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Successful digital initiatives demand that leaders frame performance targets around data-defined business objectives rather than technological capabilities.

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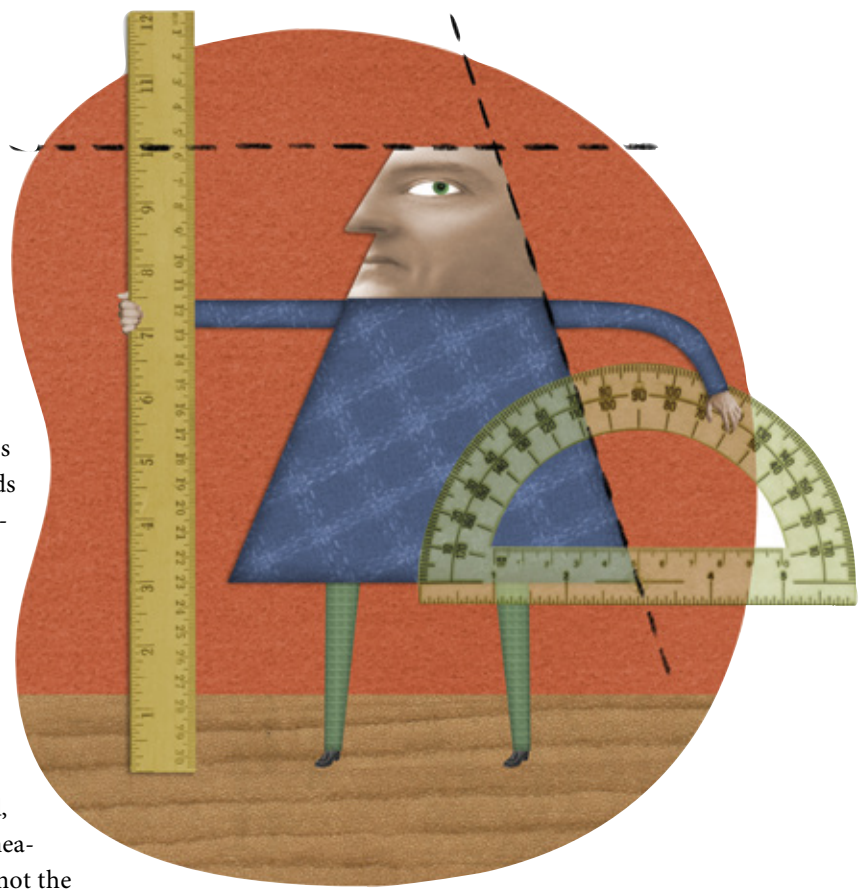

The most dangerous step leaders take in pursuit of digital transformation is declaring digital transformation their goal. More than any other error, confusing the means with the end is responsible for the dismal digital track record of transformation efforts.

While there are many reasons why so many companies report poor results from their digital initiatives, what stands out for us is how many aspiring transformers seek to measure the wrong things. They consistently pick poor and misleading key performance indicators, such as the number of users per license purchased or the number of processes performed using new software.

These digital KPIs miss the point. Transformational leaders recognize digital strategy not as an end but as a means to achieving measurably better business outcomes. They design digital plans around strategic objectives. And, crucially, they identify a portfolio of enterprise KPIs that measure business value delivered by the transformation — not the company's technology infrastructure.

In platform economies, radically enhanced digital capabilities become critical to actually achieving the results that manifest a company's strategic objectives. The ability to meet complex supply chain challenges, innovate, enable hybrid distributed workforces, and continually improve both virtual and real-life customer experiences increasingly relies on digitally enabled capabilities.

Unfortunately, we find KPIs undervalued and underutilized as analytic assets for leading digital change.

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THE ANALYSIS

This article draws on the authors' experience advising large legacy companies on designing, structuring, and shaping effective transformation programs across a variety of industries.

The authors also incorporated findings from *MIT Sloan Management Review*'s Strategic Measurement initiative.

