Determining the Value of AI

Executive Summary

The true value of AI lies in its ability to create measurable business outcomes. To fully harness AI's transformative potential, organizations must define, quantify, and consistently measure the value AI delivers.

Achieving impactful results with AI requires aligning initiatives with core business goals and understanding their impact on either top-line growth or bottom-line efficiencies. Whether it is enhancing customer engagement, accelerating expansion into new markets, or driving innovation, AI can deliver tangible business value at the top line. AI can also automate routine tasks, optimize resource allocation, and drive significant cost efficiencies, impacting the bottom line by streamlining operations and freeing up resources for higher-value activities.

As many organizations still grapple with maximizing AI value, this paper provides foundational context to help IT Decision Makers (ITDMs) define and articulate the value of AI and align it with broader business goals. It explores how AI can be systematically embedded within the organization, emphasizing a structured approach for measuring the value of AI investments. This includes prioritizing high-value use cases, defining an AI business case, unlocking executive buy-in, and setting up a framework for ongoing value measurement. By focusing on these areas, this paper equips ITDMs with actionable strategies to successfully deploy AI initiatives and maximize their impact—turning AI-driven projects into value-focused initiatives.

Introduction to AI Value

Understanding AI value starts with an understanding of what AI can do. Organizations turn to AI to address pain points like inefficient and repetitive tasks that take away from mission-critical work, and large and complex data sources that are difficult to test and interpret. AI capabilities can address these pain points through cheaper solutions, faster workflows, and better insights. They can automate processes, simulate outcomes, interact with users, predict future trends, detect patterns, interpret data, and create latest content. The diverse AI applications introduced below not only streamline operations but also unlock new paths to business value.

- **Intelligent automation** allows bots to execute tasks with minimal human intervention.
- **Predictive analytics** leverages vast amounts of data to forecast potential outcomes.
- **Virtual assistants** engage in real-time dialogue to enhance customer interactions.
- **Computer vision** identifies objects and patterns in visual data.
- **Natural language** and **speech recognition** convert and analyze text and speech.
- **Generative AI** creates innovative content across various media.

By focusing on how AI is applied—whether in automation, customer engagement, or innovation—ITDMs can better understand where AI drives impact. AI-driven initiatives either increases revenue or reduces costs. This understanding forms the basis for measuring the effectiveness and impact of AI investments.

1. **Top-Line Growth**: AI initiatives can drive revenue growth by enabling new products, services, and market expansion. They enhance customer engagement, predict customer needs, optimize product recommendations, and drive hyper-personalization, all of which lead to improved customer acquisition and loyalty, increasing sales and customer retention. Further, AI accelerates innovation by enabling predictive insights and rapid product development, allowing businesses to stay ahead of market trends and expand into new areas. These benefits directly influence P&L line items such as:

- Revenue Growth: AI-powered sales strategies and personalized customer engagement increase sales volume and accelerate cross-sell/upsell opportunities.
- New Revenue Streams: AI-enabled products and services open new markets and monetization channels.
- Customer Retention: AI improves customer lifetime value (CLV), contributing to sustainable revenue growth.

Illustrative Examples: AI-powered recommendation engine in an e-commerce business delivering tailored product suggestions based on customer behavior, which boosts conversion rates and revenue through cross-selling and upselling. AI-driven R&D in pharmaceuticals which helps accelerate drug discovery by analyzing complex data, reducing the time to market for new drugs and contributing to long term growth.

2. **Bottom-Line Efficiency**: AI can also help organizations optimize operations and reduce costs. By automating manual tasks, optimizing supply-chains, streamlining processes, and improving

accuracy, AI generates significant cost savings and boosts operational agility. These efficiencies impact various cost categories, leading to improved profit margins. Key P&L impacts include:

- Reduced Operating Expenses (Op-Ex): AI automates repetitive tasks, reduces human error, and streamlines processes, leading to lower operational costs.
- Lower SG&A Expenses: AI-driven optimization of sales, general, and administrative functions reduces overhead and improves resource utilization.
- Optimized Supply Chain Costs: AI algorithms enhance demand forecasting, inventory management, and logistics, minimizing waste and reducing supply chain costs.

