The Business Technology Value Scorecard

Moving From Transaction Orientation To Outcome Orientation

September 2013
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Interviews with business leaders reveal four distinct categories of KPIs that fit the bill; these categories are health, delivery, outcome, and agility.

Accelerating Business Requires IT To Change Focus And Metrics

The old, safe, and stable transaction-oriented systems view of IT is dead. Empowered customers, coupled with increasing economic, product, and market change, force organizations to become customer-focused, outcome-oriented business partners who must think about technology systems as business drivers and revenue catalysts.

In July 2013, the Technology Business Management Council (TBM Council) commissioned Forrester Consulting to evaluate the impact of current business imperatives on the metrics that CIOs use to convey the performance and contribution of technology to business goals. The goal of the engagement was to produce a proposed suite of metrics that would serve as a starting point for traditional IT organizations looking to better reflect their role in their organization’s success.

Forrester developed a hypothesis and proposed a four-domain BT value scorecard based on its research in the area of CIO dashboards. Forrester then conducted in-depth interviews with 19 C-level business and IT executives to test this hypothesis and to gather opinions on proposed metrics. Technology leaders were asked to identify KPIs they currently use and how they would change them, while business leaders were asked to identify KPIs that would most benefit them in making business decisions and understanding technology contributions to business outcomes. Adjustments were made to the initial model, and specific KPIs were added and changed based on the interviews. The final results were validated by looking at the technology and business priorities from Forrester’s Business Decision-Maker (BDM) and IT Decision-Maker (ITDM) surveys.

Forrester found that an optimal BT value scorecard would span four areas — health, delivery, outcome, and agility. These domains convey the best blend of information so that business leaders truly understand the role and contribution of technology in their business.

Key Findings

- **CIOs struggle with communicating the value of IT to their business leaders.** Half of business leaders feel that IT is holding back the business — a very strong testament to the communication disconnect. Business leaders also estimate that IT spending is roughly 8% of their revenue, whereas, in reality the number is 5% — leading to missed expectations.¹

- **Today’s IT metrics are predominantly transaction-focused.** During the interviews for this research, and in hundreds of conversations with CIOs and business leaders, the message came loud and clear: Measure IT’s contribution to business outcomes and ability to respond to market changes, not just the efficiency of transactions.

- **CIOs must focus on communicating health, delivery, outcome, and agility in their scorecards.** CIOs need to think, communicate, and measure in business terms. Our interviews with business leaders reveal four distinct categories of KPIs that fit the bill: health, delivery, outcome, and agility.

- **There is no perfect scorecard or KPI.** The ideal scorecard not only is in sync with the business outcomes but also takes into account the maturity of existing measurements, perceptions of the business executives, and culture of the company. It’s also the beginning of conversations — not the end.
CIOs Need A New Way To Measure And Communicate

Traditional measures of IT focus almost exclusively on operational-level metrics. These include cost measures such as cost per million instructions per second, cost per megabyte, cost per transactions per second, and cost per ticket; availability metrics such as mean time between failure and mean time to repair; and call center metrics such as cycle times and first pass yields. Although these metrics are helpful to IT internally, they’re less relevant for business leaders focused on achieving business outcomes, and they do little to communicate the value of IT to the business. Often, these KPIs are isolated from the rest of the company’s goals and have no link to overall strategy. This has led to two major problems: 1) a significant gap in perceptions about the value and contribution of technology to the organization, and 2) a lack of alignment between business goals and IT measures — leading to costly mistakes.

Communication Challenge — IT Is Expensive And Hinders Business Success

When asked to estimate the IT budget as a percentage of revenue, business decision-makers, on average, said 8% while CIOs said 5%. Of course, this leads to the wrong impression that IT organizations are funded to deliver significantly greater business contributions than they actually can. This reflects a disconnect in communications: IT is not clearly conveying what it has to work with, what it’s doing with that, and what it could be doing to promote business growth and success.

CIOs must double down efforts to communicate to their business counterparts because:

- **Business decision-makers (BDMs) presume IT is “rich.”** BDMs expect that CIOs should be able to deliver much more because BDMs presume CIOs have much more than they, in fact, have. BDMs presume that IT costs 8% of company revenues, on average, which is only slightly less than estimates of the cost of US sales across all industries. Every year, a company makes clear what it expects out of sales for that 8% to 12% of revenue and how it values sales contribution to the business. Yet, IT’s contribution actually consumes only about half the percentage of revenue of sales, per the CIO’s estimates (see Figure 1).