Most legacy companies treat KPIs as reporting and accounting mechanisms rather than strategic decision drivers; they're used more to keep score than change the game. Clinging to these legacy KPI perspectives gets in the way of successful digital transformation strategies; these KPIs are literally counterproductive.

We argue that KPIs should lead, not track, digital initiatives. Top management must define and communicate both the key performance that is required to execute its strategic plan and the digital capabilities that will enable that performance. That distinction is not subtle: Dramatically upgrading technology infrastructure — so-called lift-and-shift approaches — typically results in nothing more transformative than the same old operating models running in the cloud. The real transformation opportunity lies in making strategic enterprise metrics both individually and collectively more visible and valuable. Dramatically increasing ROKPI — return on KPIs — should be leadership's goal.

Better and smarter KPIs lead to better and smarter digital transformation. Strategic KPIs invite more rigorous oversight of data governance. Ongoing improvements in predictive/prescriptive analytics ensure better and more effective decision-making. Effective transformations turn balanced scorecards into digitally dynamic KPI portfolios with the power to learn.

One financial services company we worked with identified agility — which it defined as the ability to rapidly react and respond to customer requests — as a key performance aspiration. Legacy metrics stressing conformance and compliance in back-office processes proved irrelevant to improved customer care or responsiveness. Measuring agility required the company to first identify underlying criteria and data — such as session time, autofill (whether regulatory and internal process forms could be automatically completed), customer effort, and loan approval cycles — that operationally defined agility. Doing that also meant determining which use cases mattered most and looking for where agility would measurably improve outcomes for both customer and company. It also meant gaining awareness of the risks agility created — most obviously, whether streamlining processes for some customers cut corners on creditworthiness reviews and regulatory compliance.

Measuring agility along these dimensions forced a radical rethinking of client relationships, engagement, and use cases. For example, why should loyal and established customers have to fill out the same forms and jump through the same approval hoops as newcomers and prospects? Shouldn't loyalty be recognized and rewarded by reducing customer effort and offering special notifications and alerts to valued clients? Doing that for customers meant baking speed and responsiveness into one-size-fits-all processes.

Those lessons proved invaluable. New metrics challenged old thinking about legacy processes and capabilities. The result: a metric that didn't just monitor digital agility but also informed possible investments for agile improvement.

By defining, designing, and delivering transformational KPIs, leaders quickly discover where digital transformation is most likely to offer measurably greater efficiencies and superior outcomes. Customer lifetime value (CLV) can be a profoundly transformational KPI: To wit, artfully architected CLVs can incorporate disparate data flows such as churn prediction, loyalty, propensity to buy, social network influence, and gift giving. Starbucks's popular mobile app — the use of which increased significantly during the pandemic — is transforming how the global café chain has managed customer relationships and workflows worldwide. Its evolution was harnessed to the company's customer experience and CLV KPIs.

KPIs should thus shape digital transformation priorities. If certain data and data flows don't directly inform or enhance a proposed transformational KPI, they shouldn't be on the initial transformation road map.

Based on our experiences working with companies engaged in digital transformation, we have developed a four-component leadership framework for KPI-driven digital transformation:

1. Create a strategic KPI portfolio.
2. Commit to data as a digital asset.
3. Orchestrate data flows to make KPIs shareable, visible, and dynamic.
4. Commit to continuous KPI improvement.

1. Create a Strategic KPI Portfolio

Transformational KPIs are the metrics chosen to lead and drive digital transformation. As a rule, they reflect increased customer value and revenue growth; they operationally align digital capabilities with desired business outcomes. They require — and guide — collaboration between digital developers and business process owners. And they represent where leadership wants the enterprise to go.