Illustrative Examples: Logistics company implementing AI to optimize its supply chain by reducing waste, minimizing errors, and cutting operational costs to improve its bottom line.AI-powered predictive maintenance that minimizes downtime and ensures equipment runs at optimal efficiency, driving significant cost savings.

Impact Category	Description	Illustrative KPIs
Top-Line Growth	Driving revenue by acquiring new customers through targeted marketing, innovative offerings, and expansion into new markets	New customer growth, Conversion rates, Market share, Lead-to-customer conversion, Cost per acquisition (CPA), Customer acquisition cost (CAC)
	Enhancing customer retention and loyalty through superior experiences, increasing lifetime value and reducing churn	Retention rate, Customer lifetime value (CLV), Churn rate, Repeat purchase rate, Customer loyalty index, Renewal rates
	Enhancing brand image and customer loyalty through positive experiences and public perception	Brand awareness, NPS, CSAT score, Word of Mouth (WOM) referrals, Social media sentiment, Customer loyalty index
Bottom-Line Efficiency	Optimizing internal operations by automating repetitive tasks and reducing errors	Operational Cost Reduction, Process Error Rate, Average Handling Time (AHT) for Tasks
	Improving resource allocation and process consistency, resulting in cost savings and faster time-to-market	Time-to-Market, Infrastructure Downtime Reduction, Resource Utilization Rate

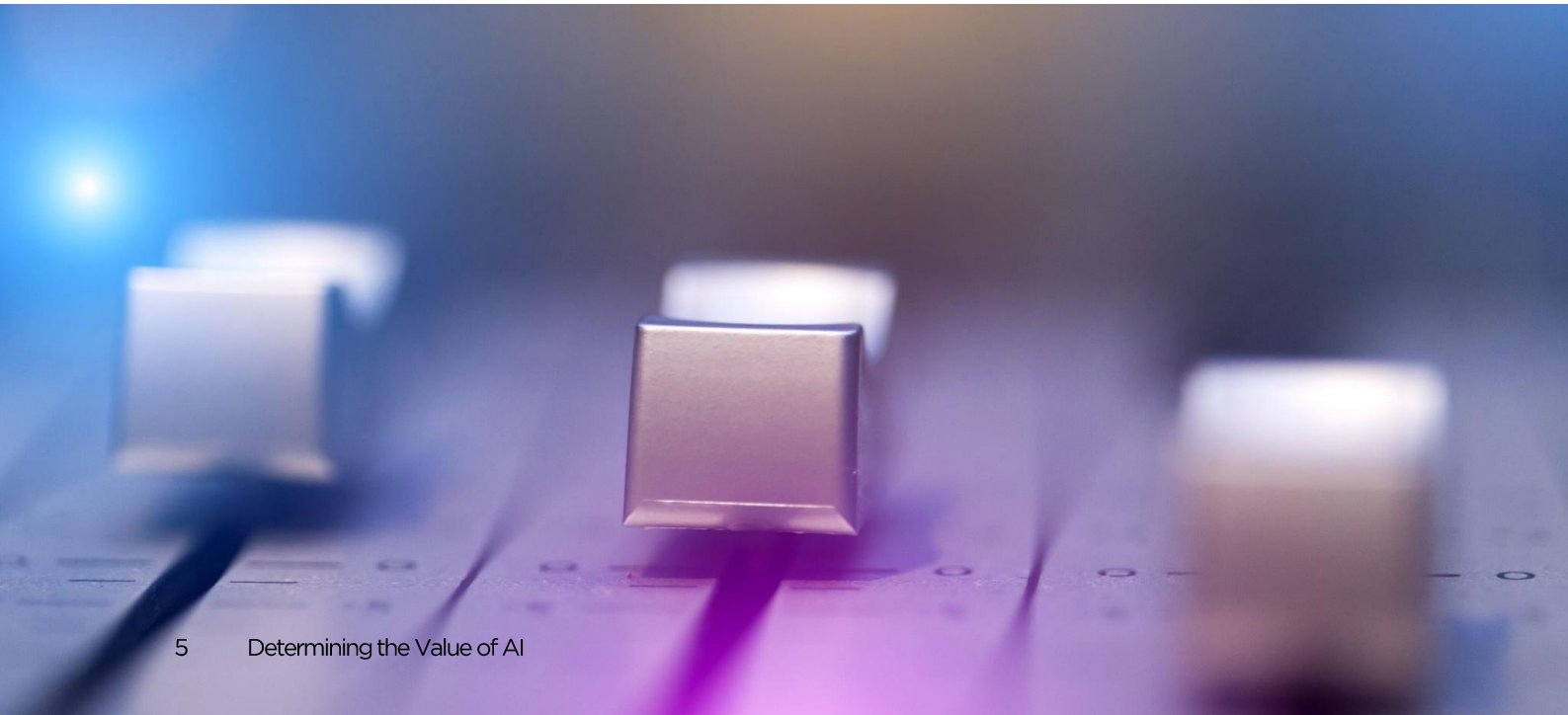
Figure 1: Illustrative KPIs Associated with Top-line and Bottom-line Impact

