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Digital Business KPIs: Defining and Measuring Success

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It's time for enterprise CEOs, chief digital officers and CIOs to move beyond the transformation stage and set metrics and goals that lay out the digital business journey. This report describes the key performance indicators necessary to do so.

Key Findings

- Digital business key performance indicators (KPIs) are designed to assess the degree of progress in becoming a digital business — which in turn leads to a change in performance that is reflected in the KPIs of the enterprise.
- A first set of KPIs is required to assess the progress in digitalizing the current business model. It is possible for many areas such as sales, marketing, operations, supply chain, product/services and customer service to have digitalization goals and KPIs.
- A second set of KPIs is required to assess the progress and opportunity of pursuing new digital business models. Growth, revenue, market share and margin metrics must clearly differentiate new revenue sources from nondigital ones.

Recommendations

CEOs, chief digital officers and CIOs:

- **Move beyond the transformation stage and set metrics and goals that lay out the digital business journey.** This shift should occur during the visioning phase — don't wait until the project definition phase. For example, shift from talking about connected healthcare as a vision to proposing the potential percentage of patient "visits" that will employ telemedicine. This clearly quantifies a goal. Then describe the expected benefits of achieving this goal.
- **Work with each senior executive to quantify the extent to which their areas would benefit from digitalization**. For example, work with a COO to define how much of their manufacturing operations should be digitalized and what benefits to expect because of it.

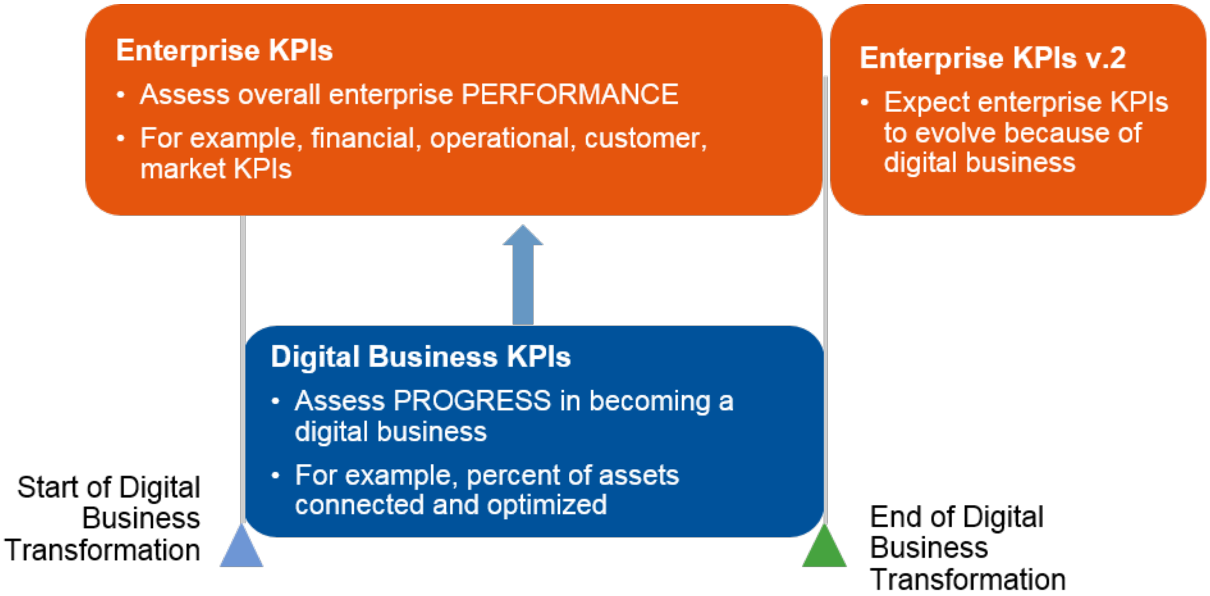
- **Use startup-style metrics for new ventures, acquisitions and business models.** Digital business will also include transformational investments. Enterprise executives should educate themselves in the metrics used by venture capitalists and startup executives.

