OPTIMIZING RESOURCES AND TIMING TO ALIGN YOUR GenAI CAPABILITIES WITH BUSINESS NEEDS

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&

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My Second Brain

FROST & SULLIVAN

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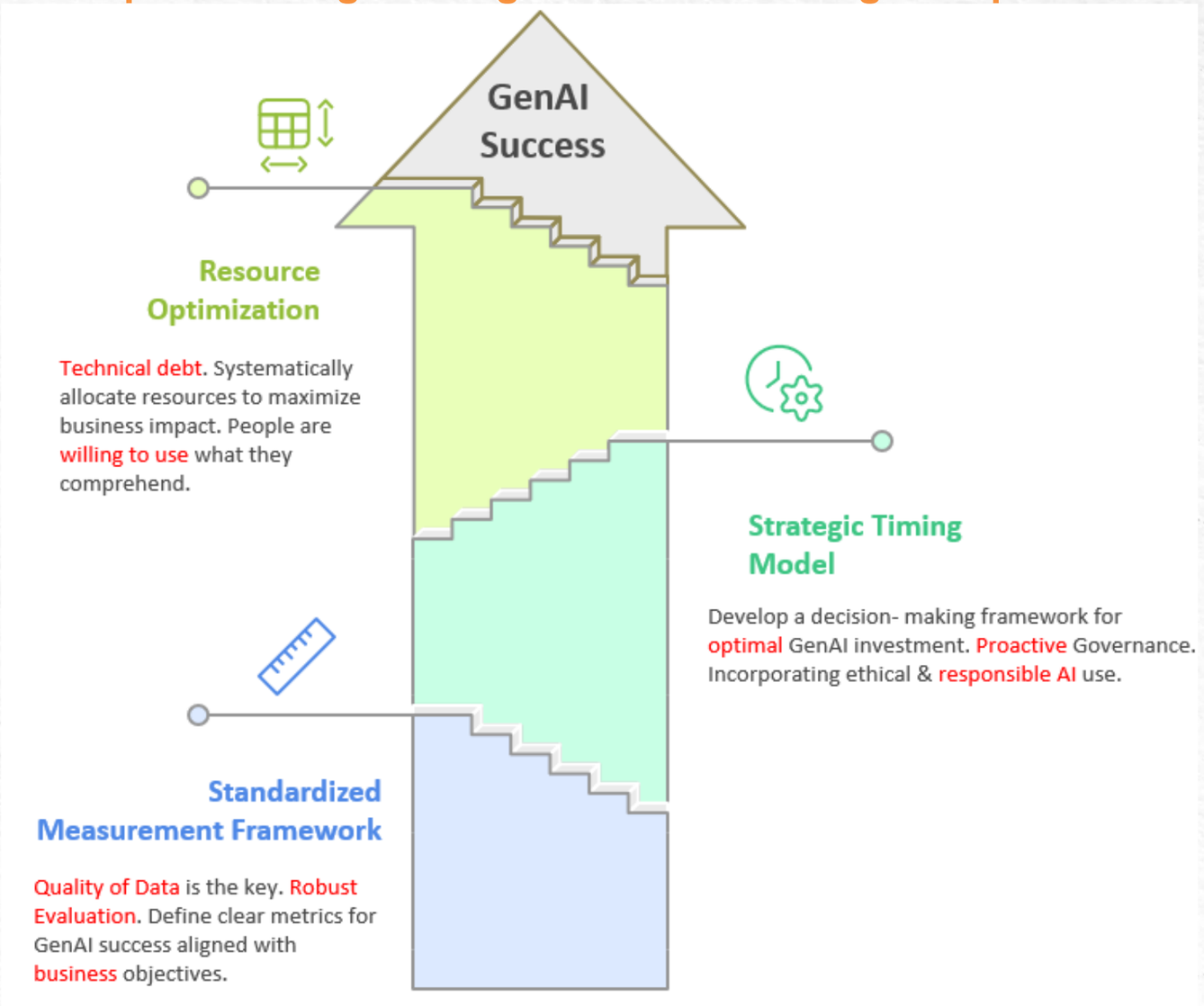
PATH TO GenAI IMPLEMENTATION

Stop Measuring AI Usage - Start Measuring AI Impact!