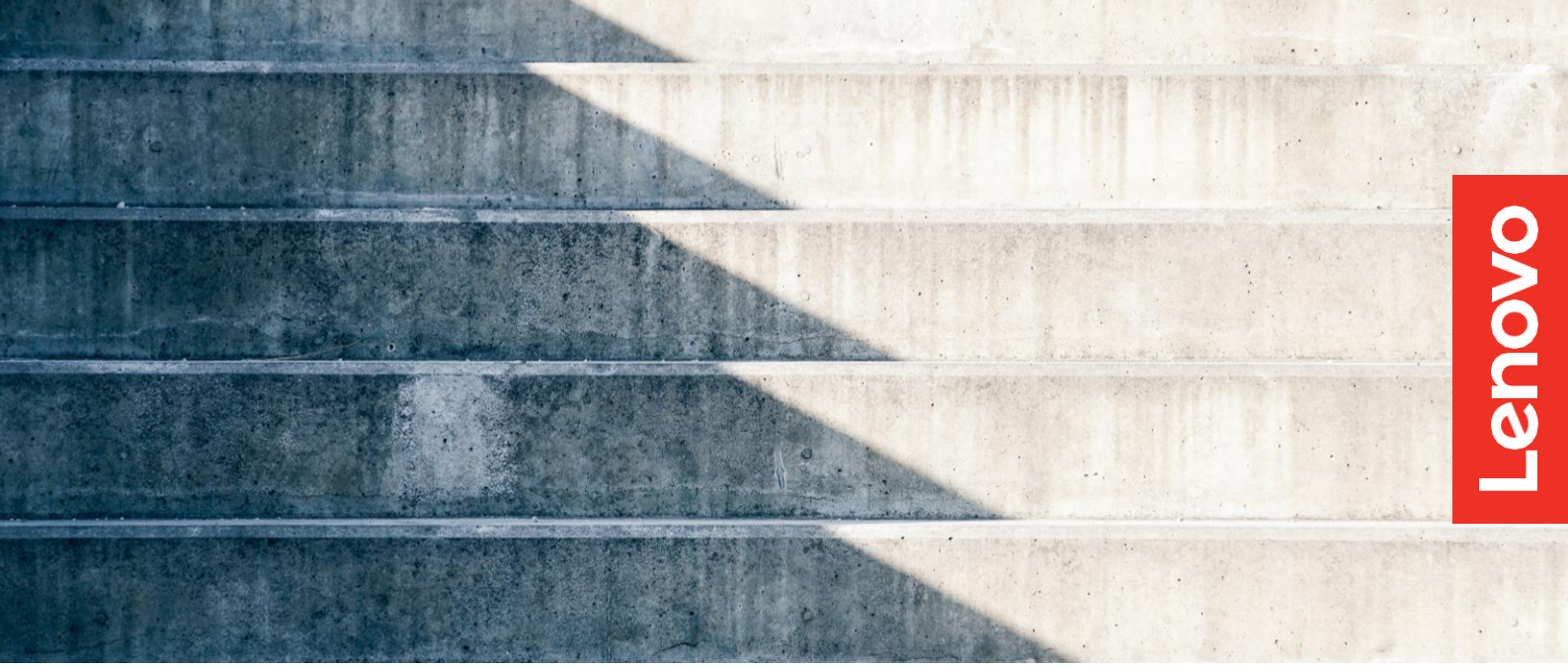
Three Levers for Articulating AI Value

To ensure that AI initiatives deliver sustainable and measurable value, organizations should focus on Use Case Prioritization, Business Case Articulation, and Ongoing Measurement. These levers ensure that AI projects are aligned with strategic goals, provide a clear path to value, and continue delivering benefits over time.

1. **Use Case Prioritization**: Given the wide array and technical maturity of AI applications as well as business priorities, not every use case will deliver the same level of value. Organizations need to prioritize use cases that align most closely with their strategic objectives and provide the highest impact to either top-line growth or bottom-line efficiency. Identifying and focusing on these high-priority areas ensures that resources are deployed where they will have the most meaningful business impact. *Consider a financial institution which prioritizes an AI-driven fraud detection system, as it maximized AI value by simultaneously reducing fraud-related losses (bottom-line) and enhancing customer trust (top-line).*

2. **Business Case Articulation**: The business case is the main vehicle through which organizations determine AI value. It should capture granular AI impacts at a process or activity level and aggregate these across functions to evaluate enterprise-wide impact. The business case should also factor for costs like resourcing and technology investments. *Consider a healthcare provider that develops a top-down business case by conducting*





a benchmarking study to determine the expected ROI for an AI diagnostic tool. It supplements this analysis with a bottom-up sizing effort to better pinpoint expected AI value.

3. **Ongoing Measurement**: AI value is not static and should be continuously monitored. Establishing clear KPIs at the beginning of an AI journey allows organizations to track the performance of AI initiatives and ensure they are delivering the intended top-line or bottom-line outcomes. Continuous measurement allows businesses to optimize their AI strategies as market conditions and organizational needs evolve and to also course correct key business case assumptions, so ROI articulation remains accurate. *Consider a retailer using AI for demand forecasting that regularly tracks performance metrics such as inventory turnover, sales growth, and forecast accuracy. These KPIs provide valuable insights that help refine AI models and maximize value over time.*

Use Case Prioritization

Unlocking AI value begins with the identification and prioritization of high-impact use cases—those that are strategically aligned to business objectives, provide maximum ROI, and are feasible for implementation. IT Decision Makers (ITDMs) must adopt a structured framework to evaluate AI opportunities based on their potential to deliver measurable business value.