Analysis

How would you describe the progress achieved in becoming a digital business? This requires a set of KPIs that are specific to the digital business transformation effort. With most enterprises already using a robust set of enterprise KPIs to measure the performance of their business, it may seem superfluous to create yet another set of KPIs. However, as with any large transformation or project, it is helpful to temporarily create transitional KPIs for the duration of the digital business effort.

Figure 1 illustrates the context for digital business KPIs.

Figure 1. Digital Business KPIs Are Temporary but Will Eventually Drive Changes to Enterprise KPIs



Source: Gartner (March 2016)

Note that:

- Digital business KPIs are designed to assess the degree of *progress* in becoming a digital business — which in turn leads to a change in *performance* that is reflected in the KPIs of the enterprise.
- Digital business KPIs are not enterprise KPIs, nor do they replace them. The measures of enterprise success don't change (such as revenue growth, lowering expenses, and increasing profits and margin). What does change is "how" to reach those goals. Digital business offers

opportunities on how to achieve them. This means the measures of enterprise success don't change, but the methods to measure digital business transformation do.

- Digital business KPIs are temporary. They start and end with the digital business transformation.
- It is probable that the enterprise KPIs will evolve after an organization goes through a digital business transformation (represented as Enterprise KPIs v.2 in Figure 1). For example, an enterprise that builds a digital ecosystem may permanently add ecosystem metrics to their ongoing enterprise KPIs.

Two Kinds of Digital Business KPIs

Ask enterprises what their organization will look like after they go through a digital transformation and two types of responses will likely result. Some enterprises will describe how their current business model will become more digitalized but essentially remain the same, while others will describe how they will pursue new digital business models to add to their existing portfolio. A digital business transformation can pursue both of these ends. That is why this research presents two complementary KPI frameworks that answer questions senior executives will have about the digital business transformation:

1. Digital Business KPIs That Describe Optimization of Current Business Model
    - How digitalized is our enterprise today? What benefits can be expected from digitalizing our current business?
2. Digital Business KPIs That Measure Transformative Growth
    - What new digital revenue sources and business models can we pursue? How are we progressing compared to the market and future demand?

In summary, an enterprise is successful in becoming a digital business when it achieves a combination of digitalizing its current business models and pursuing new ones. These two pursuits will each require their own unique set of KPIs (presented later in Figure 3). Enterprises can combine the two styles of KPIs to match their own unique digital business journey.

1. Digital Business KPIs That Describe Optimization of Current Business Model

The first set of KPIs, the ones used to describe the progress in digitalizing an enterprise's current business model, is illustrated in Figure 2. These KPIs must be handpicked to sufficiently communicate and track the progress in reaching digitalization goals.

