Use Digital-Outcome-Driven Metrics to Quantify the Business Value of Technology Investments

Published 4 August 2021 - ID G00724675 - 10 min read

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Initiatives: IT Cost Optimization, Finance, Risk and Value; Executive Leadership: Digital Business; Executive Leadership: Strategic Cost Optimization

Digital capabilities are an important driver of growth and differentiation in every industry. Use digital-outcome-driven metrics to identify the best digital KPIs, to establish a clear line of sight between business value and enabling technologies, and to achieve business outcomes.

More on This Topic

This is part of an in-depth collection of research. See the collection:

- Research Roundup for Digital-Outcome-Driven Metrics for Industries

Overview

Key Findings

- Executives often struggle to measure and articulate the quantifiable value of their investments in business and technology capabilities.
- Business and IT leaders need a structured metrics library covering both operational and strategic outcomes, as well as risks and opportunities.
- Operational IT metrics are often disconnected from business outcomes, but executives need to establish the connection between technology and business outcomes to facilitate a meaningful dialogue between IT and business leaders.
- Executive leaders need to identify dependency relationships between technology and business outcomes to improve the impact of metrics on decision making and to better prioritize and invest in evolving business and technology capabilities.

Recommendations

Executive leaders pursuing cost optimization or trying to articulate the value of IT:

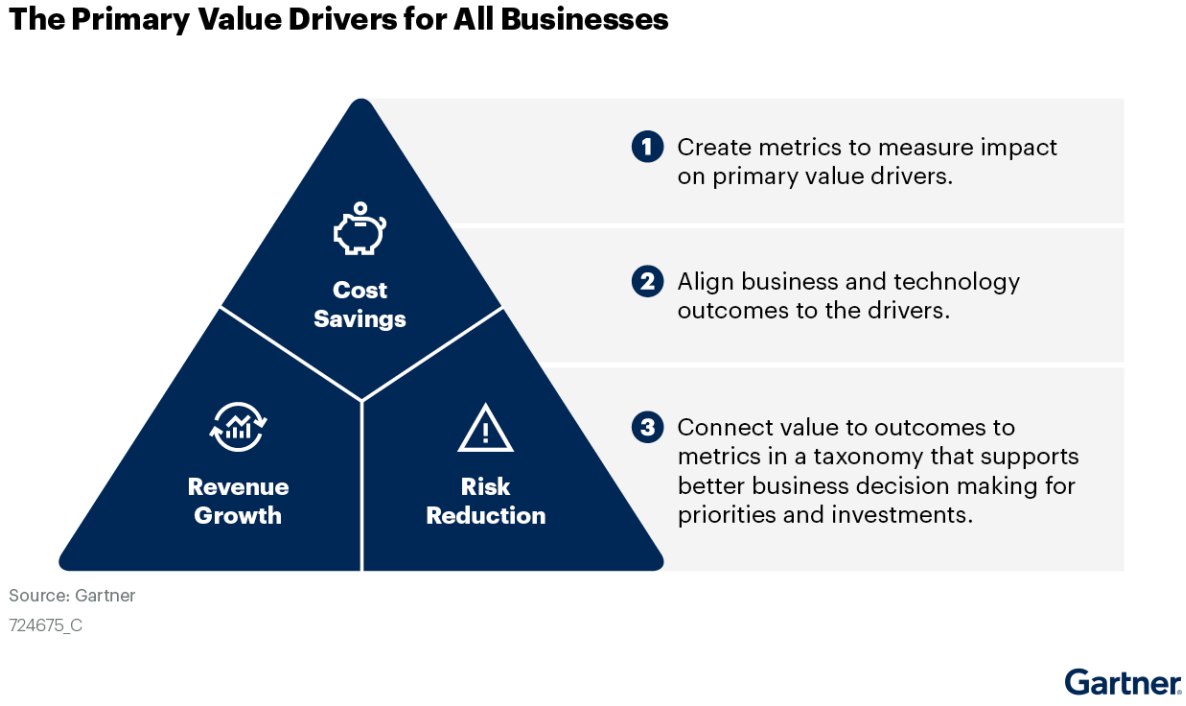
- Take inventory of current IT metrics and map them into your executive priorities.
- Determine the business value of technology investments by linking business-outcome-driven metrics (BODMs) to technology-outcome-driven metrics (TODMs).
- Build a metrics library that represents the full range of technology support for the expected business outcomes by clustering them along two dimensions: strategic vs. operational business outcomes and risks vs. opportunities.