- **Almost half of business leaders feel IT is holding them back.** Two-thirds of CIOs believe that IT accelerates business success, but when the same question was asked of the business decision-makers, about half of them said that IT actually hinders business success. Herein lies the budgeting challenge for CIOs.
Measurement Challenge — Traditional CIO Success KPIs Will Lead IT To Commodity Status

Whether the CIO supports it or not, technology is increasingly playing a critical role in business success. The best CIOs will consider this a great opportunity to step up and grow into a true business partner — with technology activities directly linked to business activities — turning IT into business technology or BT. The current reality is very different, and many struggle to rise to the occasion because:

- **Two-thirds of IT budget is spent on maintenance and operations, forcing CIOs to focus on operational KPIs.** Spending on ongoing operations and maintenance plus enhancements make up the IT budget to maintain and operate the organization, systems, and equipment — what Forrester calls “IT MOOSE.” This investment for enterprises has remained within a few percentage points of 70% for the past seven years of our studies (see Figure 2). Unfortunately for such firms, new entrants in many markets, unconstrained by multi-million dollar capital investments in infrastructure, data center, and applications with many years of amortization left, have the capability to move more quickly and focus more of their spending on customer-facing systems, creating significant business risks for the organization.

- **Traditional risk-averse culture makes IT bureaucratic and overly slow.** While an enlightened CIO may realize this and be moving toward agility, the culture of risk avoidance, coupled with metrics and bonus plans that favor a safe, risk-free approach to applications and provisioning, makes it extremely difficult to embrace much more of a move to business change and business value than the current 30% range. Unfortunately, such spending, while operationally safe, does not create the agility required to address market and economic risks.
CIOs struggle to link KPIs to specific strategic objectives and business value. Clearly, there is a need for a common language that allows IT and business executives to better understand the activities — and the outcomes of these activities — toward efficient stewardship of business resources. A clear and concise dashboard composed of a suite of relevant metrics that span the activities within the IT portfolio that positions both this efficiency and effectiveness should contribute to better interdepartmental communications, better business and IT strategic planning, and an environment that is self-optimizing based upon desired results.

CIOs Miss The Boat On Financials, Innovation, And Customer Satisfaction

Forrester conducted 19 in-depth interviews with business leaders (CFOs and CMOs) and IT leaders (CIOs) and received 16 responses to a follow-up survey to further understand the challenges and disconnects with respect to measuring IT. There was a remarkable variance in what the business leaders wanted to measure and what CIOs thought was important to measure. First, the good news: Five of the top 10 KPIs for business leaders were also in the top 10 KPIs for CIOs (shown in green in Figure 3). This is a vast improvement from the past years of business technology disconnect. But, unfortunately, four of the top 10 things business leaders wanted to measure were not on the CIO radar (shown in orange in Figure 3). The survey results suggest that business leaders and CIOs generally agree on the top three to four KPIs but then quickly diverge in their thinking on what is important to measure. The three specific areas where CIOs missed the boat were: 1) IT performance against business financials (KPIs 6, 8); 2) IT’s contribution to new ideas (KPI 9); and 3) external customer satisfaction. These results, although not statistically significant, validate the
results from the in-depth interviews and point to three topics that consistently came up in business conversations but rarely in CIO conversations.

**Figure 3**
Results From Survey Of 16 Business And Technology Decision-Makers

<table>
<thead>
<tr>
<th>KPI</th>
<th>Business rank</th>
<th>IT rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>IT cost per business service supported</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Internal customer satisfaction survey score</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>IT spend by business objective (margin, revenue, growth, compliance, etc.)</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Percentage of IT projects that meet or exceed expected benefits</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Percentage of IT spend on run, grow, change the business</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Yr/Yr IT budget growth vs. revenue growth</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Yr/Yr unit cost of infrastructure, systems, apps maintenance</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>IT spend as a percentage of business revenue</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Percentage of IT budget spend on R&amp;D, emerging tech, pilots, innovations, etc.</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>External customer satisfaction (your organization’s customers) survey score</td>
<td>10</td>
<td>13</td>
</tr>
</tbody>
</table>