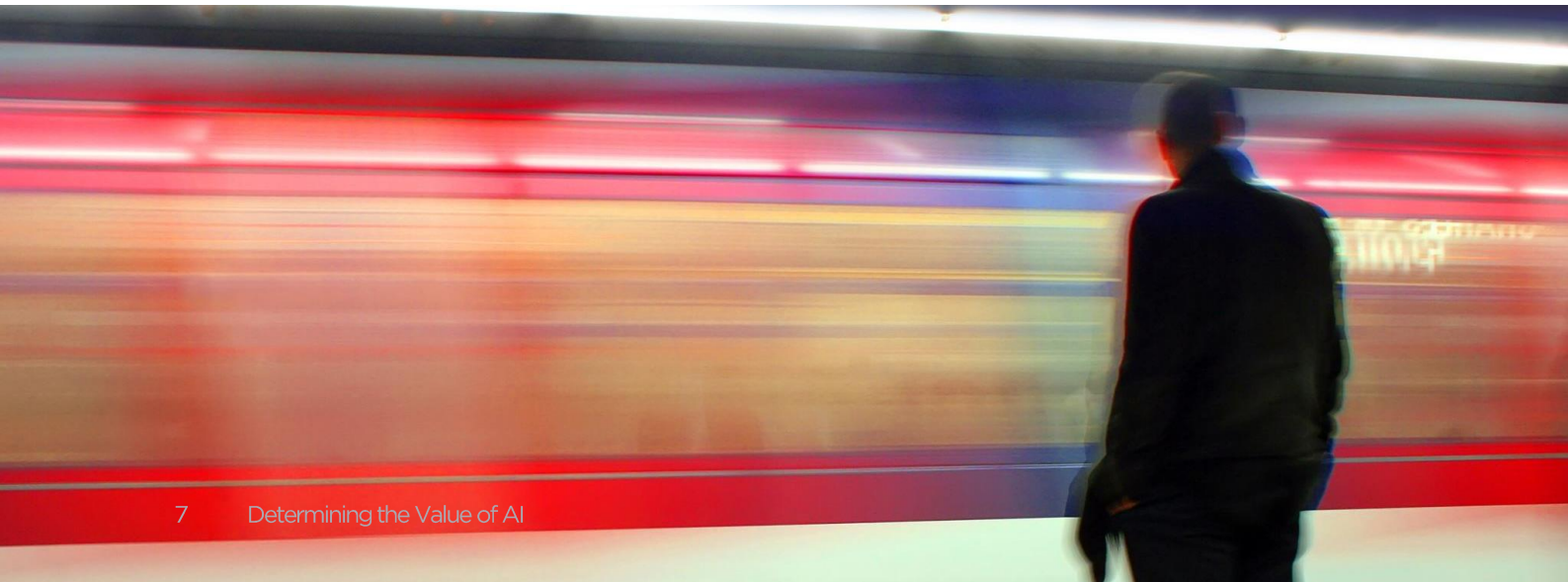
AI Use Case Prioritization Framework

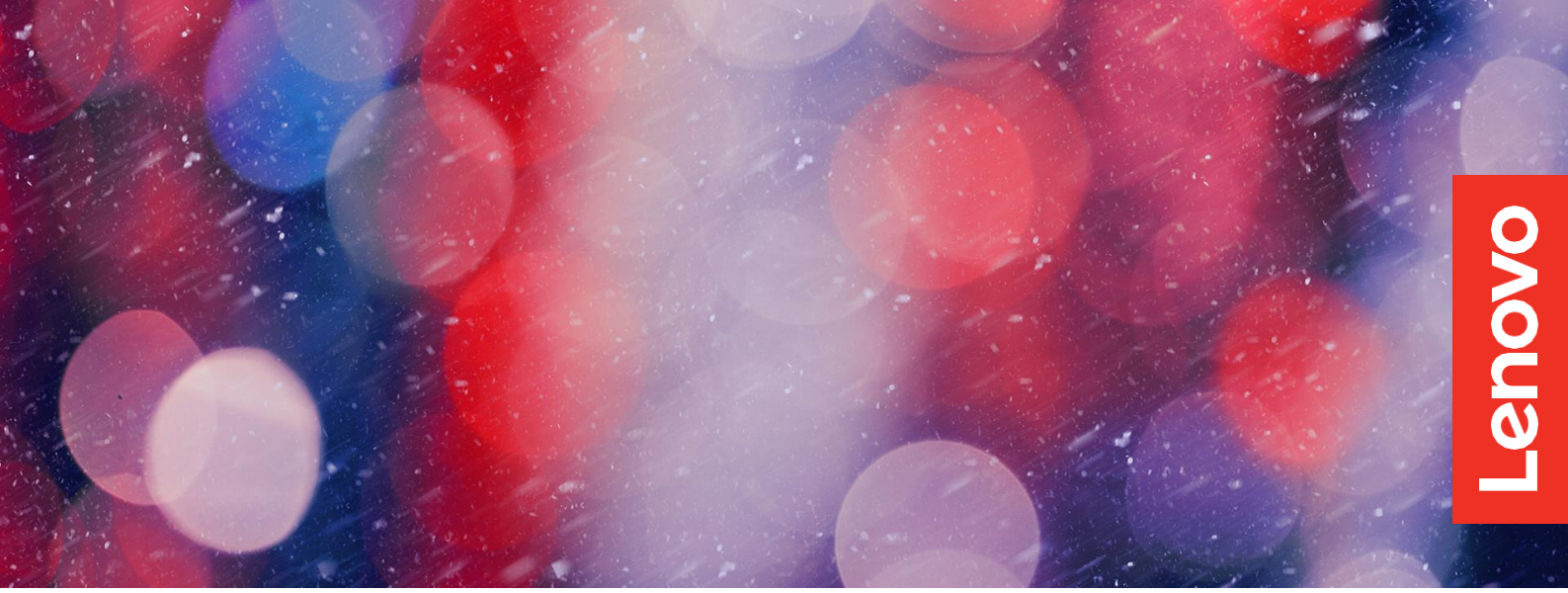
The AI Use Case prioritization framework evaluates AI use cases across two core dimensions: Attractiveness and Feasibility. This approach ensures a comprehensive evaluation of AI initiatives, balancing business