Introduction

As companies continue to leverage technology investments to fuel their growth ambitions, business and IT executives need to become increasingly connected in their efforts to deliver strong business outcomes. According to Gartner's 2021 Innovation in Crisis Survey, [1] IT leaders across most industries, in their efforts to support business priorities, are pursuing efficiency and cost optimization, risk mitigation, and business profitability in that order as their most important goals for 2021.

Figure 1 shows the primary value drivers for all businesses. Revenue, cost and risk extend to all organizations, not just for-profit businesses. For example, government agencies and defense organizations have to manage budgets, which are parallel to revenue.

Figure 1: The Primary Value Drivers for All Businesses



Our 2021 CEO and Senior Business Executive Survey [2] shows that these goals are among the top 10 strategic business priorities of CEOs and executives of business leaders.

In this research, we discuss how executives can strengthen the dialogue between business and IT. This dialogue drives business outcomes through a deep understanding of what the business is trying to accomplish and an assessment of the role that IT plays in supporting key business outcomes and in creating specific metrics that articulate quantifiable value.

Analysis

Focus on the Primary Business Value Drivers of Your Technology Investments

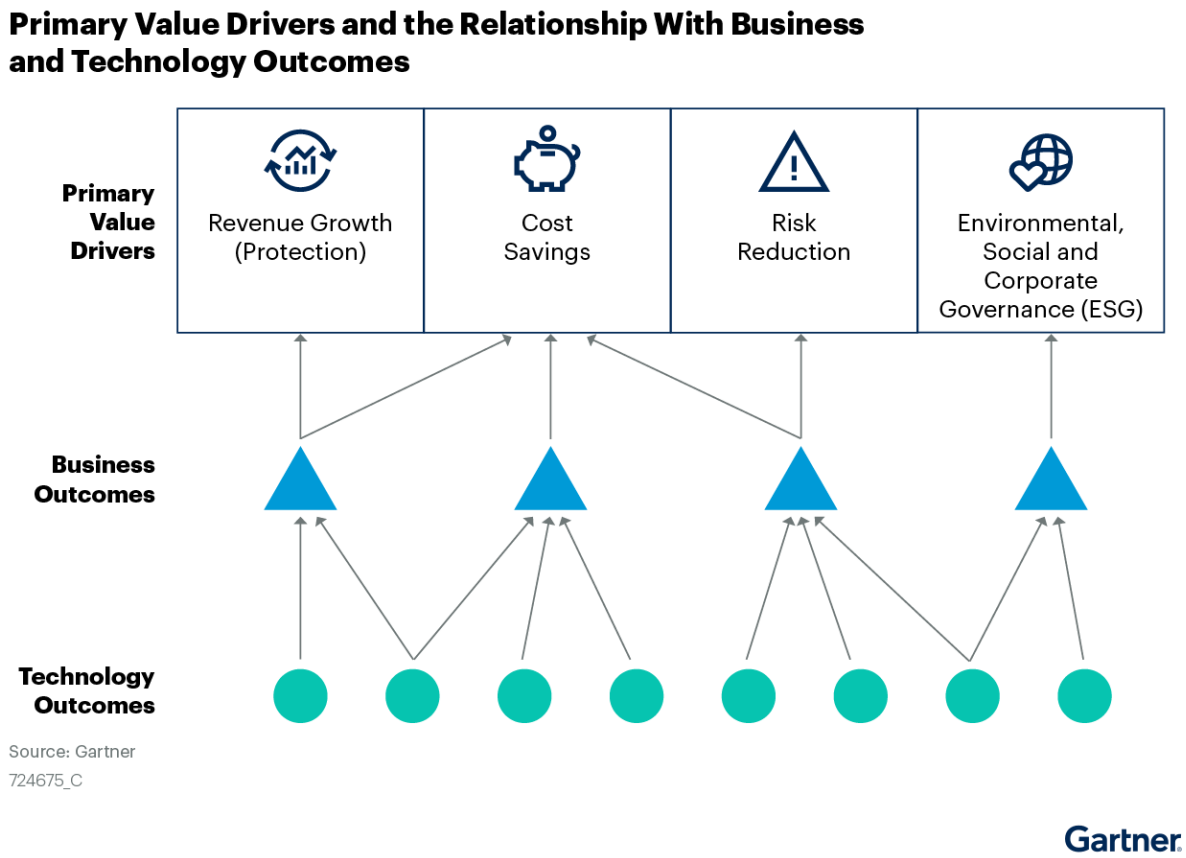
Investments in new business and technology capabilities will focus on enterprise performance improvements in three primary value areas (see Figure 2):

1. **Revenue Growth:** By increasing sales of existing products and services or generating new digital revenue.