Base: 16 CIOS, CMOs, and CFOs

Source: A commissioned study conducted by Forrester Consulting on behalf of The Technology Business Management Council, September 2013

**Financials: Business Leaders Want To See The Benefits In Addition To Spending For IT**

“My comparisons are mainly as a percent of revenue . . . at the end of the day, revenue is what will guide us to what we can afford to do.” (CFO of healthcare company)

Our interviews with many of the CFOs pointed out that they feel that they are only receiving one-half of the information from CIOs — the amount of spend. They expressed frustration that they did not know the other half of the equation — what the company was getting for that spend, and whether that spend amount was appropriate. One CFO very clearly articulated his expectation: “Value-add projects need to have a 15% rate of return and a two-year payback
or better.” If a project does not meet this benefit criterion, the project is not approved. This discipline ensures that CIOs and CFOs are always on the same page on the benefit expectations of business leaders.

The often adversarial relationship between CIOs and CFOs stems from a disconnect in understanding basic business priorities. These priorities change at the pace of market change, which means that CIOs and CFOs must collaborate on a business-driven governance program that reviews investments and spend and continually prioritizes future resource commitments.

**Innovation: CIOs Fail To Measure And Deliver Agility**

“Right now, I have to pick all the systems apart. Nirvana for me would be if I had a clear view of (data in) each of those systems in real time without having to go into Google analytics and enter the data manually.” (CMO of services company)

Many business leaders referred to existing systems that were optimized for delivering rock-solid reliability but were not optimized to provide information in an agile manner. Others had stories of projects that ended up taking twice the estimated time and delivering a fraction of business value initially envisioned. In many of these examples, CIOs did not consider themselves to be business leaders but only technology leaders. Business leaders seek agility — not just quick response times but also the flexibility to use whatever tools necessary to achieve their business goals. IT is often the roadblock for them. The typical rate of change for IT systems appears to frustrate them. One CMO of a financial services company said, “The marketing team doesn’t have a Mac because the infrastructure is not flexible enough for the hardware they want. Sales are using iPads to edit presentations but couldn’t have the tool.” Another CMO of a media and entertainment company said that “IT uses a lot metrics that are very IT-specific, to measure the process of IT. We have every metric you can imagine from tracking hours, cost, project completion [...] on-time, on budget, but not on-quality (of delivery).” CIOs must encourage and hold their organizations accountable for delivering business outcomes, not just project delivery KPIs.

**Customer Satisfaction: IT Lacks The Skills To Survive In The “Age Of The Customer”**

“Whether it's knowing a product is in stock, delivering it on time, having 100% accurate orders; all those metrics are essential to know for IT because it's what our customers care about.” (CFO of distribution company)

The traditional, three-tiered business model, where IT serves internal business customers, who in turn serve the organization’s external customers, does not meet current realities. Your customers have access to product reviews and price checks through their mobile devices. They use Facebook, Twitter, and YouTube to discuss and share good and bad customer experiences. We’ve entered a new era that Forrester calls the “age of the customer.” While companies have always, to a greater or lesser extent, called themselves “customer-centric,” this is different. This is not about “customer-centric” thinking or “the customer is always right” — instead, the new power of customers means that a focus on the customer now matters more than any other strategic imperative (see Figure 4).
Figure 4
The Age Of The Customer Changes The Way IT Needs To Think About Technology


Rethinking The CIO Dashboard

Developing the proper metrics to measure the performance of IT is not a new problem. For the past decade, Forrester Research has worked with clients to develop the most appropriate suite of metrics to ensure that IT is acting and delivering appropriate value to its business and external customers. Based on the vast array of interactions with CIOs and business leaders on this topic, looking at data from Forrester’s Forrsights Survey, and for this specific effort talking to and surveying 19 business and technology leaders, Forrester has carefully crafted the following CIO scorecard.

The BT Value Scorecard Reflects Current Business Realities

Forrester proposes a four-quadrant BT value scorecard. The four perspectives are health, delivery, outcome, and agility (see Figure 5). It is consciously designed to be relevant to both IT and business audiences. The scorecard abstracts the typical IT operational metrics up a level to show the relationship between IT activities and business outcomes:

- **The four perspectives.** The *health* perspective measures the effectiveness of existing controls, while the *delivery* perspective measures the ability of IT to deliver on its promises to internal and external stakeholders. The
outcome perspective identifies and measures IT contribution to business outcomes, while the agility perspective tries to predict the ability of current IT investments in people, processes, and technology to respond to changing business needs quickly and flexibly.

