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

Organizational 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 labor 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: Organization 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:

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

Organizational 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:

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
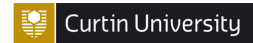
Fix: Assume current problems will amplify 10x

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 organization

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

FINAL WISDOM

"The cost of being wrong about scaling is much higher than the cost of being wrong about killing."

"When in doubt, run another small experiment rather than scaling prematurely."

"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.