Representation created using Napkin AI

THE MEASURING PROBLEM

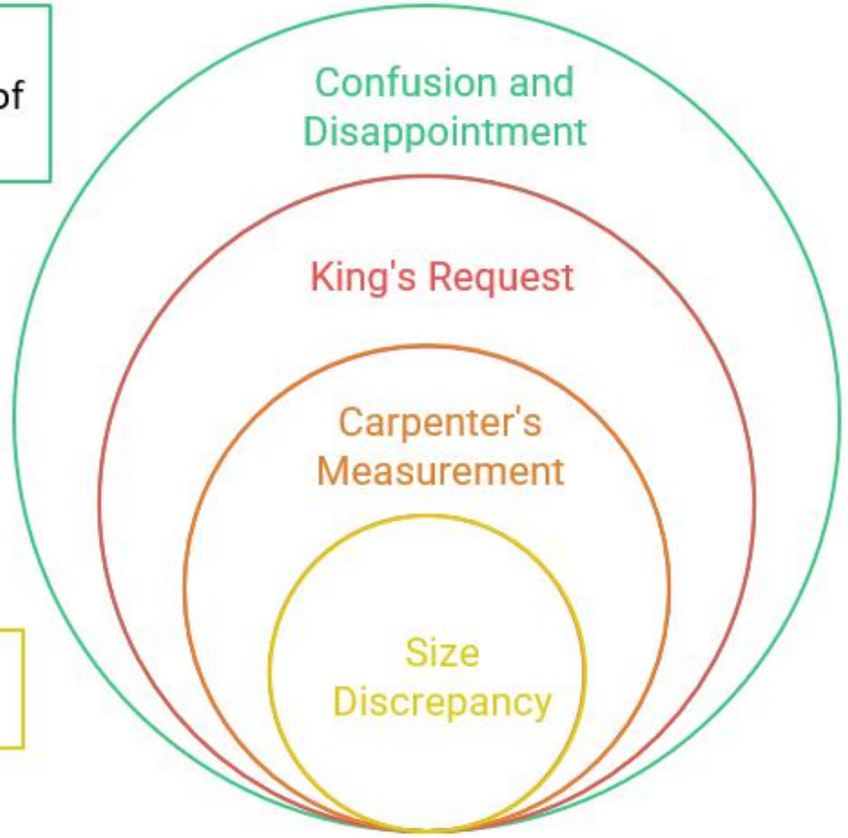
The Boiling Frog Effect

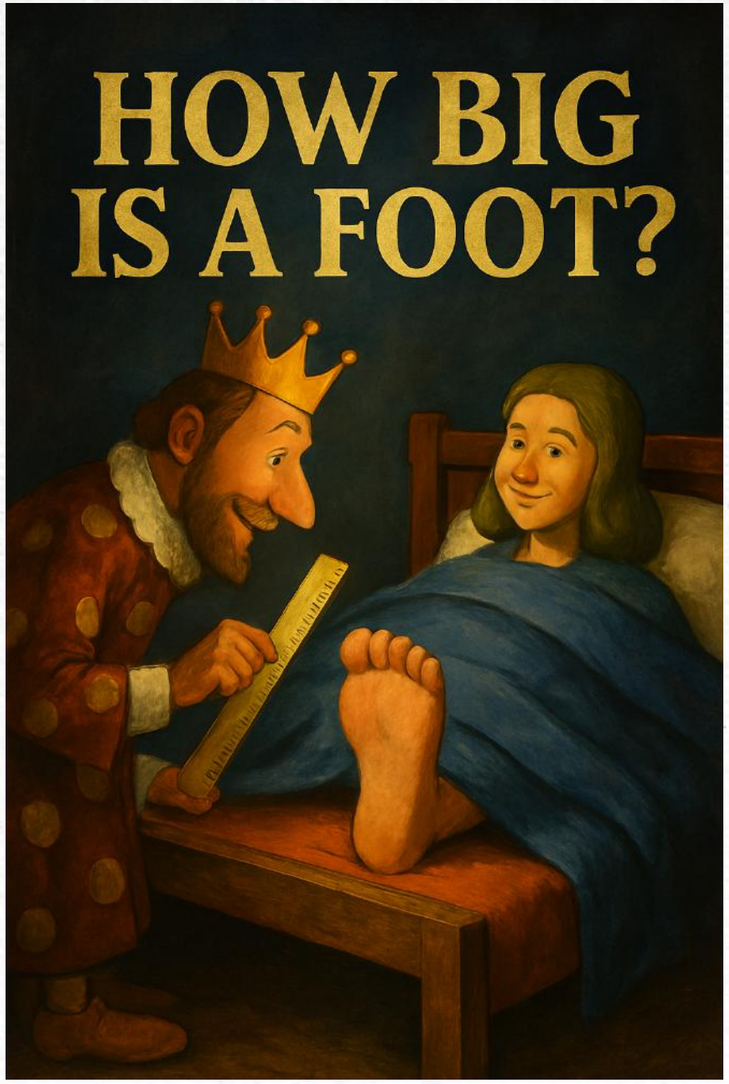
Fit for purpose: Emotional outcome of the size error