- **The three maturity levels.** Developing a measurement and reporting program is a journey. As you build and develop KPIs, you refine your approach and strategy. Often metrics fail to measure the intended parameter, have unintended behavioral consequences, or may not be appropriate based on your organizational construct. Therefore, Forrester proposes a maturity ranking for each of the KPIs recommended, moving from today’s predominantly internal-focused (Level 1) metrics, to metrics with increasing business results (Level 2), and external customer-oriented focus (Level 3). So if you’re just starting off, pick Level 1 metrics and gradually move to Level 3. On the other hand, if you’re a pro at this, try your hand at the Level 3 metrics.

**Figure 5**
Proposed Dashboard Has Four Perspectives

![BT Value Scorecard](image)

*Source: A commissioned study conducted by Forrester Consulting on behalf of The Technology Business Management Council, September 2013*

**Health KPIs Measure The Fitness Of Existing IT Investments**
The health perspective communicates how efficient/proficient IT is with its technology investments. These KPIs can show whether IT is investing in technology in line with business expectation and strategy. Many business leaders are not confident of IT’s ability to manage its technology investments. One CFO said, “The best thing that could ever happen to me would be for us to figure out how to control the software costs.”
Another CFO was concerned about the lack of visibility in health KPIs and stated: “I’m concerned we are underinvesting in IT overall — it would help to have a metric to compare ourselves to our peers.” Many business leaders focus on similar comparisons, which can be dangerous if you don’t consider the context. Any industry benchmark comparisons without context could give you a false sense of security or, worse, force you to underinvest on technology.

Forrester recommends the following domains for health KPIs (see Figure 6):

- **Governance.** Technology projects span a wide spectrum; therefore, it’s essential to ensure that there is appropriate ownership, oversight, and alignment among the stakeholders. Many CIOs wanted more business accountability for technology projects. KPIs such as percentage of projects jointly governed by business and technology stakeholders will ensure appropriate oversight and accountability.

- **Performance.** This is probably the strongest area for CIOs, and many of them take pride in providing reliable, scalable, and secure technology environments. Metrics such as uptime, number of breaches/incidents, and system availability are hallmarks of this domain.

- **Efficiency.** Many of the efficiency KPIs are looked at in conjunction with an industry benchmark, but it’s important to only look at these benchmarks as starting points and to set goals based on individual context of the company’s environment. KPIs such as IT spend as a percentage of revenue and unit cost of delivering hosting/storage are typical metrics in this category.

**Figure 6**
Recommended Health KPIs

<table>
<thead>
<tr>
<th>Level 1 Metrics:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Unit cost of infrastructure (hosting, storage, etc.)</td>
</tr>
<tr>
<td>2. Yr/Yr reduction in unit cost of infrastructure, systems, applications, maintenance</td>
</tr>
<tr>
<td>3. IT spend per employee</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Level 2 Metrics:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Percent of IT spend by revenue by business</td>
</tr>
<tr>
<td>2. Percentage of projects jointly governed by business and technology leadership</td>
</tr>
<tr>
<td>3. Percent of projects tied to business strategy/outcome</td>
</tr>
<tr>
<td>4. Number of security breaches/major incidents?</td>
</tr>
</tbody>
</table>

Source: A commissioned study conducted by Forrester Consulting on behalf of The Technology Business Management Council, September 2013

**Delivery KPIs Measure IT’s Ability To Fulfill Its Obligations**
This perspective is likely the most familiar to IT organizations, encompassing the transaction-oriented activities of the IT organization — delivering technology on a timely and efficient basis, running processes efficiently, and supporting
ongoing operations. KPIs within this perspective would communicate the performance of groups such as the PMO, application developers, and help desk. One CIO said, “What we thought was going to happen, did that happen? Try to go back and look at the assumptions. Did it come through? Did it work? Were we better or worse? What can we learn from it either way?”

Many CIOs focused on measuring their internal customer delivery capabilities, while business leaders want to measure the impact on external customers. Some CIOs are already working with their counterparts in marketing to deliver digital tools. An SVP of marketing at a services company said, “(We) work closely with the CIO’s team to create a customer-facing portal for customers to look at their transactional data.”