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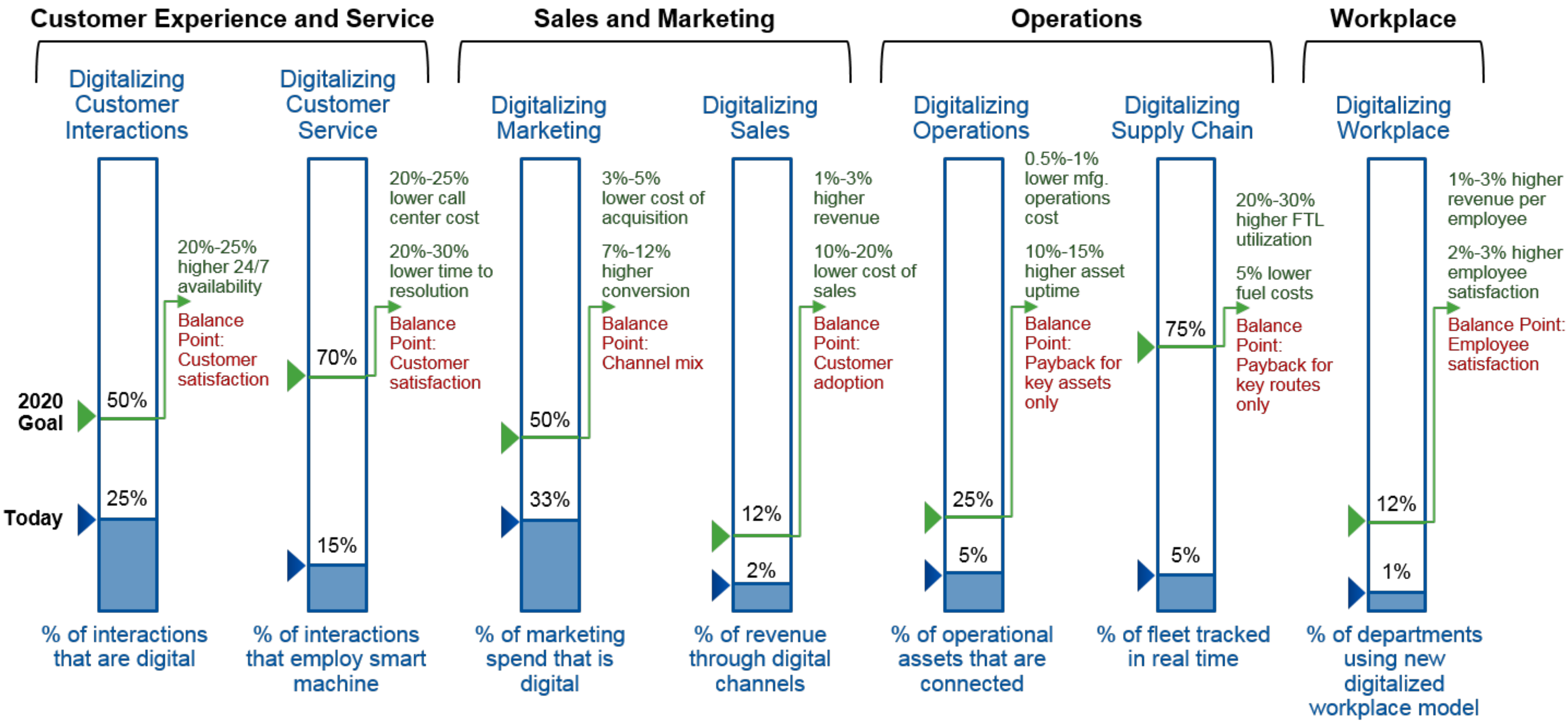
Figure 2. Illustrative Framework: Digital Business KPIs for Optimizing Current Business Model



Source: Gartner (March 2016)

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Consider what makes a good set of digital business KPIs by referring to Figure 2 and noting the following principles:

1. **The KPIs collectively answer the question, "How digital are we?"** The KPIs in Figure 2 were deliberately chosen to describe the degree of digitalization that the enterprise is expected to go through to become a digital business. For example, one KPI (titled Digitalizing Sales) measures the percentage of revenue sold through digital channels such as the Web and mobile apps. These KPIs can be adapted for each industry. A life insurance company may measure the percentage of its sales that are made through self-serve digital channels, while a property-and-casualty insurer may measure the percentage of claims submitted through digital channels. As illustrated in Figure 2, the KPIs are measuring revenue, spend (for example, the percentage of marketing spend that is digital) and operational areas (such as the percentage of a truck fleet that is tracked by the real-time Internet of Things [IoT]).
2. **The KPIs collectively answer the question, "What business and financial benefits can we expect when we successfully attain our digitalization goals?"** Figure 2 contains arrows pointing to business benefits to right of each bar. What is being communicated graphically is: "By reaching our 2020 goal of digitalizing ABC, we will benefit from an *x* increase in these business and financial metrics." Describing how digital an enterprise has become (see item No. 1, above) is not enough. An enterprise will digitalize to gain benefits, and these must be communicated on the KPI chart. For example, many enterprises pursuing the industrial Internet initiatives do so to achieve an overall cost and margin improvement typically ranging from 50 to 200 basis points, or a governmental department may digitalize its physical service centers to reduce wait times and lower staffing costs. Enterprises must have a clear reason to invest in digitalization. Gartner has created a Business Value Model to help enterprises define and assess business and financial benefits (see Gartner Recommended Reading).
3. **A "balance point" describes the reasons why an enterprise shouldn't overdigitalize.** Becoming a digital business does not mean that every aspect of the business model needs to become fully digital. There is an optimum level. As a matter of fact, digitalizing too much or forcing too many customer interactions via digital channels can create negative impacts. For example, expecting all sales to go through a digital sales channel will upset some customers and provide very little chance for high-touch engagement. As such, an enterprise should determine the "balance point" at which the amount of digitalization is ideal for customers and employees. Each KPI should have a balance point that counters the risks that come with going 100% digital. Notice that each balance point identifies an area of the business that is at risk (for example, customer satisfaction) or a metric that explains the logic for not digitalizing everything (such as the ROI/payback for making assets part of an industrial Internet initiative will not be feasible for all assets — maybe only the major assets will benefit from digitalization). Over time, the balance point will change. Match your digitalization goals to customer adoption, employee acceptance and the individual business cases for benefit.
4. **The set of KPIs describes all parts of the enterprise.** A digital business will digitalize many parts of the enterprise. As such, the KPIs need to describe progress and goals in each area. Figure 2 is a generic illustration of what could be assessed. However, an enterprise should choose a set that reflects its goals. For example, a retail bank looking to increase business with

