

Strategic Measurement

# Intelligent Choices Reshape Decision-Making and Productivity

by David Kiron and Michael Schrage

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Artificial intelligence can offer better options for better strategic outcomes.

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Better choices enable better decisions.

Profitably thriving through market disruptions demands that executives recognize that better decisions aren't enough — they need better choices. Choices are the raw material of decision-making; without diverse, detailed, and high-quality options, even the best decision-making processes underperform. Traditional dashboards and scorecards defined by legacy accounting and compliance imperatives reliably measure progress but can't generate the insights or foresight needed to create superior choices. They weren't designed for that.

Generative AI and predictive systems are. They can surface hidden options, highlight overlooked interdependencies, and suggest novel pathways to success. These intelligent systems and agents don't just support better decisions — they inspire them. As greater speed to market and adaptability rule, AI-enhanced measurement systems increasingly enable executives to better anticipate, adapt to, and outmaneuver the competition. Our research offers compelling evidence that predictive and generative AI systems can be trained to provide better choices, not just better decisions.

Machine-designed choices can — and should — empower their human counterparts. As Anjali Bhagra, physician lead and chair, Automation Hub at Mayo Clinic, explains, “Fundamentally, what we are doing at the core, whether it's AI, automation, or other innovative technologies, is enabling our teams to solve problems and minimize the friction within health care delivery. Our initiatives are designed by people, for the people.”

Leaders, managers, and associates at all levels can use intelligent systems — rooted in sophisticated data analysis, synthesis, and pattern recognition — to cocreate *intelligent choice architectures* that prompt better options that in turn lead to better decisions that deliver better outcomes. Coined by Nobel Prize-winning economist Richard Thaler and legal scholar Cass Sunstein in their book, *Nudge: Improving Decisions About Health, Wealth, and Happiness*, the term *choice architectures* refers to the practice of influencing a choice by intentionally “organizing the context in which people make decisions.”<sup>1</sup>

Drawing from the rich empirical literature of behavioral economics research, Thaler and Sunstein's work explored how specific factors (such as the number of choices, the inclusion of default choices, and the description of choices) influence decision-making. Integrating AI into the choice architecture design and production process strengthens connections between design and decisions even more. What sets AI-driven choice architectures apart are their abilities to innovatively engage with human decision makers and learn to make better recommendations and choices through feedback loops.

Intelligent choice architectures could design decision environments to nudge managers toward more innovative thinking by injecting and framing “unconventional” options. For example, when brainstorming new product features, an intelligence choice architecture might include wildcard options from unrelated industries, prompting creative idea cross-pollination.

Intelligent choice architectures could also learn to present strategic options in ways that counteract an executive committee's risk-aversion bias. For example, an intelligent choice architecture might frame potential acquisitions as "growth opportunities" rather than "financial risks," subtly encouraging bolder decisions.

As strategic investments in AI and human capital further entwine, forward-thinking leaders will recognize that intelligent measurement systems can improve organizational decision-making behaviors by generating novel options, predicting outcomes, and guiding choices. By designing the contexts in which key strategic and operational decisions are made, these structures will shape decision-making's enterprise future and how leaders choose to pursue strategic aspirations.

Consequently, we argue that intelligent measurement for better choices has enormous implications for operational and strategic decision-making, productivity measurement, and organizational design.

## Intelligent Measurement Leads to Better Choices and Better Decisions

Translating AI-enabled measurement capabilities into actionable insights, nudges, and options effectively creates dynamic intelligent choice architectures. These structures embed AI insights into decision frameworks and flow; deliver choices that are personalized, predictive, and ethically aware; and help users align decisions with enterprise goals.

Intelligent data analytics, for instance, can yield demonstrably better management choices for sales, supply chain, and marketing decisions: The key deliverables here are choices, not answers. Intelligent measurement agents could deliver accurate and detailed insight that enables digital twins to suggest more efficient or more innovative suggestions for supply chain operations. Leaders can expect better options and recommendations — not just the "best" answer — from their algorithmic investments in areas ranging from HR to software development to workforce automation.

Executives need not have a monopoly on these benefits. Intelligent choice architectures could redefine decision rights throughout an organization. For customer support, AI-enriched choice architectures could present human

agents with bespoke recommendations based on real-time data analysis of customer behaviors, transactions, and sentiment. Predictive guidance could help customer support teams resolve issues more efficiently — say, by boosting the percentage of support tickets resolved in the first call — while enhancing customer experience. Aided by automated and augmented decision options in high-pressure environments, these systems could empower customer-facing employees not by telling them what to do but by giving them more personalized choices. That respects and reflects a certain "decision rights" sensibility.