Forrester recommends the following domains for delivery KPIs; simple metrics within each quadrant (Level 1) can be followed by richer metrics (Level 2 and Level 3) as needed (see Figure 7):

- **Help desk.** Help desk is the face of IT. Many CIOs mentioned this as their first step toward building trust. KPIs such as mean time to resolve help desk tickets or to respond to incidents are indicators of IT delivery capability and can serve as a reminder to get the basics right.

- **PMO.** Project management office is not just responsible for the day-to-day management of technology projects. KPIs such as on-time, on-budget performance and SLAs such as average (end-to-end) project length keep people focused on delivery.

- **Customer satisfaction (internal and external).** The help desk and PMO KPIs are a good proxy for internal customer satisfaction, but it’s still recommended that CIOs get an annual check on their performance from internal customers. What many CIOs don’t consider to be their responsibility — external customer satisfaction — is actually more important than internal customer satisfaction. A large part of customer satisfaction is meeting, exceeding, and even anticipating external customer needs. KPIs tracking external customer satisfaction scores or measuring customer engagement such as Net Promoter Score need to be part of the CIO dashboard.
Outcome KPIs Tie Technology Spending To Business Results

Outcome KPIs ensure the linkage between spending and business results. Measuring and communicating these KPIs can ensure joint accountability and ownership of business- or customer-focused systems. Said the SVP of marketing at a services company: “We [all the executives] are all measured on revenue. Overall revenue of the company and the revenue of strategic big buckets. Revenue growth is the most important.” CIOs can act as the glue that provides data on variables to understand their impact on outcomes.

Forrester recommends the following domains for outcome KPIs (see Figure 8):

- **Financial measures.** Many CIOs focus on the cost of technology, while business leaders want the value. They want to understand the benefit statements as well as the cost in relation to revenue or growth. So KPIs like “Yr/Yr IT budget growth versus revenue growth” and “percentage of IT spend on run, grow, change the business” are good starting points.

- **Market dynamics.** CIOs need to be in tune with changing market dynamics by developing insights from data that already exists in corporate systems. There are many valuable sources such as business partners, employees, service providers, and most importantly, your customers. KPIs such as retention rates for certain customer segments, conversion rate for marketing campaigns, or tracking global regulatory and risk exposure would highlight IT contribution to achieving business outcomes.

- **Industry/sector KPIs.** Many of the outcome KPIs are also very industry-specific and so there are no standard examples. Every industry has its own set of business KPIs. For example, the insurance industry measures claims ratio as total claims per period/total earned premiums per period. CIOs must be well versed in these ratios and be able to articulate their contribution to these ratios. One CIO of a healthcare organization we talked to said, “We
measure the time it takes for physicians to do certain tasks with the goal of reducing it so the physicians can spend more time on patient care.”

**Figure 8**
Recommended Outcome KPIs

<table>
<thead>
<tr>
<th>Level 1 Metrics:</th>
<th>Commonly used based on interviews</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1</strong> Yr/Yr IT budget growth vs. revenue growth</td>
<td></td>
</tr>
<tr>
<td><strong>2</strong> Percentage of IT spend on run, grow, change the business</td>
<td></td>
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</tbody>
</table>

**Level 2 Metrics:**
1. IT cost per business service supported
2. IT spend per each end customer of the organization
3. Percent of IT spend on customer facing projects
4. Percent of IT staff with Business value metrics in their performance KPIs
5. External customer satisfaction survey score

**Level 3 Metrics:**
1. EBITDA
2. Aggregate return of the IT portfolio (ROI/ROA)
3. Customer Engagement Index/metrics

*Source: A commissioned study conducted by Forrester Consulting on behalf of The Technology Business Management Council, September 2013*

**Agility KPIs Assess Flexibility And Speed In Current And Future Technology Investments**

The agility KPIs are probably the most important determinant of the long-term success of an organization, yet many CIOs and business leaders focus on shorter-term KPIs. “We need something that will make this more efficient. Anytime anyone wants new software, it goes through a request, review, approval process (that is long and cumbersome),” said one CFO. These KPIs can help ensure that IT is flexible and nimble enough to move with the pace of business change, is skilled and has the capacity to adapt to future business needs, and has the technology to support future business models.

