

Lessons from Real-World Cases

Sensye • Duolingo • Yunji Technology • Quibi • Cortana • Apollo Go

Case study discussion: connect AI capability to business model, adoption, data advantage, and strategic fit.

Leadership with AI – Rajendra M Sonar, IIT Bombay

A simple AI strategy lens

1	Strategic intent	Efficiency, differentiation, new market, platform control
2	Data flywheel	Can usage data improve the product and widen the moat?
3	Adoption friction	Who changes workflow? How much trust is needed?
4	Business model fit	Is willingness-to-pay aligned with AI cost and value?
5	Ecosystem readiness	Regulation, hardware, channels, partners, infrastructure

Which case has the strongest alignment across all five dimensions?

The Core Strategic Dilemma

The "AI Silver Bullet" Illusion

Enterprise enthusiasm mirrors the 1990s dot-com bubble. Organizations race to deploy LLMs and autonomous systems under the assumption that AI capability alone produces sustainable market dominance.

However, technology is merely an operational enabler. When disconnected from clear buyer utility and economic viability, AI investments result in capital destruction rather than growth.

The Strategic Reality

Competitive differentiation originates from business strategy, not compute power. Superior algorithms cannot rescue flawed business models or poorly conceived go-to-market motions.

Sustainable advantage requires synchronizing breakthrough technology with compelling buyer value, resilient margins, and broad stakeholder buy-in.

The Strategic Triad Framework



Value Proposition

Delivers exceptional utility to buyers by eliminating acute friction points, rather than forcing consumers to adopt unfamiliar, inconvenient behaviors.



Profit Proposition

Enables scalable unit economics through radical cost structure optimization, ensuring profitability without pricing out mass-market adopters.



People Proposition

Aligns employees, business partners, and broader society by augmenting human capacity rather than triggering acute socio-economic backlash.

Which case has the strongest value propositions?

Case portfolio: six firms, six strategic questions

Case	AI use case	Core strategic question	Relevance of what we have learned? Module 1 Module 2 Module 3 Module 4
Sensye	Predictive maintenance	Can AI move customers from reactive repairs to preventive decisions?	
Duolingo	Personalized learning	Can AI improve engagement, retention, and learning outcomes at scale?	
Yunji Technology	Hotel delivery robots	Can automation remove service bottlenecks without hurting hospitality?	
Quibi	Short-form video	Can premium content alone overcome distribution and habit barriers?	
Cortana	Digital assistant	Can a late entrant win without ecosystem control and daily use cases?	
Apollo Go	Robotaxi	Can autonomous mobility scale through regulation, safety, and unit economics?	

Sensye: predictive maintenance as a B2B value proposition

B2B AI

Industrial data

Strategic logic

- ✓ Turns machine data into maintenance decisions
- ✓ Reduces downtime, emergency repair, and inventory waste
- ✓ Requires trust, integration, and measurable ROI

AI advantage

Better failure prediction improves as more equipment and fault data are observed.

Adoption challenge

Maintenance teams need explainability, alerts they trust, and integration with existing workflows.

Teaching point

In B2B AI, “technical accuracy” matters less than decision impact, workflow fit, and proof of savings.

Duolingo: personalization, engagement, and learning loops

Why AI fits

High-frequency user interactions create data for personalization. The product improves through learning paths, adaptive difficulty, feedback, and content recommendations.

Business model lesson

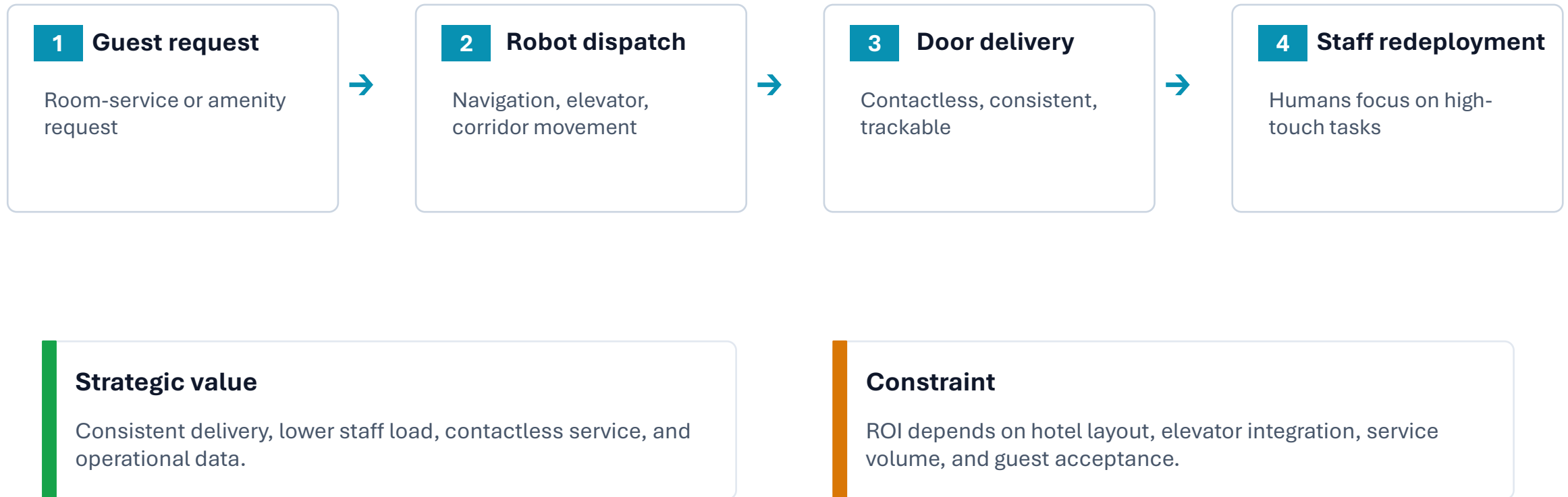
AI helps free users stay engaged while premium features monetize motivation, convenience, and progress.

