RADIANT AGILITY TECHNOLOGY

Your Partner in Agile Excellence

🤖 AI Prompts Library for Hypothesis-Driven Development

Turn Ideas into Testable Experiments with AI Assistance

🎯 How to Use This Prompts Library

1. **Choose the prompt** that matches your current need
2. **Replace bracketed sections** with your specific context
3. **Copy and paste** into your favorite AI tool (ChatGPT, Claude, etc.)
4. **Refine the output** with your domain expertise
5. **Use results** as starting point for team discussions

🚀 Hypothesis Generation Prompts

Feature Hypothesis Generator

Generate multiple testable hypotheses for a new product feature

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Generate 3-5 testable hypotheses for this product feature: Feature Concept: [Describe your feature idea] Target Users: [Who will use this feature?] Current User Problem: [What pain point does this solve?] Business Context: [Company goals, market position, constraints] Success Metrics Available: [What can you measure?] For each hypothesis, provide: 1. Clear hypothesis statement in "We believe that X for Y will achieve Z" format 2. Specific success criteria with metrics and timeframes 3. Potential risks or counter-metrics to monitor 4. Suggested experiment approach (A/B test, prototype, survey, etc.) 5. Estimated experiment duration and effort
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Focus on hypotheses that are:

- Specific and measurable
- Achievable within 2-8 weeks
- Aligned with business objectives
- Testable with available resources

User Behavior Hypothesis Creator

Create hypotheses focused on changing user behavior patterns

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Help me create hypotheses about changing user behavior: Current User Behavior: [What users do now] Desired User Behavior: [What you want users to do instead] Proposed Intervention: [How you plan to influence behavior change] User Motivation Factors: [What drives these users?] Barriers to Change: [What prevents the desired behavior?] Generate hypotheses that explore: 1.
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Adoption rate predictions (what % will try the new behavior?) 2. Retention predictions (what % will stick with it?) 3. Segmentation insights (which user types will respond best?) 4. Unintended consequences (what unexpected behaviors might emerge?) 5. Timeline predictions (how quickly will change occur?) Include both optimistic and conservative scenarios, with reasoning for each.
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Business Impact Hypothesis Designer