Forrester recommends the following domains for agility KPIs; simple metrics within each quadrant (Level 1) can be followed by richer metrics (Level 2 and Level 3) as needed (see Figure 9):

- **People agility.** “IT is overly bureaucratic and slow to react,” declared one CMO of a services company. Measuring the current skill sets and planning for future competency needs of your staff will go a long way in equipping you to deal with future business needs. Establish KPIs to retain and motivate top talent. Metrics such as percentage of staff with direct interaction with business counterparts, percentage of IT staff at or above their competency level, or percentage of staff slotted for nontechnology training will give you an accurate picture of staff agility.
• **Technology agility.** “We seem to invest in a lot of technologies that we don’t end up utilizing,” declared another CFO. Having flexible technologies that can offer reusable components and modular functions is a conscious decision that CIOs will need to manage and monitor. Metrics such as percentage of (business-specific) applications using agile methodologies, percentage of infrastructure/applications in the cloud, or percentage of IT budget spent on maintaining the mainframe can be good barometers for your technology agility.

• **Financial agility.** A large part of agility comes from having the financial agility to quickly move to new technologies and systems to support business needs. In many cases, this agility means that it may not be the most efficient use of resources, but it gives you the option to move quickly in response to changing market conditions. KPIs such as ratio of capex versus opex or measuring fixed and variable costs ensure that business leaders have clear insight into their financial agility.

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**Figure 9**

Recommended Agility KPIs

<table>
<thead>
<tr>
<th>Level 1 Metrics:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commonly used based on interviews</td>
</tr>
<tr>
<td>Level 2 Metrics:</td>
</tr>
<tr>
<td>1. Ratio of variable cost to fixed cost of IT</td>
</tr>
<tr>
<td>2. Capex-to-opex (noncapital) spending ratio</td>
</tr>
<tr>
<td>3. Percent of IT budget spent on R&amp;D, emerging technologies, pilots</td>
</tr>
<tr>
<td>4. Percent IT spend on architecture/standards/frameworks</td>
</tr>
<tr>
<td>5. IT turnover by performance rating</td>
</tr>
<tr>
<td>6. Percent of staff meeting their required competency/training</td>
</tr>
<tr>
<td>7. Average age of IT employees</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Level 3 Metrics:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of projects in innovation/incubation program at different stages of investment/commercialization</td>
</tr>
<tr>
<td>Cancellation (“failure”) rate of projects in innovation/incubation program at different stages</td>
</tr>
<tr>
<td>Percent of partners participating in internal innovation programs</td>
</tr>
</tbody>
</table>

*Source: A commissioned study conducted by Forrester Consulting on behalf of The Technology Business Management Council, September 2013*

**Diagonal Dimensions Across The Coordinates Identify A Chasm**

When viewed as an integrated unit, two diagonal axes point to the balance that CIOs must maintain, with one axis highlighting metrics that span internal IT performance, business partner enablement, and external market movement; and another axis that is anchored at one end by typical, transaction-oriented activities, and pointing, at the other end, toward the required business and market transformations required to adapt and thrive in the future (see Figure 10).
Using this matrix, we were able to qualitatively map the various interviewees to a point on the matrix that represented a nexus of the type of metrics they both used and felt valuable. As the metrics in use at any individual organizations would likely span much of the matrix, these positions are only meant to reflect our perception of the “weighting” that each interviewee gave to the various quadrants.

When these positions were mapped, a number of observations became apparent (see Figure 11):

- **CIOS were more comfortable in the lower left, internal areas.** This is the traditional CIO domain, where they keep the lights on and provide the most effective and efficient service to the internal customers. This is where most of the interviewees viewed themselves operating (depicted by blue dots in the graphic below).

- **CMOs and CFOs longed for external and transformative metrics.** While the CIOs mostly focused on delivery and health, CMOs and CFOs wanted CIOs to operate and measure their performance against business outcomes, their contributions to business transformation, and their influence in meeting and exceeding customer/partner delivery metrics.
Ten Tips For Operationalizing Your BT Value Scorecard

The two secret ingredients for building a successful measurement program and a scorecard are building the right KPIs and communicating these KPIs to the right audience. Building the right KPIs requires the discipline to ensure that you select, curate, and mature your KPIs and thresholds. Communicating them to the right audience requires an acute understanding of the individual business needs and being savvy about the culture, politics, and people of your organization.