2. **Cost Savings:** By improving internal efficiency or reducing direct or indirect cost elements such as distribution, client onboarding or churn rates.

3. **Risk Mitigation:** By reducing the likelihood of different risk types, by reducing their material consequences or by increasing the overall resilience to different types of risk.

Figure 2: Primary Value Drivers and the Relationship With Business and Technology Outcomes



Not all of these primary value drivers will be relevant for every industry. In the public sector, for instance, there would be value surrogates such as student success, patient health or citizen welfare.

A fourth business value driver that is increasingly gaining importance in several industries is environmental, social and corporate governance (ESG). New Zealand, for instance, has recently introduced legislation requiring all financial services companies to consider the effects of climate change in all of their business activities and to inform customers and other stakeholders about associated risks.

The primary value drivers are supported by business outcomes, and the business outcomes are supported by technology outcomes (see Figure 3). This hierarchy of outcomes shows the dependency relationships between technology investments, supporting business processes, and ultimately, how the desired outcomes in the value driver categories are achieved.

Quantifiable value is represented at the value driver level (e.g., x% increase in revenue), which is then mapped down into the supporting business processes (e.g., order to cash) and then to the supporting technologies (e.g., digital sales platform). A technology investment in the digital sales platform can creditably be characterized as an investment in profitability. This insight helps guide technology priorities and investments because the value of the technology investments is known.

IT leaders will need to clearly articulate the quantifiable value of their IT investments to their business peers, as IT budgets won't rise significantly in 2021 (less than 3% on average, according to our IT Key Metrics Data). CIOs often face a number of challenges in measuring and articulating the quantifiable business value of their technology operations and investments:

1. **Business Dependencies:** IT capabilities alone do not deliver business value without adoption and business process integration, which the CIO does not control. A better fraud management system in insurance, for instance, will only turn out to be valuable if skilled claims adjusters make use of it.

2. **Strategy Implications:** Quantifiable value can manifest itself in multiple ways and is highly dependent on corporate strategy. Revenue growth, for example, may be focused on maximizing output (e.g., increase of assets under management in banking) or on commercializing diversification and innovation (e.g., increase of noninterest income from nontraditional revenue sources). These factors are determined by business strategy, not the CIO.

3. **Uncertainty and Lack of Confidence:** IT investment decisions are often made with a considerable level of uncertainty regarding the concrete value potential of technologies, especially when they are emerging and lack a proven set of demonstrable use cases. This uncertainty manifests as a "halo" effect that the investment will generate benefits. We estimate that at least one-third of IT initiatives have this low confidence level.

4. **Multiple Value Taxonomies:** There are few commonly accepted and defensible ways to measure future value. A myriad of potential value taxonomies are applied in organizations today — ranging from simple one-dimensional discounted cash flow assessments to much more complex analysis of chain of effects.

5. **Lack of Industry Experience:** Some CIOs are experts in their function but may lack industry insight. This makes it tough for them to fully determine the quantifiable value they can generate from their IT investments, especially if their role is defined by a stronger focus on general infrastructure capabilities.

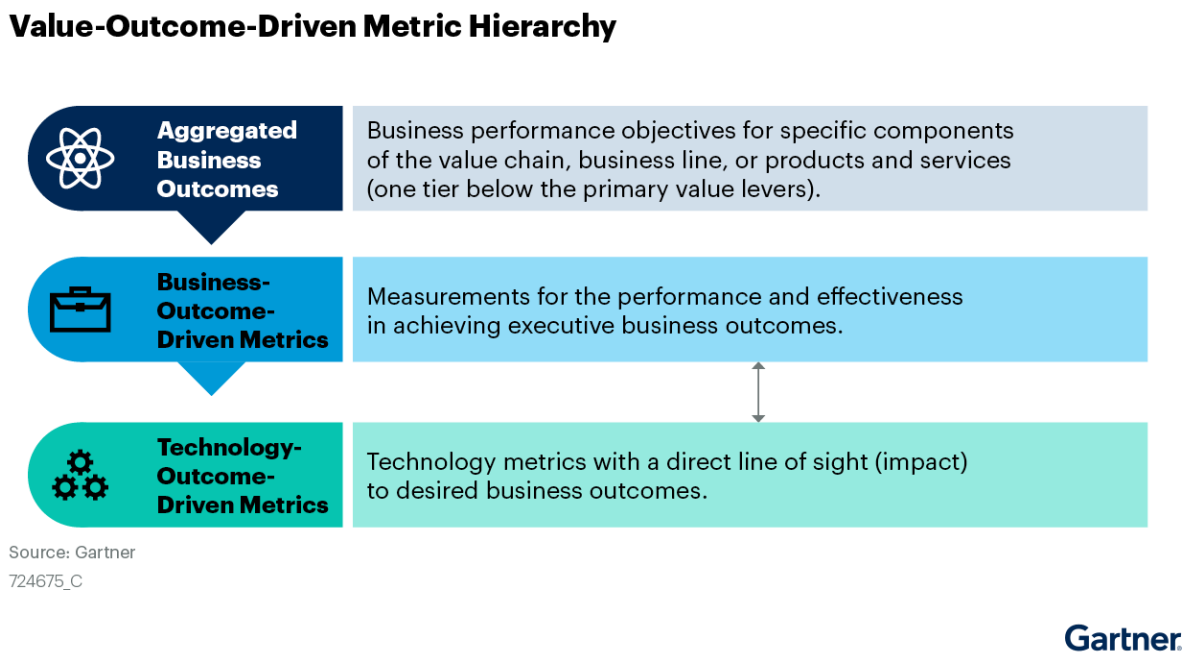
Executives need to become better-aware of the dependency relationships between business and technology. These dependencies create the foundation of outcome-driven metrics that represent the rather complex chain of immediate and cascading effects of IT investments.