Initial demand for specific bed dimensions

Using personal foot as measurement

The central problem of incorrect bed size



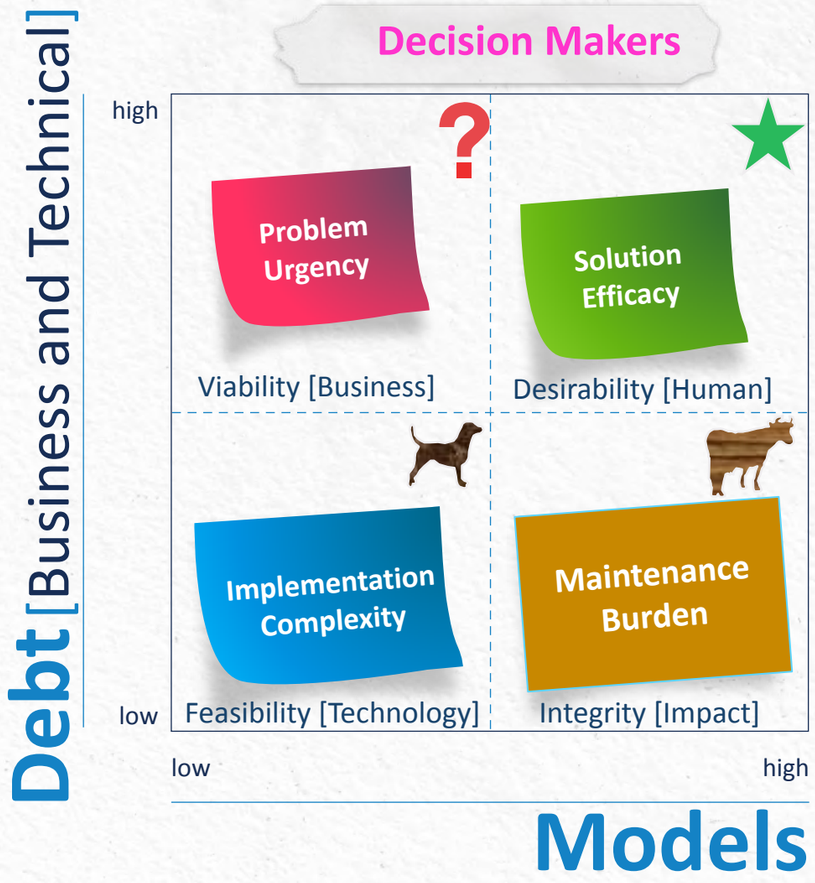


Source

LET'S MEASURE: HOW BIG IS A FOOT

GenAI Selection Framework

GenAI Tool Value = (**Problem Urgency** × **Solution Efficacy**) ÷ (**Implementation Complexity** × **Maintenance Burden**)



Contributing Variables [Factors]