alignment with technical practicality. In practice, use case evaluation and prioritization must be managed as a cross-functional exercise to ensure that AI decisions are not made in silos but rather weigh the needs of the broader business.

1. Attractiveness assesses the overall value and alignment of the use case with business objectives. It includes two key themes:

- **Desirability** assesses how well the use case aligns with strategic goals and stakeholder needs. Criteria include:
    - **Stakeholder Impact**: Does the use case address key pain points for internal or external stakeholders, such as improving operational efficiency or enhancing customer experiences?
    - **Business Alignment**: How closely does the use case support core business priorities, such as growth objectives or resolving critical challenges?
    - **Value Contribution**: Does the use case deliver unique business value, such as improving competitive positioning or generating significant societal impact?
- **Viability** evaluates the financial aspect of the use case and its scalability. Criteria include:
    - **Financial Benefit**: Does the use case offer clear ROI through revenue generation, cost reductions, or operational efficiency improvements?
    - **Scalability**: Can the solution scale effectively across departments or geographies without significant rework or customization?
    - **Market Fit**: Is the use case compatible with current regulatory standards, and does it fit the organization's operational and market context?





2. Feasibility focuses on the practical ability to implement the use case, including resource availability and technical considerations. Criteria include:

   - **People Readiness**: Is the organization equipped with the necessary technical expertise to implement the solution effectively?
   - **Resource Requirements**: Are the necessary infrastructure and budget in place to support the use case?
   - **Implementation Complexity**: Can the solution be integrated with existing systems? Is the technology sufficiently mature for reliable deployment?

These dimensions are used to inform two scores: Attractiveness and Feasibility. The Attractiveness Score focuses on business alignment and financial viability, while the Feasibility Score considers the technical and resource capabilities required for successful implementation.

The following tables allow ITDMs to weigh their scores based on their relative importance to the organization. For instance:

- If an organization prioritizes revenue growth and strategic expansion, Business Alignment and Financial Benefit would carry more weight.
- If the focus is on practical implementation and resource management, Technical Readiness and Resource Feasibility would be emphasized more heavily.
- ITDMs should adjust the scoring definitions of high, medium, and low based on their industry context or enterprise requirements. For example, what is considered "high feasibility" in a technology firm with advanced infrastructure may be different from a traditional industry facing resource constraints. This flexibility allows the framework to be tailored to the specific business goals, market conditions, and resource availability of the organization.