Designing effective strategic KPI portfolios requires guiding principles, including having a balanced focus on predictive (leading) and retroactive (lagging) outcomes; establishing direct, observable links between KPIs and the organization's strategic objectives; and crafting KPIs to uncover root causes. Consider the following questions to work through this process:

What is the overall strategic vision for your transformation? Draft a one- or two-sentence statement that articulates an explicit mission. For example, "Achieve 5x revenue uplift and 3x margin improvement by being hyperfocused on customer needs and simplifying operations."

What tangible goals link to that statement? Most often, mission statements are clear but "squishy." Quantitative clarity is key: Measurably diversified sales channels, improved customer experience, and enhanced cross-functional collaboration are potential deliverables for the vision statement above.

What key inputs and actions correspond to each tangible goal? We've observed that even tangible goals can be too sweeping for effective KPI design. Whenever possible, tangible goals should be broken into the two or three high-level inputs that will enable that goal. For example, for the goal "enhance cross-functional collaboration," high-level actions could be "incentivize functions to cross-sell and go to market together" and "enable functions to effectively share data and reduce duplication."

What is the possible universe of metrics that can reliably measure each key action? This is where enterprise stakeholders collectively brainstorm possible KPIs (leading and lagging) corresponding to each key action.

What is the prioritized portfolio of metrics? Winnowing the universe of KPIs into a prioritized portfolio (typically five to nine of them) requires leadership art and management science. Objective criteria that can help you narrow the list include measurement feasibility, ability to minimize unintended consequences, and ability to facilitate alignment.

For example, a global hardware company we worked with sought to transform from a product-focused enterprise to an end-to-end solutions provider. The goal of this strategic shift was to increase CLV while radically simplifying operations. With these aspirations in mind, we collaboratively created a portfolio of strategic KPIs. These KPIs had technical, operational, and cultural implications and included the following:

- Customer and partner Net Promoter Scores (NPSs). These were selected as a simple, accessible way to assess customer and partner relationship quality, both over time and in comparison to competitors.
- Number of lines of business. This KPI was selected as a leading measure to promote simplified operations — important to private equity investors in that industry — via greater consolidation, integration, and cross-border collaboration. Digitalization would reflect this by measurably reducing the proliferation and diversity of disparate IT systems and simplifying and globalizing national and regional workflows.
- Number of general ledgers (GLs). Radically reducing the number of GLs would signal successful rationalization of duplicative or unnecessary operations. Having fewer GLs was seen as a proxy for simplifying financial reporting. The CFO thought this KPI was a superior lagging indicator for assessing the rationalization/consolidation agenda.

Our digitally transforming financial services provider, in contrast, defined its sought-after capability — agility — along four tactical dimensions: business performance, risk management, operational excellence, and employee experience. The KPIs were meant to reflect value-oriented speed and responsiveness for both people and processes. The following were among them:

- Ratio of transactional to analytical operations. This is a lagging indicator of the organization's

priority of providing fewer low-value transactions to clients in favor of more high-value analytical insights.

- Percentage of data storage and distribution processes leveraging cloud-based platforms. This leading indicator emphasized better and faster data access and improved control by managing fewer internal platforms. It was chosen to ensure that IT teams didn't "cheat" by investing more time and effort in sunk-cost legacy systems.
- Percentage of roles offering flexible work schedules. This KPI was selected because analytics suggested that it was an excellent proxy measure for quality of employee experience — that is, engagement and satisfaction. It is also a leading indicator of employee churn.

To be clear, there is no correct number of strategic KPIs for the digitally transforming company — though we find somewhere between five and nine to be most appealing. Management debates around portfolio size and scope are invariably contentious, but they clarify executive and enterprise priorities, put the focus on business outcomes rather than digital inputs, and signal leadership's strategic and operational concerns.

Are these concerns largely related to customers, costs, or production? Through this process, we see executives gain new visibility into how constellation KPIs complement and compete. More than one company we've worked with, for example, discovered that improving NPS and customer effort metrics required a reduction in the number of planned features and new functionality. Novelty, simplicity, and perceived value can be at odds; leadership uses KPIs to define and determine the trade-offs.