// **Problem Urgency: Systematic customer discovery and stakeholder engagement**

// **Financial Impact, Strategic Alignment, Competitive Benchmarking**

// **Time Sensitivity, Scale of Impact**

// **Solution Efficacy: Solving the specific problem effectively**

// **Performance Metrics, Specificity [Domain], Fidelity [Replicates]**

// **Quality, Reliability, Reusuability, Comparative Advantage**

// **Implementation Complexity:** difficulty to deploy the solution within existing infrastructure, architecture, systems and workflows

// Data Preparation, Workflow changes, Integration [data sources]

// Training Needs, Validation procedures

// **Maintenance Burden: Keeping the solution operational, compliant, and effective over time, pruning needs.**

// **Model retraining, Staffing, Adaptability, Performance Monitoring**

// **Security, tracing, Regulations and Policies, Killswitch triggers**

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This framework provides a structure for thinking about GenAI tool selection, organizations should adapt and refine as technology advances.

GenAI Selection Scoring Guide

Problem Urgency

// 9-10: Critical business problem with significant financial impact; strategic imperative
// 7-8: Important business challenge with clear financial implications; high priority
// 5-6: Meaningful issue with moderate business impact; medium priority
// 3-4: Operational issue with limited business impact; lower priority
// 1-2: Minor inconvenience with minimal business consequences; nice-to-have solution

Solution Efficacy

// 9-10: Transformative solution with robust evidence of >80% improvement over alternatives
// 7-8: Significant improvement (50-80%) with strong supporting evidence
// 5-6: Moderate improvement (20-50%) with adequate supporting evidence
// 3-4: Incremental improvement (5-20%) with limited supporting evidence
// 1-2: Minimal improvement (<5%) or unproven performance claims

Implementation Complexity [reverse-scored]

// 1-2: Extremely simple implementation; plug-and-play with existing systems
// 3-4: Straightforward implementation with minimal integration requirements
// 5-6: Moderate complexity requiring some system integration and workflow changes
// 7-8: Complex implementation requiring significant integration and process changes
// 9-10: Highly complex implementation requiring extensive system overhaul

Maintenance Burden [[reverse-scored]

// 1-2: Minimal maintenance; fully automated updates with little oversight needed
// 3-4: Low maintenance burden with occasional manual interventions
// 5-6: Moderate maintenance requiring regular attention but manageable resources
// 7-8: Significant maintenance burden requiring dedicated resources
// 9-10: Extremely high maintenance requiring specialized team and continuous attention

Formula Interpretation	
>2.5	Exceptional business case; immediate implementation
1.5-2.5	Strong business case; high-priority
1.0-1.5	Positive business case; standard
0.5-1.0	Questionable business case; consider alternatives or refinements
< 0.5	Poor business case; needs datapoints

GenAI VALUE: An Example

GenAI Tool Value = (Problem Urgency × Solution Efficacy) ÷ (Implementation Complexity × Maintenance Burden)

AVOIDABLE AMENDMENT RATIO

Only about **20 to 30% of all amendments are** seen as potentially **avoidable**

Table 5. Distribution of Avoidable and Unavoidable Amendments.

Level of Avoidability Assigned	2010 Study, % (n)	2015 Study, % (n)	Cause Category
Completely avoidable	20 (555)	23 (28)	Design flaw, inconsistent, and/or errors in the protocol
Somewhat avoidable	13 (373)	22 (27)	Recruitment difficulty, investigator/site feedback
Somewhat unavoidable	27 (758)	30 (36)	New data available (other than safety data), change in strategy, change in s
Completely unavoidable	39 (1,082)	25 (31)	New safety information available, regulatory agency request to amend, ma

GenAI Value Calculation

Problem Urgency (6) × Solution Efficacy (5) = 30

Implementation Complexity (8) × Maintenance Burden (9) = 72

GenAI Value = 30 ÷ 72 = 0.42

Contributing Variables [Factors]

- **Problem Urgency [6/10]:** We need an AI solution because protocol amendments are costly. We need to reduce protocol amendments by 30% to accelerate our time-to-market by 2 months and save $1.5M per trial while improving patient access to treatment.
  - **Financial Impact:** Each protocol amendment costs approximately $500,000 in direct costs.
  - **Regulatory Risk:** 15% of amendments relate to safety concerns requiring regulatory notification.
- **Implementation Complexity:** We need a phased implementation plan that prioritizes the three protocol sections causing 70% of our amendments, with minimal disruption to ongoing trial planning.
  - **Data Preparation:** 6 months of historical protocol data requires standardization.
  - **Integration Needs:** Needs connections to 4 separate clinical systems.