Create hypotheses focused on business outcomes and ROI

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Create business impact hypotheses for this initiative: Initiative: [Describe what you're building/changing] Business Goals: [Revenue, cost reduction, efficiency, etc.] Target Market/Users: [Who is affected?] Current Baseline Metrics: [What are current performance numbers?] Investment Required: [Time, money, resources needed] Timeline: [When do you need to see results?] Develop hypotheses covering: 1. Revenue impact (direct and indirect revenue effects) 2. Cost implications (implementation costs vs. operational savings) 3. User/customer impact (satisfaction, retention, acquisition) 4. Operational efficiency (time savings, process improvements) 5. Strategic positioning (competitive advantage, market share)
```

For each hypothesis, include:

- Quantified predictions with confidence ranges
- Leading indicators (early signals of success/failure)
- Lagging indicators (long-term business impact)
- Break-even analysis and ROI projections

📊 Experiment Design Prompts

A/B Test Designer

Design comprehensive A/B tests with statistical rigor

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Design an A/B test to validate this hypothesis:
Hypothesis: [Your specific hypothesis statement]
Target Metric: [Primary metric you want to improve]
Current Performance:
[Baseline numbers for your metric] Minimum Detectable
Effect: [Smallest improvement you care about]
Available Traffic/Users: [How many users can
participate?] Test Duration Constraints: [How long can
you run the test?] Design recommendations for: 1. Test
variants (Control vs. Treatment descriptions) 2.
Traffic allocation strategy (what % to each variant) 3.
Sample size calculation (how many users needed for
statistical significance) 4. Primary and secondary
metrics to track 5. Guardrail metrics (things that
shouldn't get worse) 6. Statistical analysis plan
(significance thresholds, multiple testing corrections)
7. Early stopping criteria (when to end test early for
strong signals)
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Include implementation considerations:

- Technical requirements for variant delivery
- User experience consistency across variants
- Potential bias sources and mitigation strategies
- Quality assurance checkpoints

MVP Experiment Planner

Design minimum viable product experiments for rapid learning

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Help me design an MVP experiment for this concept:
Product/Feature Concept: [What you want to validate]
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Key Assumptions to Test: **[List your riskiest assumptions]** Target User Segment: **[Who will test this MVP?]** Success Criteria: **[How will you know if it works?]** Resource Constraints: **[Time, budget, team capacity limits]** Technical Constraints: **[Platform, integration, skill limitations]** Recommend: 1. MVP scope (minimum features needed to test key assumptions) 2. Experiment methodology (prototype, landing page, manual process, etc.) 3. User recruitment strategy (how to find test participants) 4. Data collection plan (what to measure and how) 5. Timeline and milestones (experiment phases and checkpoints) 6. Success/failure decision criteria (when to pivot, persevere, or stop) 7. Learning capture framework (how to document insights) Focus on the fastest, cheapest way to get reliable learning about your riskiest assumptions.

Multivariate Test Optimizer

Design complex multivariate tests for optimizing multiple elements

Design a multivariate test for optimizing multiple elements: Page/Feature to Optimize: **[What you're testing]** Elements to Test: **[List the variables you want to change]** Current Performance: **[Baseline conversion/success rate]** Business Impact Goal: **[What improvement would be meaningful?]** Technical Constraints: **[Any limitations on implementation?]** For each element, suggest: 1. Specific variations to test (2-3 options per element) 2. Hypothesis for why each variation might perform better 3. Interaction effects to watch for (how elements might work together) Provide: 1. Full test matrix (all possible combinations) 2. Traffic requirements (sample size for each combination) 3. Statistical analysis approach (main effects vs. interactions) 4. Implementation complexity assessment 5. Recommendation on whether to run multivariate vs. sequential A/B tests 6. Success metrics and guardrails for the test Consider both statistical rigor and practical implementation constraints.

🔬 Analysis and Learning Prompts

Experiment Results Analyzer

Analyze experiment results and extract actionable insights

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Analyze these experiment results and help me draw insights: Experiment Hypothesis: [Original hypothesis statement] Test Duration: [How long the experiment ran] Sample Size: [Number of participants in each group] Results: - Primary Metric: Control [X]%, Treatment [Y]% (p-value: [Z]) - Secondary Metric 1: Control [A]%, Treatment [B]% - Secondary Metric 2: Control [C]%, Treatment [D]% - Guardrail Metrics: [Any concerning changes?] Additional Context: - User Feedback: [Qualitative feedback received] - Implementation Issues: [Any technical problems during test?] - External Factors: [Seasonality, marketing campaigns, etc.] Provide analysis on: 1. Statistical significance and practical significance 2. Confidence intervals and effect size interpretation 3. Segment analysis suggestions (which users responded best?) 4. Potential confounding factors or alternative explanations 5. Recommendations: scale, iterate, pivot, or stop? 6. Key learnings for future experiments 7. Updated beliefs about user behavior/preferences 8. Next experiment suggestions based on results Be objective about both positive and negative results.