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the unbanked customer segment may track market share gained by the sale of new digitally enabled small loans (for example, www.LendUp.com and other digital payday-style loans). A healthcare delivery organization may track successful patient outcomes. An upstream oil company may track the percentage of exploration projects that use a new big-data-powered analytics platform.

5. **Only "key" performance indicators will be shared with executives.** Although an enterprise will measure all kinds of detailed performance indicators, only a handful of them can be "key" indicators to be presented to senior executives. This task is arguably the hardest to accomplish. For example, manufacturing operations can be digitalized in many ways. Production assets can be connected, data can be analyzed, yield can be optimized, consumables can be reduced, uptime can be maximized, work-in-progress (WIP) inventory can be minimized, and so forth. However, only one metric should be chosen as the "key" indicator. In Figure 2, the percentage of operational assets that are connected was chosen. This key metric serves as a proxy in describing the overall level of digitalization in operations. An enterprise could have chosen the number of production lines connected, or even the amount of data being analyzed from factory operations. For the purposes of this report, we found that the percentage of assets connected was most appropriate in describing the degree of digitalization of operations.

6. **Digital business KPIs do not replace project-level metrics for digital business initiatives and projects.** Enterprises will develop their digital business strategies and come up with a defined set of initiatives and investments they will pursue. Project management methodology contains guidance on the specific project metrics used to describe the progress of each of these initiatives. For example, typical project metrics include ROI. The digital business KPIs presented in Figure 2 are not designed to replace these project-level metrics. Project-level metrics are still important, but there must be a set of KPIs that describe important big-picture digital business concepts such as, "Our enterprise has the least amount of sales going through digital channels, making us uncompetitive and our customer acquisitions costly." A healthcare delivery enterprise may state that "we will maintain our competitiveness by shifting over 25% of our visits to telemedicine-enabled home visits and out-of-hospital points-of-care such as our kiosks at pharmacies." The KPIs are designed to provide an executive-level perspective of an enterprise's journey in becoming a digital business. Project-level metrics are not designed to achieve this.

7. **Digital business KPIs are temporary.** The digital business journey is a temporary one, as eventually digital business becomes business as usual. Good KPIs are time-bound; therefore, a time scale is established (for example, today to 2020 in Figure 2). How does an enterprise know when its digital business transformation is complete? Well, it's really up to the enterprise to define this endpoint. Although, there can be ongoing incremental improvement indefinitely, it is a good practice to set an endpoint to convey a sense of accomplishment. Endpoints will provide a strong sense of structure to the digital business transformation program — which executives will appreciate.

The remaining guidelines apply to any KPI program, but are worth restating for digital business KPIs:

8. **Set a goal target for each KPI.** In Figure 2, the green triangle to the left of each KPI sets a clear measurable goal for 2020.

9. **Indicate where an enterprise is today.** In Figure 2, the blue triangle to the left of each KPI indicates the current level/status of each KPI.
10. **Use visual and graphical figures and constructs.** In Figure 2, bars visually describe where an enterprise is and how far it has to go. The bars should be set to scale if possible. A visual sense of progress is easily conveyed. Dials, thermometers or any similar visual constructs can be used.
11. **Make the set of KPIs fit on one page or a chart.** As with any good KPI program or dashboard, a glance at a single page or screen should be able to convey progress and goals with confidence.