Contributing Variables [Factors]

- **Solution Efficacy:** Solving This LLM has 175 billion parameters and scored 92% on the medical knowledge benchmark. This solution reduced protocol amendments by 27% in oncology trials similar to ours, with strongest performance in inclusion/exclusion criteria optimization and visit schedule rationalization.
  - **Specificity:** General-purpose LLM with limited pharmaceutical fine-tuning.
  - **Claimed Performance:** 30% reduction in amendments based on limited case studies.
- **Maintenance Burden**: We need a sustainable maintenance strategy that ensures continuous improvement in amendment reduction while maintaining regulatory compliance and minimizing the burden on clinical teams
  - **Model retraining:** Quarterly updates required with new protocol data
  - **Staffing:** Dedicated team of 3 FTEs for ongoing validation and support

ROUNDTABLE DISCUSSION

Let's build a GenAI Use case Framework

Guidelines

- Divide yourself into groups
- Select a GenAI Use case of choice
- Discuss and capture key information
- Nominate a spokesperson for your group

When we regroup [3 minutes]

Share your experience(s) around
Your Use case selection
What key outcomes where derived from your group
One observation or call to action
Next steps in your journey map

GenAI Use case Framework

Discussion Themes

- **Defining Success Metrics**
- **Creating Organizational Alignment**
- **Implementation Challenges**
- **Risk Management**
- **Resource Allocation Timing**

Standardization

TEMPLATE

Without standardized measurements, what seems "big enough" to one stakeholder may be insufficient to another

Scenario: When your marketing team implemented a GenAI tool for content creation, they celebrated a 40%-time savings, while your sales team using the same tool focused on increased customer engagement metrics—how might this measurement disconnect impact your ability to evaluate the true ROI of your GenAI investment?

Define your Success Metrics

Create your Organizational Alignment

List your Implementation Challenges

Outline your regulatory and policy considerations for [specific use case]?

One actionable, measurable takeaway for your team to implement right away.

Strategic Timing Model

TEMPLATE

Matching the right capability to the right problem is the trick

Scenario: Your data science team is eager to implement a GenAI solution for customer service, but your customer data is scattered across three legacy systems with inconsistent formatting—how would you determine if now is the right time to invest, or if you should first allocate resources to data infrastructure improvements?

Define your Organizational Readiness Plan

Create your Risk Management & Ethics

List your Strategic Timing Decisions

Outline your data strategy for GenAI Implementation[specific use case]?

One actionable, measurable takeaway for your team to implement right away.

Resource Optimization Techniques

TEMPLATE

More use isn't better use. Better use is better use!

Scenario: Your organization has budget for either upskilling 500 employees on GenAI tools or implementing one high-impact GenAI solution in your [supply chain]—what systematic approach would you use to determine which investment would create more sustainable value for your business and Why?