Intelligent choice architectures similarly could support decision-making by middle managers and supervisors through actionable insights delivered via adaptive KPI dashboards that illustrate decision paths for optimizing team performance, easing operational bottlenecks, or flexing project timelines. In such a case, managers wouldn't just choose from a menu of options; they would receive recommendations on trade-offs among alternatives. For example, an AI might analyze sales data trends and recommend strategies to meet quarterly goals without requiring employees to take on unreasonable workloads, or send employee performance alerts tied to improving upsell or lift opportunities. Highlighting sales numbers is operationally and analytically secondary to proactively guiding managers to "nudge-able" improvements in team productivity and morale. Does this pose ethical, legal, and privacy concerns? Yes. That's why intelligent choice architectures must embed the explainability, interpretability, and transparency imperatives of responsible AI principles.

For HR, intelligent choice architecture training could highlight intelligent options for management to better coach and mentor by integrating data on employee performance, satisfaction, and career development. They could suggest personalized career paths, identify potential leaders, or recommend targeted training programs to better upskill employees or close skill gaps.

Walmart, for example, is exploring AI to identify hidden or undervalued talent, whom Ben Peterson, Walmart's vice president of People Product & Design, calls the retailer's "diamonds in the rough." As Peterson explains it: "Who's working right now in Store 2463 in Frisco, Texas, that we don't know about? How do we leverage technology to get a view into our associate population and identify skill gaps in where we want to be five or 10 years from now?" In addition, Walmart seeks to use AI also to identify real-time learning

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and development opportunities for associates that will “get them where they want to be and where we see a need,” Peterson says. “How do we prepare them for the roles of the future?” The answer is by providing better choices to help them make better decisions, for themselves and Walmart.

Intelligent choice architectures also make substantial contributions to rethinking and redesigning key performance indicators and outcomes. If manufacturing predicts longer-than-anticipated downtime, an intelligent choice architecture might adaptively engage with middle managers to suggest resource reallocations, workflow adjustments, or personnel shifts. The intelligent measurement system ensures that production managers don’t merely react to KPI fluctuations but proactively anticipate issues before costly escalations. Just as leaders will learn to make better decisions through their engagements with choice architectures, choice architectures will learn from the decisions leaders make.

### Selecting the Right Choice Architecture

Which intelligent choice architecture best suits a given use case or circumstance? Should intelligent choice architectures privilege or weigh customer experience more heavily than employee experience? Should operational financial decisions seek to optimize customer lifetime value over quarterly cash flows? Should managers make their own personalized intelligent choice architecture guidelines, guardrails, and recommendations visible to their colleagues? Ultimately, intelligent choice architectures should reflect and respect decision rights established by top management (or elsewhere in the organization — it’s a choice). When weighing choice architecture options, leaders should explicitly consider how these systems would engage with users and connect them with the job or task for which they are best suited.

These are some options for intelligent choice architectures:

#### **NUDGE ALGORITHMS FOR OPTIMAL DECISIONS:**

AI can incorporate Sunstein and Thaler’s nudge strategies that gently guide leaders toward more optimal decisions without limiting or threatening their real or perceived autonomy and discretion. This enhances enterprise decisions by subtly optimizing outcomes while preserving decision makers’ agency. This builds greater trust between intelligent choice architects and users of these systems.

#### **PERSONALIZED DECISION ENVIRONMENTS:**

AI-driven measurement systems can create bespoke decision environments, reflecting the unique roles, past choices, and contexts of individual leaders, managers, or associates. Just as Amazon, Netflix, and Spotify tailor their recommendations to individual consumers, these personalized options explicitly align with professional preferences, priorities, or situational demands.

**PREDICTIVE CHOICE MODELING:** By leveraging historical data and AI analytics, these systems provide forward-looking insights, predicting the probable outcomes — and trade-offs — of various strategic decisions. Predictive capabilities encourage leaders to proactively assess the potential impact of their choices and their likely results.

**COMPLEXITY MANAGEMENT:** AI can distill vast volumes of complex data into simplified, actionable insights, enabling decision makers to more efficiently navigate challenging choice landscapes. Complexity reduction enhances both clarity and visibility around decisions while ensuring that leaders focus on the most meaningful metrics.

**ETHICAL DECISION-MAKING:** AI can embed ethical considerations into intelligent choice architectures to transparently guide strategic decisions into alignment with organizational values and compliance. This integration celebrates responsible decisions that reflect broader enterprise goals for stakeholders, as well as for investors and operators.