Strategic risk

Engagement metrics can conflict with learning outcomes. The firm must balance habit formation with genuine educational value.

Yunji Technology: service robots inside hotels

The robot is not just “automation”; it is a service process redesign.



Quibi: strong content, weak strategic fit

Core issue: the product competed for attention without a compelling habit, distribution advantage, or social/content flywheel.

Assumption

Hollywood-quality short videos would create paid mobile demand.

Mismatch

Consumers already had low-friction alternatives: YouTube, TikTok, Instagram, and streaming bundles.

Lesson

Content investment cannot substitute for a strong consumption context, network effects, and customer acquisition discipline.

Discussion: Was Quibi a product problem, a timing problem, or a strategy problem?

Cortana: why AI assistants need ecosystem power

- Voice assistants rely on daily repeated use cases, not occasional novelty
- Ecosystem control matters: mobile OS, devices, apps, search, and smart-home partners
- A late entrant struggles when rivals own stronger consumer touchpoints
- Enterprise repositioning can preserve value, but the original consumer assistant vision weakens

Strategic diagnosis

The bottleneck was not only AI quality; it was access to user context and habitual interaction.

Class contrast

Compare with Duolingo: clear daily habit + feedback loop + measurable user progress.

Lesson

For consumer AI, distribution and ecosystem access can be more decisive than model capability.

Apollo Go: scaling robotaxis is a systems problem

Technical

Safety in complex city environments
Edge cases and reliability
Fleet operations and remote support

Regulatory

Permits, liability, safety reporting
City-by-city approvals
Public trust and incident response

Economic

Vehicle cost and utilization
Pricing vs alternatives
Path to sustainable unit economics

Teaching point: Autonomous mobility is not just an AI product; it is AI + regulation + hardware + infrastructure + operations.

What separates stronger and weaker AI strategies?

Stronger patterns

- Clear problem with measurable economic value
- Frequent data feedback loop
- AI embedded into existing workflow or habit
- Business model aligned with delivered value
- Execution path does not depend on too many external blockers

Weaker patterns

- Technology-led solution looking for a market
- Weak distribution or ecosystem position
- High customer acquisition cost
- Limited user habit or unclear willingness-to-pay
- Regulation, infrastructure, or trust constraints ignored

Case comparison matrix for classroom discussion

Dimension	Sensye	Duolingo	Yunji	Quibi	Cortana	Apollo Go
Problem clarity	High	High	Medium	Low	Medium	High
Data flywheel	Medium	High	Medium	Low	Medium	High
Adoption friction	Medium	Low	Medium	High	High	High
Monetization fit	High	High	Medium	Weak	Weak	Unproven
Ecosystem dependency	Medium	Low	High	High	High	Very high

Challenge the ratings and defend one change with evidence from the case.

Strategic Alignment Scorecard

Initiative	Value Proposition	Profit Proposition	People Proposition	Outcome
Senseye	Cuts million-dollar downtime	Scalable SaaS on sensor data	Augments maintenance teams	✓ High Success
Duolingo	Personalized, bite-sized study	AI slashes content costs	Broad accessible learning	✓ High Success
Yunji Robots	Rapid on-demand room delivery	Reduces hotel staffing strain	Assists, does not replace staff	✓ High Success
Quibi	Forced viewing format & paywall	Massive production burn	Restricted sharing/creators	✗ Rapid Collapse
Cortana	Awkward desktop voice utility	High R&D, low monetization	Ignored hardware ecosystem	✗ Abandoned

Breakout activity: redesign one challenged model

Choose Quibi, Cortana, or Apollo Go. Redesign the strategy using the five-part AI strategy lens.

1. What customer problem will you narrow down to?
2. What data flywheel or ecosystem asset can you build?
3. How will you reduce adoption friction?
4. What business model will monetize value?
5. What 90-day experiment would validate the new strategy?

Final synthesis: AI strategy lessons

AI must be linked to a concrete business wedge

Start with a painful problem, not with a fashionable technology.

Data advantage compounds only when usage repeats

The best AI strategies create learning loops, not one-off deployments.

Adoption is strategic, not operational

Trust, workflow integration, and behavior change determine value capture.

Ecosystem constraints can dominate model quality

Regulation, distribution, hardware, and partners can make or break AI businesses.

Closing question: Which firm had the best AI capability but the weakest strategy?