Define your Technical Resources

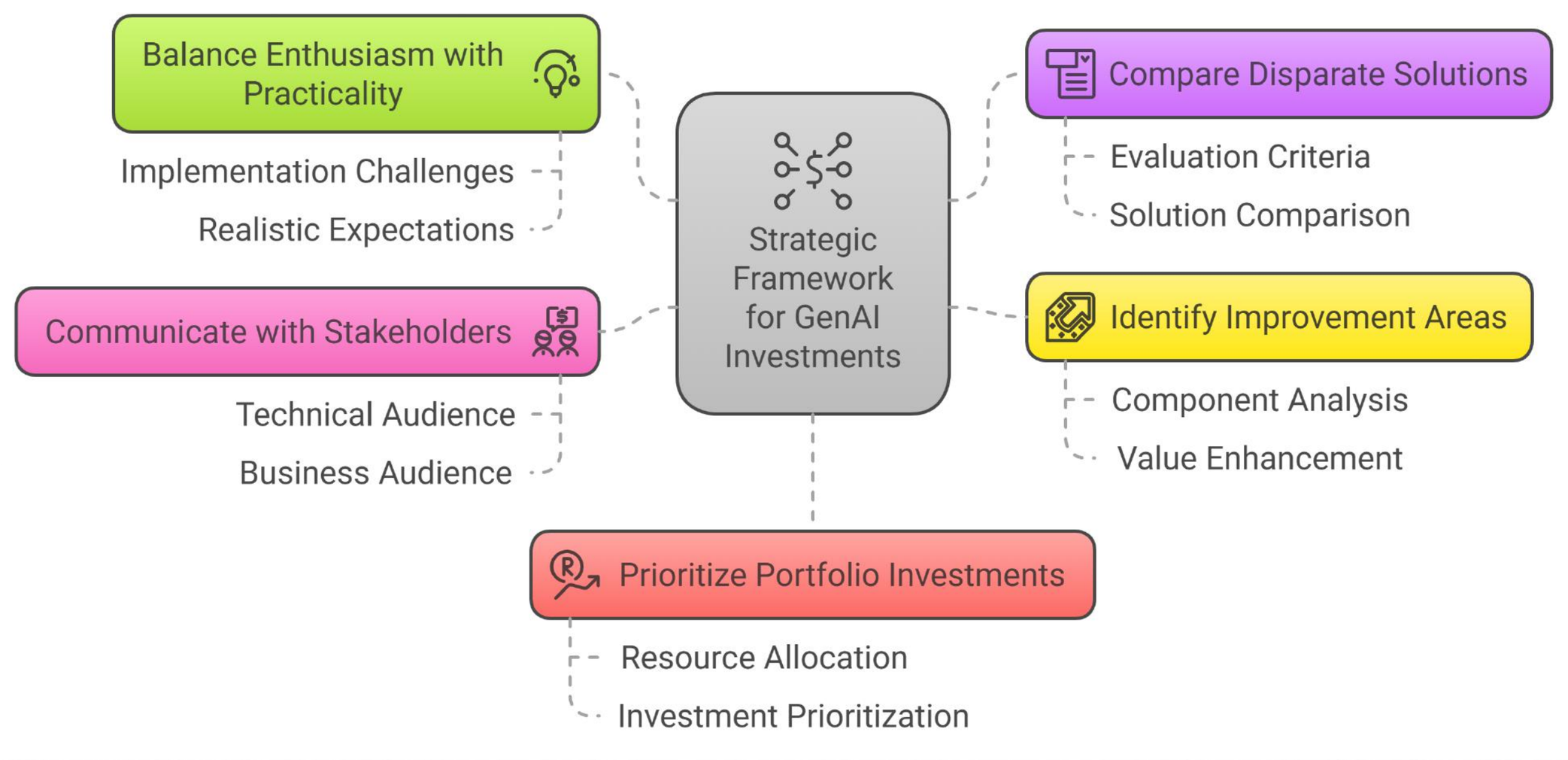
Create your Human Resources needs

Plan your Financial Resources

What criteria or outcomes would you use to validate your hypothesis?

One actionable, measurable takeaway for your team to implement right away.

KEY TAKEAWAYS



Thank you

Let's strive for Singularity

Few citations and references

Who benefits most from GenAI productivity – Gartner

Beyond Productivity: How to Cut Costs With Generative AI - Gartner

The three business cases of GenAI value - Gartner

Optimizing Resources and Timing to Align Your GenAI capabilities with Business Needs

Total Session Time: 50 Minutes
Topic Steering: Vinod Das

MAIN POSITION (THEME)

Discover how to synchronize your GenAI investments with business rhythms through a proven framework that transforms the abstract "measurement problem" of AI implementation into standardized approaches for resource allocation, timing decisions, and ROI assessment—turning technological potential into tangible business value.