Picking The Right KPIs

If you don’t pick the right metrics, all your effort could be wasted, or, worse, it could lead to mistrust and adversarial relationships. While choosing the KPIs make sure you:

1. **Make your KPIs actionable.** This is probably the most important element for picking your KPIs. Your BT value KPIs should not just be informative. They provide a wonderful opportunity to open up a dialogue and request action from your business peers.

2. **Establish thresholds.** Many business leaders, especially at the beginning of the effort, would need to establish and monitor the KPIs against these thresholds. Not having the thresholds for these KPIs would mean you are playing a game without keeping score. You will never know when/if you won.

3. **Ensure auditability.** One sure way to remove the mistrust of the IT organization is to keep the scorecard visible and transparent. This also means making the KPIs easy to understand and follow and to ensure you can track back your numbers to their source — that is credible.
4. **Be pragmatic and repeatable.** One CIO built a really slick scorecard for his business peers, but every time it took him almost two weeks’ worth of effort. It’s neither sustainable nor realistic to maintain such a scorecard. The KPIs you pick should be easy to measure and report and easy to gather consistently and frequently.

5. **Focus on quality not quantity.** The magic number of metrics for a business technology scorecard is anywhere from eight to 12. Anything more than that dilutes the message, and anything less than that is too aggregated and often meaningless. Our expectation from this report is for you to pick the metrics that make sense for you in each quadrant, not use all of them.

**Culture, Politics, And People**

One CIO we talked to said, “What most people don’t realize is that measuring has a significant cultural impact.” While it is important for CIOs to embrace the opportunity to step up and link technology activities to external outcomes and risk mitigation expressed by our CFO and CMO interviewees, such a metrics program is best tackled logically and sequentially, with one phase building credibility and creating a platform for future phases:

1. **Emphasize the desired role for IT within the organization.** IT’s ability to step up to a more strategic role is likely limited by credibility and trust. An open and relevant dashboard of credible metrics can build this trust and elevate the conversation from one that constantly questions spending to one that evaluates the potential for the biggest business impact.

2. **Map metrics to the IT portfolio.** Just as IT activities can be mapped to the four-quadrant model, IT spending can likewise be mapped to the model. Matching the IT spend in each quadrant to the proportion of metrics communicating their performance is a logical way to prioritize activities.

3. **Catalyze strategic discussions on the right role and activity plan for IT.** Though the saying may seem trite, it is very true that “You get the behavior you measure.” Metrics are a powerful communication tool for behavior within the IT organization. Establishing an appropriate suite of metrics and communicating them internally can help shift internal behavior.

4. **Build trust and mutual respect before measuring.** Many KPIs require mutual understanding and respect among the stakeholders. Some CIOs are experimenting with rotation programs for their staff in different business areas. Without joint accountability, common goals, and measurements, these KPIs will be useless.

5. **Use KPIs to start a dialogue.** “It is (CIO dashboard) also about starting a dialogue and making my business peers accountable for their responsibilities.” One CIO mentioned picking KPIs that raised more questions than they answered.
KEY RECOMMENDATIONS

The role of the CIO has shifted from a technology leader to a business leader. This requires a new perspective that is neither technology centric nor business driven, but a fusion of both — Business Technology. In this new world, CIOs will need to think and act differently. Here are some major shifts:

- **Delivering consistent, reliable technology is table stakes: Anticipate future business needs.** The first and foremost role of the CIO is to deliver consistent, reliable, and dependable technology (infrastructure and applications) to the business. If you can’t do this, you won’t have the trust and the respect of your business peers. But just doing this will not earn you the proverbial seat at the table; being an order-taker will not make you a successful CIO. You have to consciously build bridges and understand business changes to propose technology solutions and innovations to solve those business problems. To do this, you have to develop and measure areas such as contribution to business innovation and acceptance of fast failure.

- **Technology-centric view creates silos: Develop and execute on customer life-cycle view to create cohesion.** Customers are the glue that will bind the whole organization together. In the age of the customer, your competitive differentiator is your ability to understand, engage, and deliver value to your customers. Interestingly, your counterparts in marketing and sales organizations have a wealth of information you can mine to build and deliver greater customer value. Develop KPIs around your end customers, and keep your IT organization focused on delivering value to them.