Match Technology- and Business-Outcome-Driven Metrics to Articulate Business Value

Many CIOs struggle to drive technology priorities and investments when they discuss the business benefit with other executives. They largely report the success of IT initiatives as on time and under budget, and IT dashboards commonly contain metrics focused on the operational performance of technology with no clear line of sight to the business benefits they support.

CIOs should identify the dependency relationships between technology and the business outcomes when talking to other executive leaders. Figure 3 populates the visualized hierarchy and dependencies presented in Figure 2. IT operational metrics with a direct line of sight to business outcomes are referenced as technology-outcome-driven metrics (TODM). Similarly, business-outcome-driven metrics (BODM) are business metrics with direct line of sight to business outcomes (see also Outcome-Driven Metrics for the Digital Era). The arrows represent dependency relationships.

Figure 3: Value-Outcome-Driven Metric Hierarchy



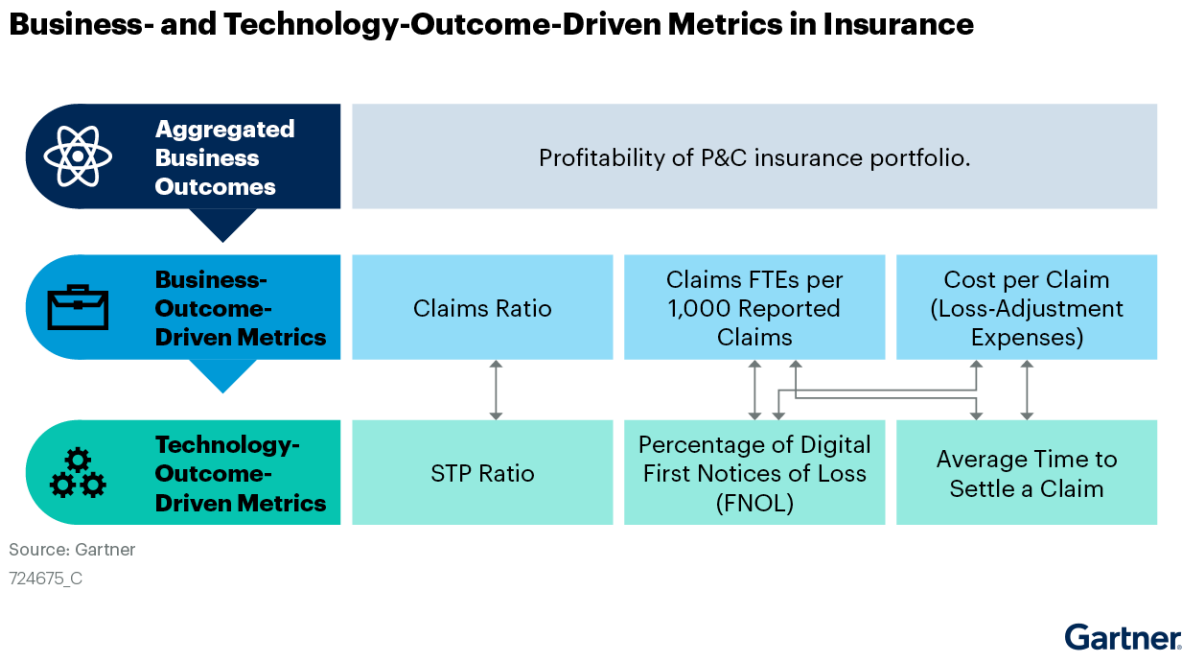
Aggregated business outcomes are performance objectives for specific elements of the value chain, lines of business, products and services, or business processes. They create business value and can be mapped to one or multiple of the three primary value drivers (increase revenue, reduce costs or mitigate risks). In mission-driven industries, revenue is usually replaced by the value that is generated for citizens or other stakeholders.