The Challenge Faced

"Measurement Problem" in GenAI implementations:

- Resource constraints (talent, computing power, data)
- Timing issues (when to invest, when to scale)
- Alignment with business objectives (process understanding and fulfillment)
- ROI measurement difficulties (success metrics)

Introduce "How Big is a Foot?" as a Framework

- Canvas 1 (Measuring ROI through Standardization) how different teams using the same technology might measure success differently.
- Canvas 2 (Developing Your AI Strategy) to present a framework for timing decisions
- Canvas 3 (Internal Dynamics) to discuss resource assessment

Key Takeaways

For Participants

Participants will gain a standardized framework for measuring GenAI value, strategic timing models for investment decisions, resource optimization techniques that maximizes value while minimizing waste, practical metrics for demonstrating ROI, and implementation roadmaps that balance innovation with business constraints—all illustrated through the memorable "measurement problem" metaphor.

THREE ACTION ITEMS

1) Establish Your Standardized Measurement Framework: Define clear metrics for GenAI success that align with business objectives, creating a common "unit of measurement" across your organization to avoid the costly misalignment illustrated in "How Big Is a Foot?" where different interpretations lead to implementation failure.

2) Develop a Strategic Timing Model: Create a decision-making framework for optimal GenAI investment and scaling, incorporating ethical guidelines and risk management to ensure responsible AI use.

3) Implement Resource Optimization Techniques: Systematically allocate technical, human, and financial resources to maximize business impact, enhance team skills, and investing in scalable and secure technology infrastructure to ensure sustainable value creation.

Standardized Measurement Framework / RESOURCES

Defining Success Metrics

1. What specific business metrics are you currently using to measure success in your organization?
2. How do you currently determine if a technology implementation has been successful?
3. Which metrics would best demonstrate GenAI's impact on your specific business objectives?
4. What qualitative and quantitative measures would help you track GenAI implementation progress?
5. How do you currently communicate technology ROI to leadership?

Creating Organizational Alignment

1. What inconsistencies exist in how different departments measure success in your organization?
2. Who are the key stakeholders that need to agree on your GenAI measurement framework?
3. How might you create a common "unit of measurement" that works across different business functions?
4. What communication channels would be most effective for establishing standardized metrics?
5. How can you ensure metrics remain aligned with evolving business priorities?

Implementation Challenges

1. What obstacles have you encountered when trying to standardize measurement approaches?
2. How do you balance the need for standardization with department-specific requirements?
3. What data collection challenges might impact your ability to measure GenAI success?
4. How will you address resistance to new measurement frameworks?
5. What resources would you need to implement a standardized measurement system?

Develop a Strategic Timing Model / RESOURCES

Organizational Readiness

1. What indicators would signal your organization is ready for GenAI implementation?
2. How do you currently determine the timing for new technology investments?
3. What business cycles or rhythms should influence your GenAI implementation timeline?
4. How might you assess your team's readiness for GenAI adoption?
5. What data infrastructure prerequisites should be in place before scaling GenAI?

Risk Management

1. What ethical considerations should influence your GenAI implementation timing?
2. How will you incorporate regulatory compliance into your timing decisions?
3. What risk assessment frameworks could help you determine optimal implementation timing?
4. How might you balance first-mover advantage against implementation risks?
5. What governance structures need to be established before scaling GenAI initiatives?

Resource Allocation Timing

1. How do you determine when to shift resources from exploration to implementation?
2. What milestones would trigger increased investment in GenAI capabilities?
3. How might you sequence GenAI investments to maximize learning while minimizing risk?
4. What indicators would suggest slowing down or accelerating your GenAI implementation?
5. How will you time your GenAI investments relative to other strategic initiatives?

Resource Optimization Techniques / RESOURCES

Technical Resources

1. What technical infrastructure investments would provide the greatest return for GenAI implementation?
2. How do you currently prioritize technology investments across competing initiatives?
3. What scalability considerations should influence your GenAI resource allocation?
4. How might you balance building internal capabilities versus leveraging external partners?
5. What security and compliance requirements should shape your technical resource allocation?

Human Resources

6. What skills gaps exist in your organization that could impact GenAI implementation?
7. How might you develop internal talent versus acquiring external expertise?
8. What team structures would optimize GenAI implementation and adoption?
9. How will you measure, and track skill development related to GenAI?
10. What change management resources will you need to ensure successful adoption?