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Learning Synthesizer

Synthesize insights from multiple experiments into strategic guidance

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Synthesize learnings from multiple experiments: Experiments Completed: 1. [Experiment 1]: [Brief description and key results] 2. [Experiment 2]: [Brief description and key results] 3. [Experiment 3]: [Brief description and key results] [Add more experiments as needed] Product/Feature Area: [Common theme across experiments] User Segment Focus: [Target users across experiments] Business Objective: [Overall
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goal these experiments support] Help me identify: 1. Consistent patterns across experiments (what worked repeatedly?) 2. Contradictory findings (where results conflicted and why?) 3. User behavior insights (what have we learned about user preferences?) 4. Business model implications (how do findings affect strategy?) 5. Technical insights (implementation challenges or successes) 6. Segmentation opportunities (which user groups respond differently?) 7. Prioritization guidance (what to test next based on learnings?) 8. Product strategy updates (how should these learnings change our roadmap?) Create a coherent narrative that connects individual experiment learnings into broader strategic insights.

Hypothesis Refinement Assistant

Refine and update hypotheses based on new information and learnings

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Help me refine these hypotheses based on new information: Original Hypotheses: 1. [Hypothesis 1 and its results/status] 2. [Hypothesis 2 and its results/status] 3. [Hypothesis 3 and its results/status] New Information: - User Research Findings: [Recent insights about user needs/behavior] - Market Changes: [Competitive moves, industry trends, economic factors] - Technical Learnings: [Implementation challenges or capabilities discovered] - Business Priority Shifts: [New goals or constraints] Help me: 1. Update existing hypotheses based on new information 2. Identify assumptions that need retesting 3. Generate new hypotheses based on recent learnings 4. Prioritize hypotheses by potential impact and confidence level 5. Suggest different experimental approaches for updated hypotheses 6. Identify knowledge gaps that require more research
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Focus on hypotheses that:

- Address the most critical business questions
- Can be tested efficiently with available resources
- Build on previous learnings rather than starting from scratch
- Account for changed circumstances or new constraints

🎯 Strategic Planning Prompts

Hypothesis Roadmap Builder

Create a strategic roadmap for hypothesis testing and learning

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Create a hypothesis-testing roadmap for this product area: Product/Feature Area: [What part of your product?] Business Objectives: [What business outcomes do you need?] Current User Research: [What you know about user needs] Technical Constraints: [Platform limitations, integration needs] Resource Availability: [Team capacity, budget, timeline] Risk Tolerance: [How much uncertainty can you handle?] Create a 3-6 month roadmap that: 1. Prioritizes hypotheses by potential business impact 2. Sequences experiments to build on each other's learnings 3. Balances quick wins with longer-term strategic questions 4. Accounts for resource constraints and technical dependencies 5. Includes validation gates (go/no-go decision points) 6. Plans for both success and failure scenarios For each experiment in the roadmap: - Hypothesis being tested - Success criteria and measurements - Estimated effort and timeline - Dependencies on other experiments - Risk mitigation strategies - Learning objectives beyond the primary hypothesis Ensure the roadmap creates a coherent learning journey toward your business objectives.
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Risk Assessment Framework

Assess and mitigate risks in hypothesis-driven experiments

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Assess the risks of these product hypotheses and experiments: Hypotheses to Evaluate: 1. [Hypothesis 1 with planned experiment approach] 2. [Hypothesis 2 with planned experiment approach] 3. [Hypothesis 3 with planned experiment approach] Business Context: - Company Stage: [Startup, growth, mature company?] - Market Position: [Competitive landscape] - User Base: [Size and loyalty of current
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users] - Revenue Model: [How you make money] - Key Stakeholders: [Who cares about these experiments?] Evaluate risks in these categories: 1. Technical Risk (implementation complexity, system stability) 2. User Experience Risk (potential negative impact on users) 3. Business Risk (revenue impact, competitive disadvantage) 4. Opportunity Cost Risk (what you're not doing instead) 5. Reputation Risk (brand impact, customer trust) For each risk: - Probability of occurrence (High/Medium/Low) - Potential impact if it happens (High/Medium/Low) - Mitigation strategies to reduce probability or impact - Early warning indicators to watch for - Contingency plans if risk materializes Recommend risk-adjusted prioritization of experiments and suggest additional safeguards.