While strategic KPI portfolios may not necessarily be silo busters, they provoke internal conversations about interdependencies that haven't occurred before. They raise cross-functional awareness of common measures such as NPS, overall equipment effectiveness, and first-contact resolution.

KPI discussions also sharpen leaders' thinking about their portfolio mix of leading and lagging indicators. That dichotomy has enormous implications for digital transformation investment. CLV-oriented organizations, for example, need to consider where it makes more sense to invest in cultivating customer capability through digital diagnostics, training, and tools versus getting them to use existing products and services more frequently. Does leadership get greater value from better anticipating the future or from better monetizing the moment?

2. Commit to Data as a Digital Asset

Misunderstanding and mismanaging the role of data is the greatest obstacle to successful and sustainable digital transformation. Defining the key data points that individually and collectively make up the KPI portfolio is the first and hardest task in this step. For example, who or what is a customer? What constitutes acceptable data quality? What is standard output? Determining clear, objective, enterprise-wide data standards and definitions is essential.

Legacy organizations we've worked with have often possessed bold digital ambitions but inadequate command of their data. Data governance was largely perfunctory, siloed, or the reluctant responsibility of IT. We found no formal metadata management policies or programs in place. The few data stewards did the best they could, given limited guidance and support. No senior manager or working group was tasked with showing "return on data as an asset."

Yet data is always where the real work of digital transformation begins: Most companies quickly discover that they lack — or can't access — essential data for their KPI portfolios. They may initially scramble to scrape "good enough" data, but ultimately, all of them will need to identify and audit both structured and unstructured databases and pinpoint responsibility for data collection and quality.

One global technology business we worked with proposed a thoughtful strategic KPI portfolio to guide its customer-centric transformation, but two specific metrics exposed its data difficulties. First, the company sought to reduce its total approval times for customer quotes. Between the company's account management structure, its broad product array, and complicated sales incentives, detailed responses to customer or prospect queries could take weeks. Second, the company sought to better leverage its sales force, making increased meetings with customers and prospects a transformation priority.

The organization quickly realized that there was no single source of truth for its pricing information and that it had inadequate sales force time-tracking records. Pricing data was owned by individual business groups that understandably wanted to maximize their flexibility. Meanwhile, most sales teams didn't reliably or accurately track their members' time. While the proposed KPIs were excellent, the data to support them was not. This forced the company to revisit and revise its transformation expectations and make a greater commitment to data acquisition and management. For example, it began to reward sales teams that agreed to track their time in order to generate the data required to measure progress toward the goal of greater sales force effectiveness.

Much transformation disappointment and failure follow expensive investments in superior digital tools that rely on data that is incomplete or inadequate. Digital transformation requires a strategic investment in making data more valuable. No digital transformation strategy or ambition escapes IT's first law: garbage in, garbage out.

Mapping quality data assets to the strategic KPI portfolio is the surest path to effective transformation alignment. Asking executives the following two questions is indispensable to this task:

What are your most valuable data sets? This question proves most revealing once leaders define their portfolios. Product and process owners alike are pushed to reevaluate their current data sets in light of their relevance to new KPIs. For the technology company that aspired to establish more agile customer-centricity, for example, the need to measure total approval time highlighted the value of legacy CRM data sets that captured how long each quote sat at each step in the approval process, from pricing to legal, risk, and so on.

What one thing would make your data more valuable? Transformation teams should take more holistic and systemic views of data's potential impact. For example, the strategic objective of being more customer-oriented frequently inspires a commitment to tracking every prospect and customer touch point along the entirety of the customer journey. Ultimately, "return on data" becomes an underlying transformation objective.

3. Orchestrate Data Flows to Enable KPIs

Strategic KPIs — NPS, customer churn, daily active users, or perfect order rate — typically appear as single metrics, but they are calculated from skillfully sequenced combinations of data building blocks. Data sets coalesce into data flows. Coordinating, sequencing, and orchestrating the journey of reliable data through systems, processes, business units, functions, and geographies makes calculating trustworthy strategic metrics possible.