- **Alignment is not enough: Ensure joint accountability for business outcomes.** Many CIOs pointed to the lack of accountability by the business leaders on technology delivery and value. To be fair, IT leaders haven’t done a good job of “training” their business leaders to ask the right questions. Instead of focusing on an industry benchmark like the IT cost per employee, CIOs need to focus on measuring their contribution to business outcomes. Also, use metrics like percentage of projects with joint IT/business ownership to underscore the lack of support from business leaders or compare business areas to encourage friendly competition.

- **Velocity of change is unprecedented: Drive people, process, and technology agility.** This was probably the most profound finding during this research effort. Not even a single CIO measured the agility of their organization, partly because it is a long-term perspective and most are mired in the short-term issues. More surprisingly, none of the CIOs we interviewed viewed it as a competency they needed to build. Measure your balance across technology, people, and process — having agility in one of these is usually not enough. Measure things such as preparedness for disasters and flexibility to change platforms.

- **Consider KPIs as managing a portfolio and drive a portfolio mindset for BT decisions.** We presented the four quadrants — none is more important than the other. Your focus should be to balance your KPIs across the four quadrants and provide a balanced view to your business peers. Having said that, align your focus to your maturity and culture — your context. If you don’t have a stable environment, measuring uptime and other health KPIs is important, but if you feel you have a stable environment and consistently deliver on your SLAs, focusing on outcome and agility metrics may be a great idea.
Appendix A: Methodology

Background
Toward the goal of providing maximum communicative value for the minimum collection overhead, we revisited the quadrants of the Balanced Scorecard, adapting them to meet the increasingly outward focus of IT and emphasizing the need to communicate technical and business flexibility. Within each of these new quadrants, we proposed a suite of appropriate metrics to our IT and business interviewees, collecting qualitative comments during the interviews and allowing them to comment and rank these metrics in a post-interview survey.

Interviews
While Forrester’s research and quantitative survey data demonstrates the disconnect in IT/business communications and perception, it does not indicate the underlying areas where improvement is both necessary and desired. To attempt to coax out this information, Forrester conducted 19 interviews with CIOs (8), CFOs (8), and CMOs (3); each interview was 45 minutes in duration. In these interviews, we probed a number of areas:

- Relationship between the CIO and other business executives? We wanted an overall impression as to how well these executives interacted and how important the CIO role was within the organization.

- Role and contribution of IT in meeting business objectives? What changes would they want? We wanted to understand how strategic IT was to overall business success and how the business leaders wanted to change/adjust this contribution.

- KPIs typically presented by the CIO? What would business leaders ideally want to see from their CIO? We probed for metrics, the feelings about those metrics, and impressions as to the type of metric that would be useful to the business executive.

- Challenges and obstacles in measuring and reporting IT performance? We asked both CIOs and other business leaders to articulate the challenges in collecting, analyzing, and reporting KPIs.

Survey
While 16 of the 19 interviewees completed the survey, this sample size precludes us from using the data to draw qualitative results with an appropriate confidence interval. However, the data is useful from a directional standpoint, allowing us to make some generalized statements about the different groups.

Appendix B: Supplemental Material

Related Forrester Research
In most cases, these metrics were based on a modified version of Kaplan and Norton’s Balanced Scorecard. While extremely useful as a framework, pointing to metrics in four quadrants — IT value, customer/partner satisfaction,
operational excellence, and future orientation — the scorecard really is just a framework that leads the way toward a specific suite of metrics appropriate for a specific organization at a point in time. Properly implemented, the relationships and links between activities and metrics in one quadrant and the desired outcomes in other quadrants, as well as the critical success factors that underlie each metric, are well documented and managed. This is what makes the Balanced Scorecard such a powerful tool for IT leaders — and also what hinders its use as a lightweight dashboard that quickly conveys the right information to the right audience.

Appendix C: Endnotes

1 Source: Forrsights Budgets And Priorities Tracker Survey, Q4 2012.

2 Source: Forrsights Budgets And Priorities Tracker Survey, Q4 2012.

3 Source: Forrsights Budgets And Priorities Tracker Survey, Q4 2012.

4 Source: Amazon.com (http://www.amazon.com/).