UNDERSTANDING THE REAL KEYS TO EFFECTIVE KPIs

By Michael Schrage and David Kiron

Businesses have always needed tools to track and measure performance – and value – of employees, sales, and customer interaction. Key Performance Indicators (KPIs) – whether displayed as scorecards, dashboards, spreadsheets or standard metrics – demonstrate how well, or effectively, an organization is achieving a key objective.

The relentless – even explosive – rise of big data combined with ongoing computational and algorithmic innovation imposes novel challenges to organizations serious about introspection, insight, and accountability. We set out to determine if legacy KPIs have become anachronisms or whether they are too outdated and arcane for today's digital transformations and business models. How might they be improved and/or renewed?

A new, global survey and research report, *Leading With Next-generation Key Performance Indicators*, published in June by *MIT Sloan Management Review (MIT SMR)* addresses these and other KPI concerns. In what we believe to be the first cross-industry survey – which polled more than 3,200 senior executives – results show these fundamental questions are starting to be addressed.

This survey, conducted by *MIT SMR* and Google, studied the use of KPIs in the digital era. As stated in the study, we explicitly chart executive views on KPI effectiveness; highlight the tensions and contradictions our research uncovered; discuss emerging behaviors by advanced KPI users; and recommend actionable next steps executives can take to adapt today's to digital opportunities – and threats.

NEW PRESSURES ON OLD KPIs

The results show that "accelerating technological innovation, intensifying competitive pressure, and increasing customer expectations are forcing business executives to rethink how they use KPIs to lead and manage the enterprise." In the study, we defined KPIs as "the quantifiable measures an organization uses to determine how well it meets its declared operational and strategic goals."

Clearly, yesterday's retrospective metrics need to give way to more predictive analytics and machine-learning capabilities that offer keener insight into moving the business forward.

IN THIS BRIEF

The *2018 Strategic Measurement Global Executive Study and Research Report*, covering 3,200 organizations in a range of industries and geographies, reveals six behaviors common to advanced users of KPIs:

1. Use KPIs to lead, as well as manage, the enterprise.

2. Develop an integrated view of the customer.

3. See KPIs as data sets for machine learning.

4. Drill down into KPI components.

5. Share trusted KPI data.

6. Aim for KPI parsimony.

Big data resources, machine learning (ML) algorithms, and innovative arrays of technologies allow us to monitor and measure user experiences in ways unimaginable even a decade ago. Legacy KPIs from 2001 or 2015 appear increasingly inadequate for tomorrow's enterprise accountability or innovation. Serious investors, for example, look at Amazon, Facebook, Alibaba, Microsoft, Netflix, or Tencent, and immediately grasp that yesterday's approaches aren't aligned with contemporary value creation and measurement.

In fact, the most sophisticated businesses – those that appreciate and understand digital transformation and accountability – take a radically more dynamic KPI view. They use the indicators to set transformation expectations and lead, not just manage their business. This distinction is not subtle. They see and treat KPIs as drivers of strategic change and opportunity, not just tools for "hitting one's numbers."

At the same time, however, uncomfortable truths surfaced from the research. Most companies simply do not deploy KPIs rigorously for review, or as drivers of change. They pay lip service to what they have declared their essential metrics. In practice, KPIs are regarded as "key" in name only. The most prevalent attitude toward them seems to be one of compliance, not commitment. The responses suggest this perfunctory treatment reflects cultural and organizational inertia, not technical or operational limitations.

M DIGITAL

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In terms of perceived effect and influence, our survey finds that most organizations are KPI underachievers. They get significantly less value than they say they want. Their returns on KPI investment are low.

BETTER ALIGNMENT NEEDED

For example, we were surprised that only a quarter of the executives (26%) say their functional KPIs are well-aligned with the organization's strategic objectives. That means roughly three-quarters of respondents acknowledge a disconnect between functional and strategic metrics. They're not aligned. They've got more data and better analytics than ever yet their organizations don't clearly align functional operations with strategic aspirations. This survey offers a clear warning to KPI underachievers:

> **Perfunctory and commodity KPIs yield perfunctory and commodity outcomes. That's a recipe for stagnation and decline as global competition intensifies.**

To what extent do your organization's KPIs drive how you lead and/or manage people and processes?
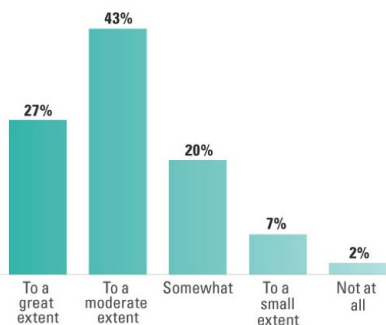
Percentages do not total 100 due to "Don't know" responses.