Criteria	Sub-Criteria	Description	Rating (High/Med/Low)
Stakeholder Impact	Stakeholder Needs	Which stakeholders are impacted and how will they be affected? Does it solve significant pain points for internal or external stakeholders?	• High if the use case solves critical pain points for key stakeholders or improves customer satisfaction • Medium if it addresses secondary needs • Low if it has minimal stakeholder effect
Business Alignment	Strategic Alignment	How well does the use case align with the organization's business goals and growth plans?	• High if the use case directly contributes to strategic objectives like growth or core business challenges • Medium if it aligns with secondary priorities • Low if the use case offers limited business relevance
Value Contribution	Value USP	Does the use case provide unique value or differentiation that aligns with strategic goals?	• High if it provides significant competitive advantage or societal impact • Medium if it offers moderate differentiation • Low if it provides no unique value
Financial Benefit	Monetary Impact	Does the use case provide measurable financial returns, such as efficiency gains, revenue increases, or cost reductions?	• High if the use case offers substantial ROI through revenue increases or cost reductions • Medium if the financial returns are moderate or long-term • Low if the financial impact is marginal
Scalability	Scalability	Can the use case be scaled across departments or processes once implemented successfully?	• High if the solution can be easily scaled across departments or geographies • Medium if moderate adaptation is needed for scale • Low if the use case is highly specialized and difficult to scale
Market Fit	Compatibility	Is the use case in its target state compatible with existing compliance regulations?	• High if the use case complies with regulatory standards and fits well in the organization's market • Medium if it needs adjustments to meet compliance • Low if it faces significant regulatory or market challenges

Figure 2: Attractiveness Framework

Criteria	Sub-Criteria	Description	Rating (High/Med/Low)
Implementation Complexity	Technical Complexity	What are the technical challenges of implementing the use case, including integration with current systems?	• High if the use case is straightforward to implement with existing technologies. • Medium if it requires integration or modification of current systems. • Low if it involves significant technical hurdles or immature technologies.
	Change Management	Are there organizational changes required, and how feasible are they?	• High if major restructuring or retraining is needed, with low feasibility due to resistance. • Medium if moderate process changes and retraining are required, with manageable effort. • Low if minimal changes are needed, with high feasibility and minimal disruption.
Resource Requirement	Data and Infrastructure Readiness	Is the data high-quality and ready for use? Is the necessary infrastructure (cloud, software, hardware) available for implementation?	• High if the necessary infrastructure and budget are readily available. • Medium if some resources are available but may require scaling. • Low if there are significant resource gaps.
People Readiness	Resource and Skill Availability	Are the necessary resources (budget, skills, time) available for implementation? Are there any talent gaps?	• High if the necessary budget and skills are readily available. • Medium if some resources are available but may require scaling. • Low if there are significant resource gaps.

Figure 3: Feasibility Framework

- To determine Attractiveness and Feasibility scores by use case, each criteria category (i.e., row in tables above) is assigned a score (scale of 1 – 5) and a relative weight (based on the importance of that criteria to the business where the sum of weights for Attractiveness and Feasibility respectively should add up to 100)
- The final use case Attractiveness and Feasibility score is the weighted average of the ratings and weights across all criteria (i.e., rows in the table)
  - ***Illustrative Example**: Technical Complexity for a give use case is High yielding a score of 5. This row is deemed important*

*and weighted at 20%. 5*20% = 1. The total feasibility score is the sum of weighted individual scores across the entire table (i.e., 1 +...)*

- The scores for each use case are plotted onto an Attractiveness vs. Feasibility Grid (often on a scale of 1–5 for each dimension), which visually represents the prioritization. This visualization allows ITDMs to focus their investments on initiatives that are strategically aligned, implementable, and most likely to deliver tangible benefits.

