Reduce touch and error

04 **Inspection** Traceability and quality



The Most Valuable Robot May Be an Algorithm

01 Route optimisation

02 Dynamic dispatch

03 Load & slot planning

04 Control tower



Automate Tasks. Elevate Service.

01 Self-service

02 Shelf intelligence

03 Replenishment assist

04 Routine monitoring

04 Picking Intelligent and Route Optimization



From Automating Tasks to Automating Decisions

Connect Data, Prediction and Action to become Decision Flow



01 Demand & replenishment Predict and act

02 Assortment & pricing Optimise choices

03 Inventory balancing Coordinate the network

04 Exception priority Focus human attention

Measure What the Business Feels

01

PRODUCTIVITY

Output per labour
hour

02

SPEED

Cycle time

03

QUALITY

Accuracy &
consistency

04

SERVICE

Availability &
experience

A successful pilot proves technology. A successful scale-up proves economics and operations.

A Controlled Pilot Is Not the Real World



PILOT

- ✓ Best process
- ✓ Best people
- ✓ Clean data
- ✓ Vendor support
- ✓ Controlled exceptions

SCALE

- ! Process variation
- ! Thousands of users
- ! Legacy integration
- ! Peak & disruption
- ! Ownership gaps

Five Myths That Block Real Outcomes

1 **ซื้อ Robot = ได้ Productivity**

Productivity มาจาก Flow

2 **Pilot Success = Scale Success**

Scale มี Variation

3 **Automation = IT Project**

เจ้าของผลลัพธ์ต้องเป็น Business

4 **ROI มาจาก Technology**

ROI เกิดจาก Adoption

5 **Automation = Replace People**

เป้าหมายคือยกกระต๊อบคน

Build an Operating System for Automation and AI Native Company

01 STRATEGY Choose valuable challenge for future

02 PROCESS Reinvent and Standardize before automate

03 PEOPLE Unleash people to become Nanopreneurs

04 DATA Quality, Security, Governance

05 TECHNOLOGY Proper and economic Architecture



Stage-Gate: From Idea to Industrialised Capability

อย่าขยายผลเพราะ Pilot ดูดี ให้ขยายเมื่อผ่านหลักฐาน



Evidence: Business • Operations • Technology • People • Risk • Economics

Automation Scales When People Trust and Own It



01 Co-design

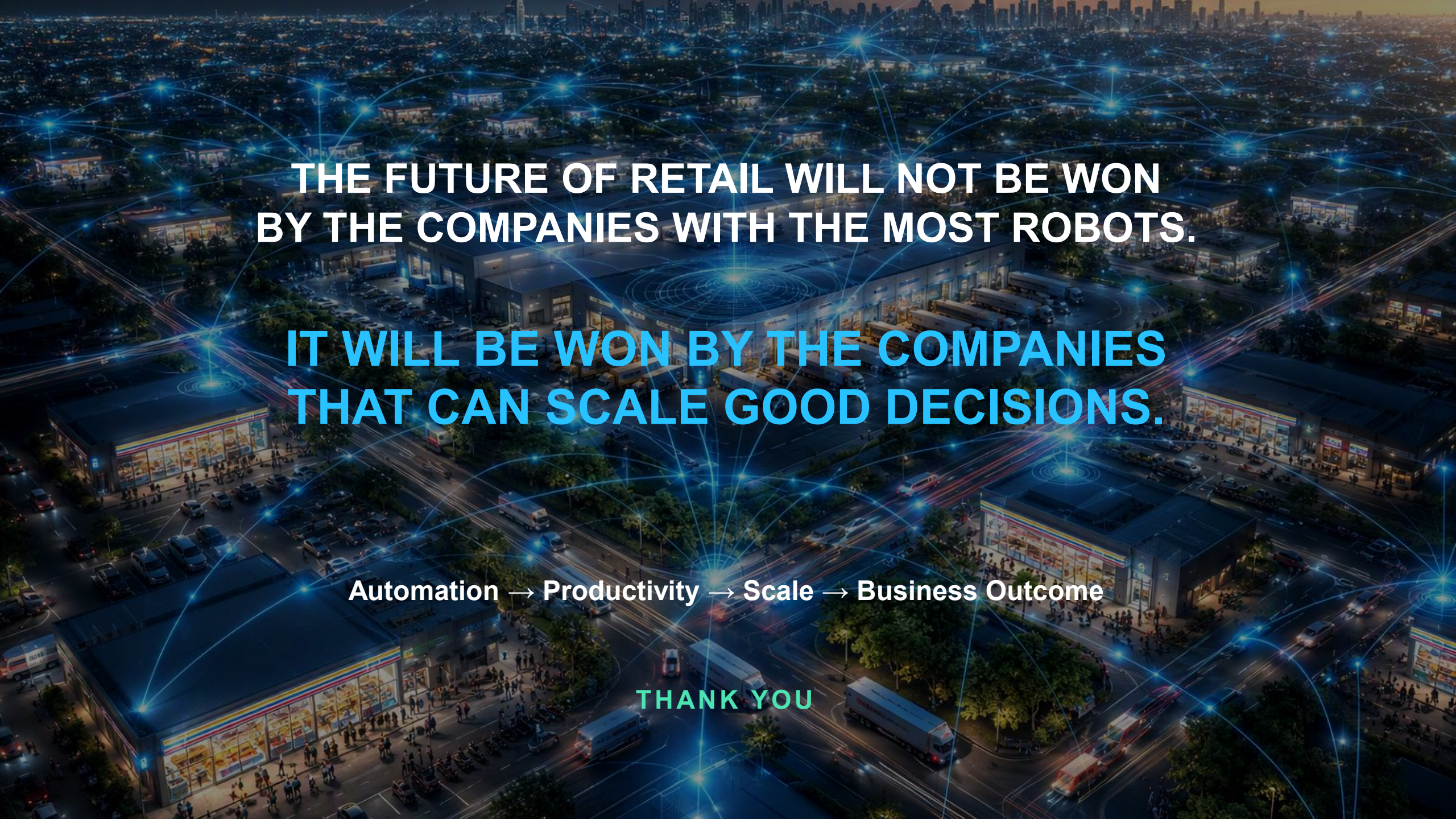
02 Decision rights

03 Capability

04 Incentives KPI

Keys Takeaway

- Start from business outcome, not technology
- Reinvent and standardize process before automate
- Pilots validate the technology; Scaling drives the business outcome
- Transformation success comes from people engagement, not just technology.



**THE FUTURE OF RETAIL WILL NOT BE WON
BY THE COMPANIES WITH THE MOST ROBOTS.**

**IT WILL BE WON BY THE COMPANIES
THAT CAN SCALE GOOD DECISIONS.**

Automation → Productivity → Scale → Business Outcome

THANK YOU