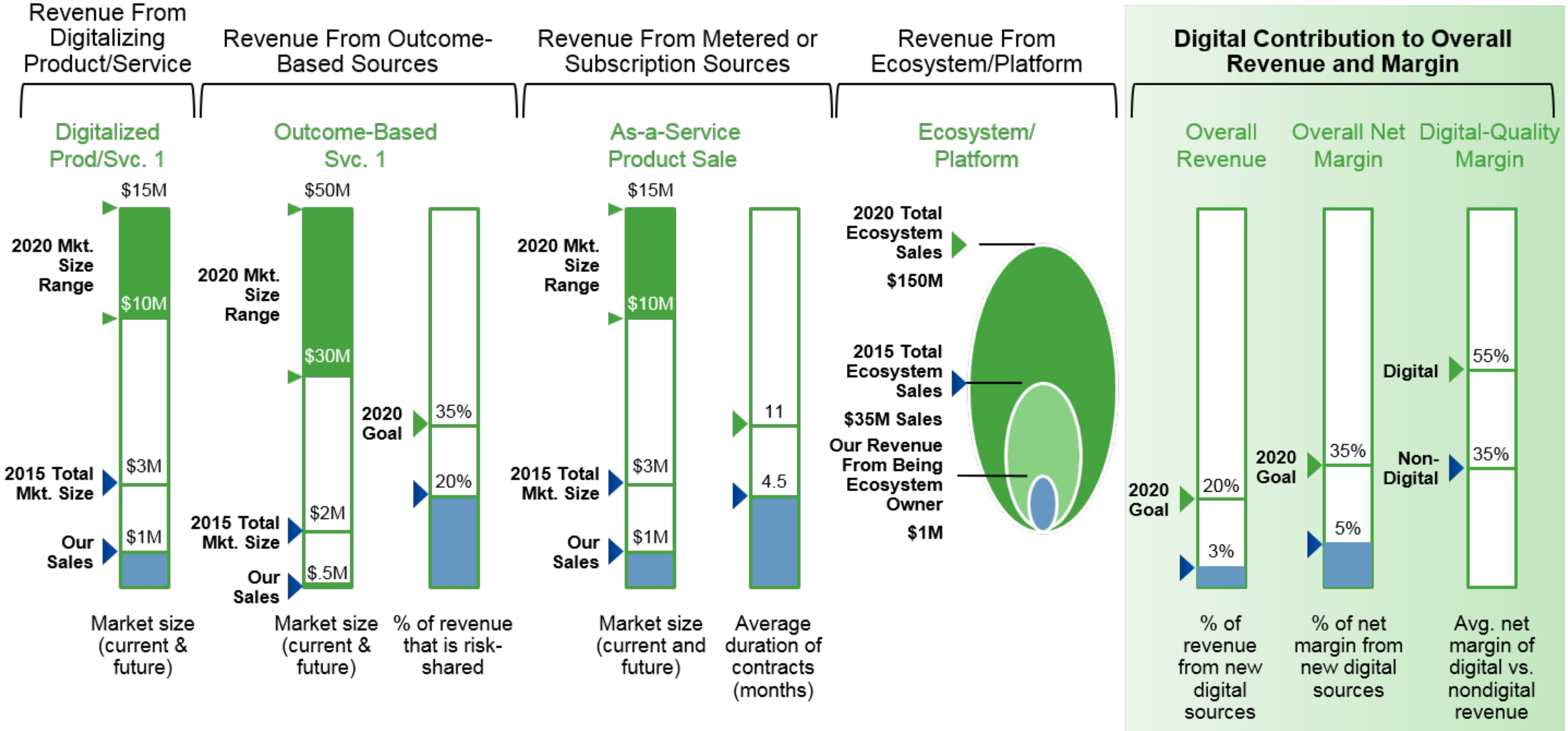
2. Digital Business KPIs That Measure Transformative Growth

The KPIs presented in Figure 2 are good at tracking incremental progress and benefits. However, digital business is also about disruptive trends, business models, and technologies that create brand new opportunities. In these situations, the KPIs in Figure 2 that assess incremental improvement are insufficient.