Figure 1 M. Schrage and D. Kiron, "Leading With Next-Generation Key Performance Indicators," *MIT Sloan Management Review*, June 2018.

Business leaders worldwide now struggle to strike a workable balance between tactical and strategic KPIs; operational and financial KPIs; and KPIs that effectively capture the moment while anticipating the future. This imbalance is a source of measurable dissatisfaction and concern as data available for KPI refinement and improvement increases.

Executives also appear torn between adding more detailed KPIs and focusing in on a smaller, simplified set. Intriguingly, no consensus of KPI best practice emerged from the survey. But we did find small slices of companies exhibiting sophisticated data-driven and analytically innovative approaches to maximizing the impact of their KPIs. Their behaviors merit closer examination.

We are tremendous admirers of the work of Robert Kaplan and the Balanced Scorecard. Peter Drucker's MBOs and Intel's OKRs – now evangelized by Kleiner Perkins venture capitalist John Doerr – are excellent, too. However, their approaches represent pre-Internet, pre-big data, pre-ML ways to think about accountability and business aspirations. Algorithmic innovation and data volume, as well as variety and velocity, profoundly disrupt these legacy KPI approaches.

The survey makes clear that legacy KPIs have become less valuable for tomorrow's accountabilities and aspirations. The research shows that as "next-generation predictive algorithms are incorporated into business process planning and design, they seem destined to inspire next-generation digital dashboards." KPIs will consequently offer predictive and prescriptive indicators, not just rearview-mirror reviews. Using yesterday's tools to guide an organization into the future is like navigating with a magnetic compass instead of a GPS. Data-driven companies that leverage advances and reconceive their KPIs will enjoy distinct competitive advantages. This can already be seen in digitally enlightened firms ranging from Amazon to Alibaba to Netflix to Facebook.

MARKETING IMPLICATIONS

The trends we discovered – individually and collectively – have particular relevance to chief marketing officers (CMOs) and other marketing executives. These leaders increasingly find themselves held accountable for growth-oriented objectives and strategies. They need to use data and analytics in new ways to find new growth. Accordingly, these executives are exploring new and novel KPIs. More traditional marketing performance measures, such as campaign effectiveness or click-through conversions, are giving way to more customer experience- and influencer/advocacy-oriented metrics.

Consider Netflix, which was not studied for this report , but serves as a good example. The entertainment service provider not only monitors and collects data on viewer behavior; it also creates and recommends programs based on that data. Netflix uses data and analytics to create more viewers and viewing, and it's likely fueled by a KPI that helps its marketing team greatly.

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While this study mostly examined marketing and customer experiences, future research in KPI design and development seems ripe. For instance, we could integrate behavioral economics and social psychology research into KPI and digital dashboard design. The opportunities for experimentation – both in the real-world and academia – are compelling.

We also see an exciting and compelling flip in the way KPIs are being used. Traditionally, KPIs told management how well the business was doing. As noted, they were largely retrospective, and originated with accounting and/or financial reporting cultures. In essence, KPIs were analytic outputs that informed executive decisions.

In an era of ML savvy, everything flips: Instead of KPIs being analytic outputs for humans, they can be treated as data inputs for machines. That is, organizations are using KPIs to train ML algorithms. Just as KPIs informed humans in the past, we can train machines to optimize KPIs in the future. We advise businesses to see KPIs as data sets for ML.

As such, a new performance analytic stack is possible that begins with humans and builds out to the enterprise in this way:

1. Quantified self
2. People analytics
3. Enterprise KPIs as discussed in this report

This analysis indicates that today's enterprise data governance and performance management must now enable measurement, assessment, interpolation, and extrapolation of KPI patterns between individuals, teams, and the organization itself. For instance, how do enterprise KPIs inform investment in individual and team capabilities? When should machines train humans or humans train machines for maximum performance output? The answers to these questions will be found in the KPIs of tomorrow – which our survey suggests are just beginning to be defined today.

REPORT

The full report can be found here: https://mitsmr.com/2M4YWrD

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