## Rethinking Productivity: From Outputs to Outcomes

Intelligent choice architectures have enormous implications for defining, designing, and measuring enterprise productivity. Intelligent measurement systems that analyze vast volumes of relevant data and identify essential patterns can now offer insight and advice on the options, opportunities, and outputs most likely to generate desirable outcomes. They can measure contributions to outcomes, not just outputs. When appropriately embedded in data flows and workflows, intelligent choice architectures can produce and prioritize *measures of impact* over *measures of activity*. This capability enables executives to revisit and rethink their productivity aspirations for human, financial, and other forms of capital. Bluntly, intelligent choice architectures can help leaders to more productively align return from both their tangible and intangible assets.

A case in point is a large international bank that emerged from the COVID-19 pandemic only to confront the unhappy reality that, in survey after survey, a majority of its employees declared that they were attending too many meetings — and that most of them were a waste of time. The survey results identified cultural and operational pain points that led to several AI pilots exploring different paths to make meetings more valuable to their participants.

In one of the more successful pilots, all of the presentation materials, meeting transcripts, and agendas for certain team meetings were fed into a large language model (LLM) for summarization, synthesis, and sharing. The immediate generative outputs were concise summaries of

takeaways and suggested next steps. Participants in these LLM-supported meetings reported dramatically higher levels of satisfaction relative to meeting-satisfaction levels in the survey results. These findings gave managers and top management alike a new way to measure and evaluate the contribution of team meetings and collaborations to delivering projects that were on time and on budget and had higher levels of quality and reliability.

A more enduring impact emerged from participants who used those summaries and next steps to improve follow-up coordination and collaboration and generate recommended agendas and checklists for future meetings and conversations. Meetings became less of a “waste of time” and more of an opportunity for value-added interactions that enabled employees to improve how they prioritized their time, tasks, and efforts. This use case illustrates that the intentional application of LLM capabilities can improve meeting quality and outcomes.

## Organizational Design Implications: Decision Rights

Choice architectures that deliver intelligent options for leaders and managers inevitably raise important — and unavoidable — questions about decision rights. When does following an automated recommendation raise accountability issues? Under what conditions can a human decision maker disregard machine-generated options or recommendations? As generative AI systems learn to become more capable choice architects, how will decision

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rights change for talented human workers? Leaders won't be able to avoid the organizational design implications of intelligent choice architectures.

Consider, for example, the RACI (Responsible, Accountable, Consulted, Informed) framework approach to allocating decision rights and responsibilities for project management. In a clear and meaningful sense, RACI represents a choice architecture for decision rights. By structuring and clarifying organizational decision-making roles, effective RACI implementations explicitly and specifically shape how choices are both presented and made.

With apologies to Sunstein and Thaler, this framework nudges organizational behaviors toward clearer, more efficient, and more accountable decisions. RACI embodies choice architecture principles in the explicit context of decision rights and responsibilities. Combining LLMs with traditional RACI approaches augments the operational implementation of RACI. An intelligent RACI framework would:

- › Predict optimal responsibility allocations based on real-time data and desired outcomes.
- › Adjust decision rights fluidly as project contexts shift.
- › Personalize choice architectures for each role, enhancing decision quality.
- › Predict and optimize the impact of different RACI configurations on project success.
- › Proactively identify decision bottlenecks and suggest reallocations of responsibilities.

This transformation would turn legacy RACI from a rigid framework that (merely) sets roles at a certain stage in a project to an adaptive measurement and learning system that continuously learns to better allocate decision rights.

## Cocreating Better Choices, Decisions, and Outcomes

If leadership teams decide to create them, intelligent choice architectures can empower managers and employees at all levels to act with greater autonomy and insight. Backed by increasingly accurate analytics, these structures reshape how leaders, managers, and employees

constructively engage with, evaluate, and act on data. As leaders become stewards of intelligent systems that learn, learn to learn, adapt, and improve, they need to reassess their default roles as dominant decision makers. Rethinking authority, accountability, and decision rights becomes a critical strategic and cultural priority. Decision rights must become as dynamic as the data and models driving them. The essential executive question is no longer whether predictive and generative AI will take over decision-making but how human expertise and AI will complement each other to cocreate better choices, decisions, and outcomes.

This is the first article in a new *MIT SMR* Big Ideas research effort, conducted in collaboration with Tata Consultancy Services, to understand how intelligent measurement transforms leadership decision-making and organization design. We'll be publishing another article sharing more of our research findings early next year and a long-form report next summer.



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## REFERENCES

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