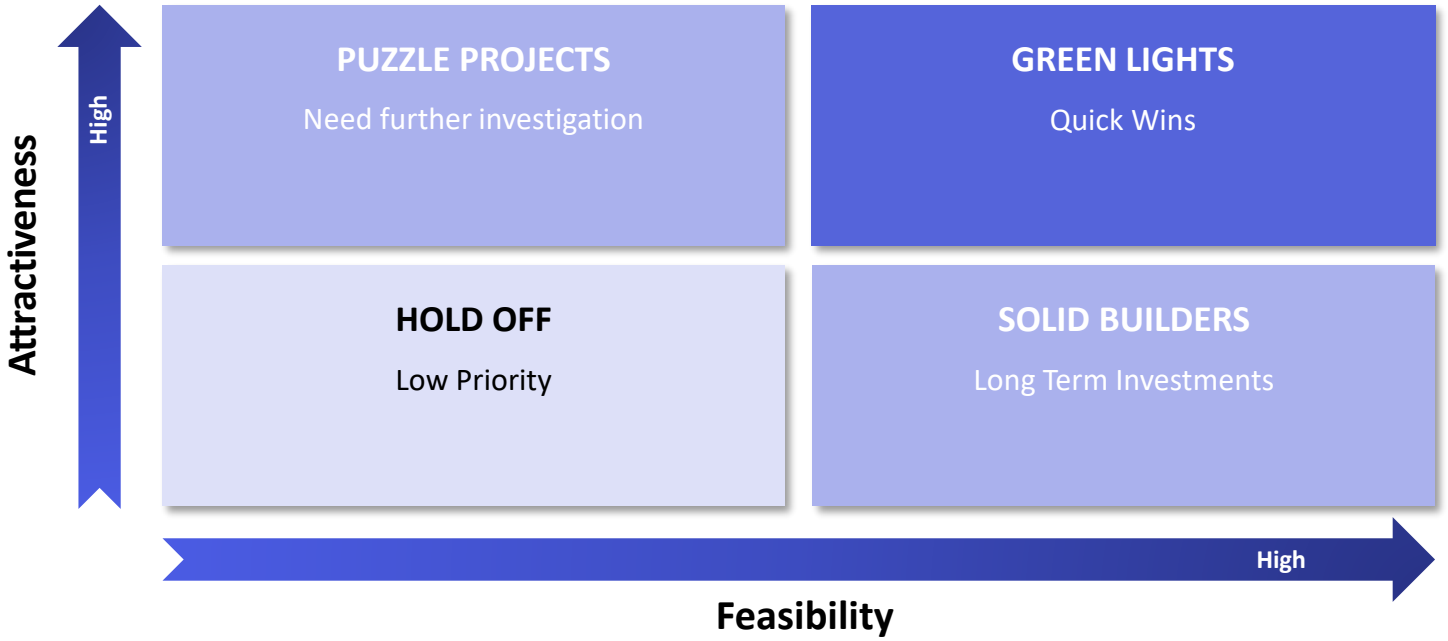


Figure 4: Prioritization Matrix Framework

Effective use case prioritization is about striking a balance between initiatives that are impactful (Attractiveness) and achievable (Feasibility). Rather than solely seeking the most innovative projects, ITDMs should prioritize initiatives that support both immediate performance improvements and long-term growth.

Conclusion

AI's potential lies in how effectively organizations can scale and measure its value. As organizations move beyond pilot projects and proofs of concept, they face the challenge of integrating AI at scale. Scaling AI requires continuous value measurement, so that AI deployments are optimized in real time and aligned with key business drivers. Organization must be able to define, quantify, and consistently measure the value AI delivers. This AI value muscle will better equip organizations to translate the impacts of technology into real, quantifiable business results.

About Lenovo

Lenovo is a US$57 billion revenue global technology powerhouse, ranked #248 in the Fortune Global 500, and serving millions of customers every day in 180 markets. Focused on a bold vision to deliver Smarter Technology for All, Lenovo has built on its success as the world's largest PC company with a pocket-to cloud portfolio of AI-enabled, AI-ready, and AI-optimized devices (PCs, workstations, smartphones, tablets), infrastructure (server, storage, edge, high performance computing and software defined infrastructure), software, solutions, and services. Lenovo's continued investment in world-changing innovation is building a more equitable, trustworthy, and smarter future for everyone, everywhere. Lenovo is listed on the Hong Kong stock exchange under Lenovo Group Limited (HKSE: 992) (ADR: LNVGY).

You can access additional white papers covering a range of AI topics here. These resources will help you fuel your AI journey and explore themes like Hybrid AI, AI PC 101, Measuring AI Value, Accelerating from POC to Production, The Role of Human Intervention in AI, AI Security Considerations, and The Power of AI-Driven Storytelling.