To evaluate progress in pursuing these transformative opportunities, another set of KPIs has to be employed. For example, a carmaker employing the KPIs presented in Figure 2 would have a hard time assessing how new digital revenue sources (such as connected cars and services) are emerging in the marketplace.

Figure 3 provides an illustrative framework for KPIs designed to assess an enterprise's progress in pursuing new transformational growth opportunities.

Figure 3. Illustrative Framework: Digital Business KPIs for New Revenue Sources and Business Models



Source: Gartner (March 2016)

Consider what makes a good set of digital business KPIs by referring to Figure 3 and noting these principles:

1. **There are several types of new digitalized revenue sources.** The graphics shown on the left of Figure 3 are KPIs that describe many styles of new digitalized models: as-a-service style of digitalization, an ecosystem style of business models, outcome-based revenue deals, and digital services. There are more revenue sources, but the idea is to represent each one. An enterprise will likely only have one or two new revenue sources that are not shown in Figure 3.
2. **The KPIs emphasize financial and market share metrics, not operational metrics.** They help executives understand how much revenue is currently being made as well as the current market share. More importantly, the KPIs should also indicate what the future market share will be so that the magnitude of the opportunity can be properly quantified. Notice the difference between these KPIs and the ones on Figure 2 that assessed the digitalization of the current business model. The Figure 2 KPIs are more operational and interaction-focused in nature.
3. **KPIs that quantify the "quality" of revenue can complement the revenue/market-size KPI of each new revenue source.** For example, if a new revenue source is based on recurring revenue (such as as-a-service models), the average duration of each contract helps describe the quality of this revenue. Another example might be the total size of transactions in an ecosystem. Gross merchandise value is a metric used by companies like Amazon and eBay to assess the total value of merchandise that is transacted in their marketplaces. Since both Amazon and eBay make some of their revenue as a variable proportion of the gross merchandise value, this KPI is very important in assessing each company's current and future success.
4. **A market size range forecast is presented.** The market potential of a new digital revenue source is more important than an enterprise's current market share in these early days of new digital business models. Figure 3 presents the forecast market size as a range (dark-green-shaded areas in each bar). It is good practice to use a forecast range (as opposed to a single forecast number), as it gives executives a more realistic sense that forecasts are estimates that can change.
5. **There is an overall assessment of the impact of digital business on revenue and margin.** In many ways, the whole point of becoming a digital business is to shift revenue to new digital sources. Why? Because the digital revenue sources represent the growing parts of the market and can often be higher in margin. Shifting revenue from "legacy" sources to digital sources sets up an enterprise for growth while simultaneously improving its financials. This shifting of revenue should be tracked. The shaded green area on the right side of Figure 3 shows examples of KPIs that assess this shift in revenue mix. Notice also that average net margin is measured for digital versus nondigital sources. This KPI clearly details the margin contribution difference between legacy and digital revenue sources.

Recommendations

For KPIs that assess the incremental improvement of digitalizing the current business model:

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- **Choose a major area of business being digitalized** (for example, patient visit, aircraft maintenance service or manufacturing operations).
- **Identify a single metric that will capture the benefits of digitalization.** Ideally, choose the core process or department's key metric (such as cost, revenue or spend).
- **Identify a single metric for degree of digitalization.** Think "penetration rate" such as percentage of assets/transactions/interactions, and so on that could be digitalized.
- **Identify a metric that sets the balance point for digitalizing.** Digitalize too much and negative consequences will occur (such as too much self-serve); digitalize too little and not all benefits will be realized.

For KPIs that assess the progress and future opportunity of new digital revenue sources:

- **Choose the benefits that capture the key reasons to shift revenue to this new digital revenue source** (such as higher margin or market share in a growing area).
- **Choose a single complementary metric that describes the quality of the new revenue source** (for example, duration of contracts or percent take rate).
- **Calculate market share, as it is a key metric in new ventures**. Determine your current market share and forecast future market size.

Gartner Recommended Reading

Some documents may not be available as part of your current Gartner subscription.

"The Gartner Business Value Model: A Framework for Measuring Business Performance"

"Leading Indicators Are a Critical Tool for Digital Business"

"Digital Business Success Will Be Driven by Economic Architecture"

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- Unlock Digital Business Value Through the Economics of Connections

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