Implementation Challenges

1. How do you currently calculate ROI for technology investments?
2. What lightweight ROI measurement frameworks could you apply to GenAI initiatives?
3. How might you balance short-term wins versus long-term strategic investments?
4. What financial metrics would help you determine when to scale GenAI investments?
5. How will you allocate resources between different potential GenAI use cases?

GenAI TOOL SELECTION FRAMEWORK

Key Four quadrant approach where the Desirability [d], Viability [v], Feasibility [f] and Integrity [i] from the innovation framework is blended for ease of tool selection process.

GenAI Value Calculation [example]

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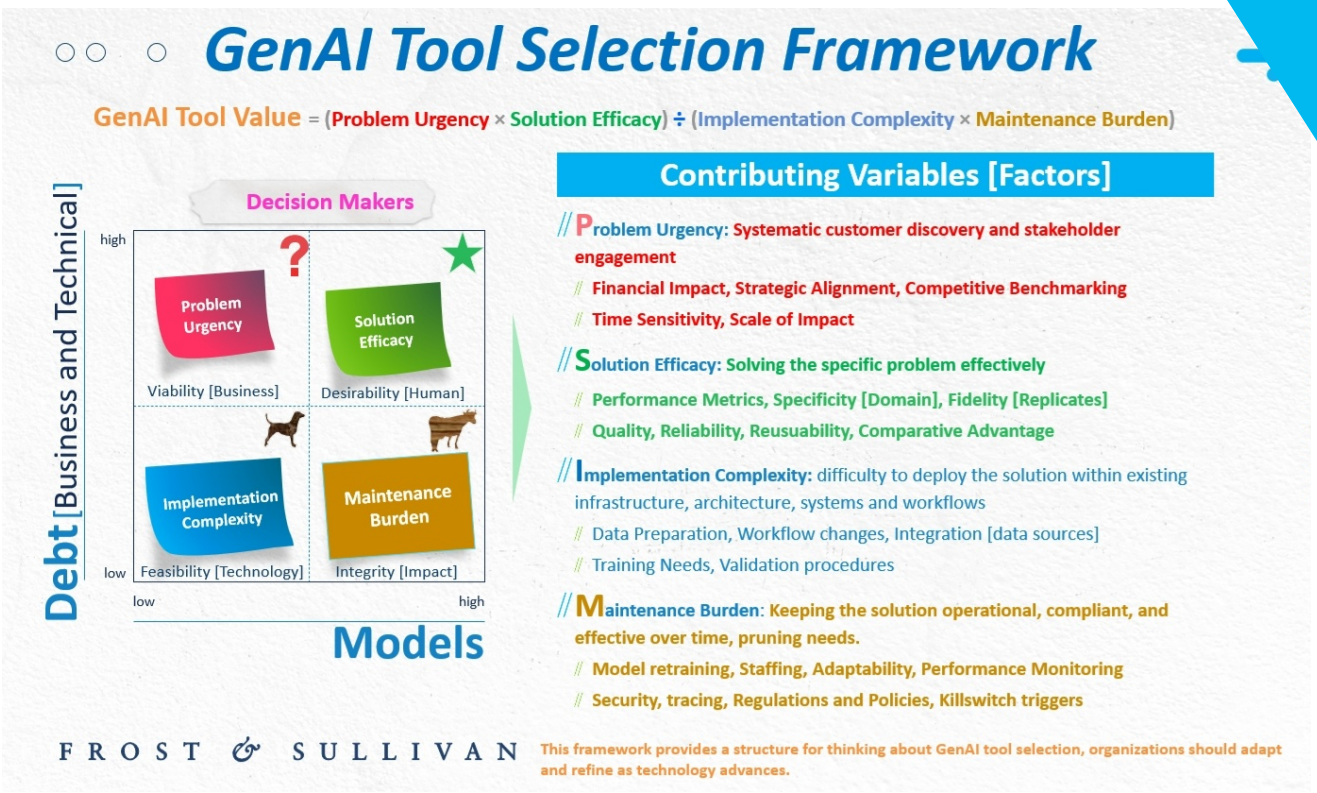

SUPPORTING MESSAGES AND BACKGROUND

None

FURTHER INFORMATION / RESOURCES

Handouts will be shared during the workshop