Competitive Intelligence Integrator

Incorporate competitive intelligence into hypothesis development

Incorporate competitive intelligence into hypothesis development: Our Product Focus: [What area you're working on] Key Competitors: [List main competitors in this space] Competitive Moves Observed: [Recent competitor product changes, announcements] Our Competitive Position: [Strengths, weaknesses vs. competitors] Market Trends: [Industry direction, user expectation changes] Use this competitive context to: 1. Generate hypotheses about differentiation opportunities 2. Identify areas where we might be falling behind 3. Suggest experiments to test competitive assumptions 4. Evaluate whether our current hypotheses account for competitive pressure 5. Recommend defensive vs. offensive experiment strategies For each hypothesis area, consider: - How are competitors solving this user need? - What unique approach could we take? - What would happen if competitors copied our solution? - How quickly could we execute vs. competitors? - What barriers to copying can we create? Balance learning from competitive intelligence with maintaining focus on our users' real needs rather than just copying competitors.

🛠️ Implementation Support Prompts

Experiment Planning Assistant

Plan the practical implementation of experiments

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Help me plan the practical implementation of this experiment: Experiment Overview: - Hypothesis: [Your hypothesis statement] - Test Type: [A/B test, prototype, survey, etc.] - Duration: [Planned timeline] - Success Metrics: [What you're measuring] Current Constraints: - Team Capacity: [Available people and skills] - Technical Infrastructure: [What tools/ platforms you have] - Budget: [Financial limitations] - Timeline Pressures: [Any deadlines or urgency] Help me create: 1. Detailed implementation timeline with milestones 2. Resource allocation plan (who does what when) 3. Technical requirements and dependencies 4. Risk mitigation strategies for common implementation challenges 5. Quality assurance checkpoints throughout the process 6. Communication plan for stakeholders during the experiment 7. Data collection and analysis workflow 8. Decision-making process for interpreting results
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Include contingency plans for:

- Technical issues during implementation
- Lower than expected participation/traffic
- Unexpected external factors affecting results
- Early signs of negative impact requiring test termination

Stakeholder Communication Script

Communicate experiments effectively to different stakeholder groups

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Help me communicate this experiment to different stakeholders: Experiment Details: - Hypothesis: [What
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you're testing] - Business Rationale: [Why this matters] - Approach: [How you'll test it] - Timeline: [When results will be available] - Resources Needed: [What you need from stakeholders] Stakeholder Groups: - Executives: [What they care about most] - Product Team: [Their concerns and interests] - Engineering Team: [Technical considerations they need to know] - Marketing/Sales: [Customer-facing implications] - Customer Support: [Potential user impact] Create tailored communication for each group covering: 1. Why this experiment matters to them specifically 2. What they can expect during the experiment 3. How results will affect their work/goals 4. What support or input you need from them 5. How you'll keep them updated on progress 6. What decisions they might need to make based on results
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Include talking points for addressing common concerns:

- "Why not just build the feature instead of testing?"
- "What if the experiment fails?"
- "How do we know the sample size is big enough?"
- "What about negative impact on current users?"

Success Criteria Definer

Define comprehensive success criteria for experiments

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Help me define comprehensive success criteria for this experiment: Experiment Context: - Hypothesis: [What you're testing] - Business Goal: [What business outcome you want] - User Impact: [How users should benefit] - Current Baseline: [Current performance metrics] - Experiment Duration: [How long you'll run it] Define success criteria across multiple dimensions: 1. Primary Success Metrics (direct hypothesis validation) 2. Secondary Success Metrics (supporting indicators) 3. Guardrail Metrics (things that shouldn't get worse) 4. Leading Indicators (early signals of success) 5. Lagging Indicators (longer-term impact) For each metric, specify: - Current baseline value - Target improvement (realistic and stretch goals) - Minimum threshold for considering success - Timeline for measurement - Statistical significance
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requirements - Practical significance thresholds Also
define: - Failure criteria (when to stop the
experiment) - Partial success scenarios (mixed results
interpretation) - Next steps for each outcome scenario
- Learning objectives beyond the primary hypothesis
Ensure criteria are specific, measurable, achievable,
relevant, and time-bound (SMART).
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