AI PROJECT DECISION FRAMEWORK

AI Leadership & Project Management Masterclass

Curtin University

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AI PROJECT DECISION FRAMEWORK

Reference Sheet - Keep This Handy

When evaluating whether to **SCALE**, **PIVOT**, or **KILL** an AI pilot project:

SCALE IT - When You See:

Financial Indicators:

- Clear, measurable ROI (typically >200% for first year)
- Benefits exceed costs by significant margin

- Costs to scale are predictable and manageable
- Business case strengthens at scale (economies of scale)

Technical Performance:

- System performs reliably (>95% uptime)
- Accuracy meets or exceeds targets consistently
- Technical debt is manageable
- Can integrate with existing systems without major refactoring
- Maintenance requirements are sustainable

Organisational Readiness:

- Stakeholders actively support and champion it
- End users want to keep using it (not just tolerating it)
- Clear ownership and maintenance plan exists
- Team has capability to support at scale
- Change management has been successful

Customer/User Impact:

- Positive impact on customer or employee experience
- Satisfaction metrics improving or stable
- No significant ethical concerns or unintended consequences
- Complaints are minor and manageable

Strategic Alignment:

- Aligns with long-term business strategy
- Creates sustainable competitive advantage
- Scalable without major redesign
- Addresses a real business problem (not just "AI for AI's sake")

Red Flags to Watch Even When Scaling:

- Vocal minority with strong opposition (may indicate larger issues)
- Success depends heavily on one person or team
- Unclear what happens at 10x volume or usage
- Brittle integration with other systems
- Hidden dependencies or technical debt

PIVOT IT - When You Need To:

Core concept has merit, but execution needs adjustment.

Common Pivot Scenarios:

1. Wrong Scope Pivot

Problem: Too ambitious or too narrow to prove value

Example: Tried to automate all customer queries → Pivot to automating just order tracking

Action: Narrow scope to winnable subset OR expand to capture enough value

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2. Wrong Metric Pivot

Problem: Optimizing for the wrong outcome, creating unintended consequences

Example: AI reduced labour costs but destroyed service quality and morale

Action: Change success criteria and retrain model with new objectives

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3. Wrong Audience Pivot

Problem: Built for the wrong users or use case

Example: Built AI assistant for executives, but frontline staff need it more

Action: Redesign for different user group or use case

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4. Wrong Approach Pivot

Problem: Technical approach or human-AI interaction model is flawed

Examples:

- AI makes autonomous decisions → Pivot to AI suggests, human decides
- Batch processing → Pivot to real-time
- Fully automated → Pivot to augmented/assisted

Action: Change the fundamental interaction model

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5. Wrong Timing Pivot

Problem: Organisation or market not ready, prerequisites missing

Examples:

- Data quality issues need fixing first
- Team needs training before adoption
- Market regulation pending

Action: Pause, fix prerequisites, relaunch when ready

Pivot vs. Kill Decision:

PIVOT when:

- Core value proposition is sound
- Problems are fixable with reasonable effort
- Stakeholders still believe in the potential
- Learning justifies continued investment

KILL when: - Fundamental concept is flawed - Fixes would require starting over anyway - Stakeholders have lost faith - Better opportunities exist for the resources

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KILL IT - When You Must:

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Financial Red Flags:

- ROI is negative or marginal with no realistic path to improvement
- Costs exceed benefits even in best-case scenarios
- Opportunity cost too high (resources better used elsewhere)
- Diminishing returns with more investment

Technical Blockers:

- Fundamental technical limitations that can't be overcome
- "It just doesn't work" despite multiple attempts to fix
- Technical debt is unmanageable or growing
- Required accuracy/performance is unachievable with current technology

Organisational Resistance:

- Widespread, persistent resistance that won't budge
- Creating more problems than it solves
- No one wants to own or maintain it
- Key sponsor has left or withdrawn support
- Political damage outweighs potential benefits

Customer/User Harm:

- Actively harming customer or employee experience
- Significant ethical issues identified that can't be mitigated
- Brand or trust damage occurring
- Regulatory or legal risks are too high
- Safety concerns

Strategic Misalignment:

- No longer aligns with business direction
- Competitor has solved this better/cheaper (can't catch up)
- Market has moved on or problem is no longer relevant
- Wrong problem to solve (addressing symptom, not cause)

When Killing is the RIGHT Answer:

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Remember: **Killing a bad project is success, not failure.**

You should kill when:

- You're throwing good money after bad
- Sunk cost fallacy is driving decisions ("we've invested too much to quit")
- "We've come too far to stop now" is the main argument
- Everyone is secretly relieved when you suggest killing it
- You're scaling problems instead of solutions

How to Kill Gracefully:

1. **Document lessons learned** comprehensively
2. **Celebrate the team's effort** (they tried, learned valuable insights)
3. **Extract reusable components** (code, data, knowledge)
4. **Communicate clearly** why you're killing it
5. **Don't punish the team** for intelligent failure
6. **Share insights** so others learn from this

Frame it as: "We learned this doesn't work, which is valuable. Now we can invest in what does work."

THE CRITICAL QUESTIONS

Ask yourself these before making a decision:

1. The Honesty Test

"If I were starting from zero today, knowing what I know now, would I launch this project?"

- If NO → Strong signal to KILL
- If MAYBE → Consider PIVOT

- If YES → Consider SCALE

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2. The Resource Test

"What else could we do with these people, budget, and time?"

- If answer is more compelling than current project → KILL or PIVOT
- If this is still the best use → SCALE

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3. The Founder Test

"If this were my personal money, would I invest more?"

- If NO → Why are you investing company money?
- If YES → You believe in it

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4. The Reputation Test

"If this fails publicly at scale, what happens to the company/brand/team?"

- If catastrophic → Don't scale yet (or ever)
- If manageable → Consider the risk

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5. The Grandmother Test

"Can I explain why this is good for customers to my grandmother in simple terms?"

- If you're doing mental gymnastics → Ethical red flag
- If explanation is straightforward → Probably sound

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6. The Time Test

"Will I be proud of this decision in one year? In five years?"

- If unsure → Gather more data or reconsider
- If confident → Proceed

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7. The Stakeholder Test

"Can I defend this decision to all stakeholders: customers, employees, shareholders, regulators?"

- If NO to any critical stakeholder → Reconsider
- If YES to all → Strong foundation

COMMON DECISION TRAPS TO AVOID

Sunk Cost Fallacy

Trap: "We've already spent $300K, we can't quit now"

Fix: Judge only by future costs vs. future benefits. Past spending is gone regardless.

Metric Fixation

Trap: "ROI is positive, so we must scale it"

Fix: Look at broader impact - customer satisfaction, employee morale, brand equity, long-term effects

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Hope-Based Planning

Trap: "These problems will work themselves out at scale"

Reality: Problems typically get WORSE at scale, not better

Fix: Assume current problems will amplify 10x

Perfection Paralysis

Trap: "Let's wait until it's perfect before scaling"

Fix: 80% good with momentum often beats 95% good that's late. Perfect is the enemy of good.

Executive Pressure

Trap: "CEO wants this, so we must scale regardless of evidence"

Fix: Your job is honest recommendations, not telling leaders what they want to hear

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Personal Investment

Trap: "I've worked on this for a year, my ego is attached, it must succeed"

Fix: Separate your ego from outcomes. Killing bad projects is wise leadership.

Confirmation Bias

Trap: "I'll focus on the positive data and ignore warning signs"

Fix: Actively seek disconfirming evidence. What would prove you wrong?

Groupthink

Trap: "Everyone agrees we should scale, so it must be right"

Fix: Assign someone to play devil's advocate. Seek diverse perspectives.

REMEMBER

Three Core Principles:

1. **Killing a bad project is success, not failure**
   - It frees resources for better opportunities
   - It demonstrates good judgment
   - It protects the organisation
2. **Pivoting shows learning, not weakness**
   - Adapting to evidence is smart
   - Stubborn persistence can be dangerous
   - Flexibility is strength
3. **Scaling the wrong thing is the biggest mistake**

- Amplifies problems 10x
- Harder to unwind once at scale
- Damages credibility for future AI initiatives

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FINAL WISDOM

> "The cost of being wrong about scaling is much higher than the cost of being wrong about killing."
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> "When in doubt, run another small experiment rather than scaling prematurely."
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> "Data-driven decisions are good. Values-driven decisions are essential. Best decisions combine both."

Use this framework, but remember:
Judgment, context, and values matter as much as metrics. There's rarely a perfect answer, but there's always a defensible decision based on clear reasoning.

Keep this reference sheet. Use it for every AI project decision you face.