BODMs are performance measures for the effectiveness and/or efficiency in achieving specific business outcomes. One or multiple BODMs are used to measure one or multiple aggregated business outcomes. BODMs are connected to specific business processes and are consistent among organizations operating in common industry value chain segments. As discussed above, they may vary because of different business strategies or industry positions.

TODMs measure the impact of a technology-related initiative on specific business outcomes, depending on that technology. There is a direct or indirect connection between the technology initiative and its impact on specific business outcomes. One or multiple TODMs can impact one or multiple BODMs.

The notation and representation in Figure 3 has been used to provide detail and examples in a research series supporting multiple industries' examples of aggregated business outcomes, and business- and technology-outcome-driven metrics (see Research Roundup for Digital-Outcome-Driven Metrics for Industries). Figure 4 shows an example from the insurance industry.

Figure 4: Business- and Technology-Outcome-Driven Metrics in Insurance



Let's start at the bottom of the chart, where we have three distinct TODMs that are all related to claims management. The bidirectional arrows indicate that those TODMs are connected to one or multiple BODMs (i.e., there is a causal relationship between them). One example is the straight-through processing (STP) ratio of processed claims. That metric would measure how many claims could be processed without any manual intervention. IT can influence the STP ratio of processed claims in a number of ways. Claims systems could, for instance, be user-friendly or could provide high-quality analytics and business process management rules to automate claims processing and to rule out fraudulent claims.

While the STP ratio is a good metric to assess the contribution of IT to better handle claims, it

still lacks a broader business value dimension. Business leaders such as the head of claims will not measure the performance of their business unit by looking at the STP ratio. The common BODM in the insurance industry is the claims ratio (the percentage of claims costs incurred during a certain period in relation to the insurance premiums earned for the same period). The lower the claims ratio, the more profitable is a specific insurance portfolio. That metric will be important for the CFO or the CEO.

The other two TODMs (percentage of digital FNOL and average claims settlement time) are both impacting two additional BODMs: the number of full-time equivalents required to process 1,000 claims and the cost per claim. We can see that there is an n:n relationship between the BODM and the TODM (i.e., the same TODM could be relevant for different BODMs and vice versa). These two metrics are more process-related and will usually be interesting for the COO or the head of the claims department responsible for operational efficiency.

Evidence

[1] **Gartner's 2021 Innovation in Crisis Survey** was conducted to assess the impact of COVID-19 on an organization's digital business strategy, as well as to understand the types of strategies undertaken by organizations that align with the respond-recover-renew framework.

The research was conducted online from October through December 2020 among 1,215 respondents, with representation from all geographies and across 11 industry sectors.

The respondents included senior leaders who were either primary decision makers for their organization or business unit's digital business strategy or had a high level of influence in those decisions. The study was developed collaboratively by Gartner analysts and the Research Data and Analytics (RDA) team.

[2] The **2021 CEO and Senior Business Executive Survey** was conducted from July 2020 through December 2020, with questions about the period 2020 to 2023. One-quarter of the sample was collected in July and August, and three-quarters from October through December. In total, 465 actively employed CEOs and other senior executive business leaders qualified and participated. The research was collected via 390 online surveys and 75 telephone interviews.

By job role, the sample mix was:

- 287 CEOs

- 115 CFOs
- 29 COOs or other C-level
- 34 chairpersons, presidents and board directors

By geographic region, the sample mix was:

- 183 North America
- 109 Europe
- 97 China, Japan, Australia and other APAC
- 56 Brazil, Mexico and other Latin America
- 13 Middle East
- 7 South Africa

By enterprise revenue, the sample mix was:

- 46 $50M to <$250M
- 122 $250M to <$1B
- 226 $1B to <$10B
- 71 $10B or more

The survey was developed collaboratively by a team of Gartner analysts that examines technology-related strategic business change, and was reviewed, tested and administered by Gartner's Research Data and Analytics (RDA) team. The results of this study are representative of the respondent base and not necessarily the business as a whole.

Recommended by the Authors

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Research Roundup for Digital-Outcome-Driven Metrics for Industries

Value-Based Performance Measurement: How to Build Effective KPIs

The 9 Rules for Demonstrating the Business Value of IT

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A Pragmatic Engagement Approach to Quantify Strategic Business Value of IT Contribution

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