Well-designed data flows not only aggregate internal systems data but update and integrate relevant external data from third parties or novel sources. Better and more timely orchestration ensures more reliable KPIs. Lagging indicators can be transformed into leaders.

Data flows both mirror and enable process flows: For example, underlying every digital customer journey is a data journey. Successfully orchestrating strategic KPI data flows requires that data governance principles be intentionally aligned with desired performance outcomes. That is, individuals and teams must ensure the quality, visibility, lineage, and timeliness of the data informing a performance metric.

Data governance is about responsibility and accountability. Digital developers and their business transformation counterparts must collaborate here. Business process owners ultimately become business process data and metadata owners as transformation efforts proceed.

For example, who owns customer profile data — sales, marketing, or account management? Who

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has the right to make a recommendation to a client on a path to purchase? Does a customer qualify for a promotional offer? What were a client's last three NPS ratings? Effective KPI data governance means these questions aren't hypothetical; they are essential to meaningfully measuring success. The ability to reliably answer these kinds of questions is the surest signal of transformation success.

4. Commit to Continuous KPI Improvement

Because digital transformation is a process, not a destination, KPIs are waypoints, not endpoints. Culturally and operationally, leaders must accept that KPIs have to continuously evolve in order to continue to drive value creation.

For example, a telecom company embraced customer churn as a strategic KPI. Its marketing and finance teams collaboratively created a CLV metric to identify, segment, and score customers at risk of canceling their service. More-valuable customers would be targeted with promotional offers or upgrades to increase retention. Analytics subsequently identified some previously undervalued customers as social media influencers who deserved higher scores. Incorporating that data into decisions on whom to target with special offers reduced churn rates among high-value customers at very low cost.

KPIs continuously improve when linked to better data, better analytics and machine learning, and better experimentation. Leaders and teams that own transformational KPIs should always seek to make them more valuable by searching out additional data held by the company or third parties. If NPS and customer satisfaction are critical, then ever more granular data on on-time delivery, returns, and customer service queries provides useful leading indicators. If a perfect order rate is paramount, then data sets providing better visibility into suppliers' reliability are key. Digitally integrating dynamic analytics into a strategic KPI is what transformation is all about.

Digital platforms transform the economics of rapid and scalable experimentation; advanced organizations typically run thousands of digital A/B experiments a week. They're keen to learn more about customer, prospect, and lead behaviors. For example, digital marketers increasingly run experiments to refine messages, segment customers, and build loyalty. Such experiments might determine when or whether better segmenting customers is more valuable in reducing churn or increasing sales than better personalizing offers for them. For some companies, better segmentation will boost retention and CLV; at others, personalization represents the better digital investment.

Some practitioners may also clone real-time data sets, data flows, and the analytics composing them in order to simulate different scenarios and experiment with options for improvement. They might test whether more granular data might lead to better performance or how changes in one KPI might affect or influence the performance of another.

TAKEN TOGETHER, this framework's four components enable a virtuous cycle. Better data and analytics improve and enhance KPIs; better data orchestration encourages the discovery of and access to new data sources that strengthen strategic metrics; seeing KPIs as dynamically evolving encourages leaders to look for new KPIs to track new kinds of value the company can create; and ongoing improvement and growth is baked in, so digital transformation is ongoing.

Too many organizations fail to see transformation as an opportunity to rethink strategic priorities and operations. Our most important insight about transformation is that successful leaders privilege performance and capability improvements over cost and head count reductions. These leaders champion KPIs as a way of holding themselves and their employees accountable against strategic goals. They look to metrics and measures that inspire new thinking, new customer insights, and new growth opportunities. Their KPIs are as innovative and empowering as the products, services, and user experiences they sell. These are the transformations that win.

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