TOOLKIT 2
A BOARD LEVEL DASHBOARD FOR DIGITAL STRATEGY & OVERSIGHT
Boards of directors are ultimately accountable for strategic decision-making and control in organizations. Financial and legal matters dominate the agendas of board meetings, which is often reflected in board composition. But what about IT-related matters? This is a prominent question in an era where IT is a crucial contributing factor to the competitiveness of many organizations. Indeed, more and more organizations are very dependent on IT for the creation of their business value. Digital disruption is all around us, and a vast number of organizations around the globe is actively thinking about digital transformation. Yet empirical evidence indicates that boards of directors are not as involved in IT-related strategic decision-making and control as they should be.

In this context, this toolkit is written for boards who are seeking guidance on how to take up accountability for governing their digital assets in their organizations. The creation of this toolkit is based on an extensive research program installed by the University of Antwerp - Antwerp Management School, CEGEKA, KPMG Belgium and Samsung Belgium on the role of the board in IT governance. You can read the results of our research at www.antwerpmanagementschool.be/boarditgov. Based on our research findings and input from several board members, we have built this toolkit that can help boards to monitor their effectiveness in taking up accountability for governing digital assets.
WHY A BOARD LEVEL DASHBOARD FOR DIGITAL STRATEGY AND OVERSIGHT

In order to adequately perform their IT oversight role, it is vital that boards measure the performance of the IT governance system that was established. Indeed, the Economic Co-operation and Development (OECD) principles of corporate governance state that one of the key functions of the board is “monitoring the effectiveness of the company’s governance practices and making changes as needed”. As IT governance is an integral part of corporate governance, this principle applies to IT governance as well.

That is why a board-level dashboard for digital strategy and oversight is created. This dashboard will help boards to evaluate whether their board level IT governance approach is implemented properly, whether it is generating the desired outcomes and how it can be improved.

CREATION OF THE DASHBOARD

The dashboard is based on academic literature and enriched with feedback from practitioners. First, the IT governance balanced scorecard built by Van Grembergen and De Haes (2005) was used as a starting point for the creation of this dashboard. The authors adjusted the balanced scorecard of Kaplan and Norton (1993) to fit into an IT governance context, translating its perspectives, missions, objectives and metrics. Second, the goal of this research was to create a dashboard not to evaluate IT governance as a whole, but to monitor IT governance at board level. Therefore, the IT governance balanced scorecard was adapted to include objectives and metrics that are relevant in the context of this board level approach.

Additional metrics and objectives found in literature and the COBIT 5 framework - which is a best-practice model aimed at practitioners to implement IT governance - were included. Lastly, to ensure the practical relevance of the dashboard, it was presented to three board members. Their feedback was captured through an iteration of individual interviews and the dashboard was adapted accordingly.

1 The Organization for Economic Co-operation and Development (OECD) principles on corporate governance are an international benchmark for corporate governance, which many countries have used as a basis for their corporate governance codes.
THE BALANCED SCORECARD

The structure of the board-level dashboard for digital strategy and oversight is based on the balanced scorecard. The balanced scorecard is a widely used tool for performance measurement. It was introduced by Kaplan and Norton (1993) to encourage organizations to not only use financial indicators to keep track of performance. They argue that financial indicators do not necessarily measure how well an organization is executing its strategy. Instead, in addition to financial indicators, organizations need to add measures relating to customer satisfaction, internal processes and learning and growth. The goal of the balanced scorecard is to translate an organization’s strategy into a set of performance measures concerning each of these perspectives.

The balanced scorecard offers some unique benefits. Firstly, it entails a top-down approach. An organization first needs to crystallize its strategy and derive appropriate measures accordingly, whereas traditional approaches tend to be bottom-up, establishing measures that originate from local activities and ad-hoc processes. Secondly, it is a forward-looking tool. While traditional financial indicators tell us how the organization has been performing in the past, the other perspectives will provide information on where to go in the future. Thirdly, it mixes internal and external perspectives. Lastly, the scorecard will help organization leaders to focus on the most important measures.
A BOARD LEVEL DASHBOARD FOR DIGITAL STRATEGY AND OVERSIGHT

To create a dashboard that boards can use to monitor their effectiveness in taking up a digital leadership role, the concepts of the balanced scorecard were translated to a board level IT governance context. The resulting dashboard consists of four perspectives boards should monitor: corporate contribution, stakeholders’ orientation, internal practices and future orientation. A mission and more specific objectives are identified for each perspective, indicating the desired outcomes. To monitor the realization of these objectives, metrics are added. The resulting dashboard is shown in Figure 1.

![Board level dashboard for digital strategy and oversight](image)

**Figure 1. Board level dashboard for digital strategy and oversight**
IT governance can be deployed using a holistic set of structures, processes and relational mechanisms.

The starting point of futureproof board level IT governance resides in the skills and culture, which can be categorized as relational mechanisms. These foundations are presented in the “future orientation” perspective. Hence, the future orientation mission is “Building foundations for IT governance delivery”. Research indicates that an inhibitor of board level IT governance is the perception that IT governance is not a topic that should be discussed by the board (Butler & Butler, 2010; Parent & Reich, 2009). That is why a first step towards board level IT governance is the creation of a culture that acknowledges the importance of IT and willingness by the board to become involved in IT governance. Furthermore, when business and IT professionals do not understand each other, business/IT alignment will never be fully attained. Hence, a board with correct skills and knowledge is essential (Jewer & McKay, 2012; Parent & Reich, 2009; O. Turel & Bart, 2014).

Key IT governance structures and processes at board level are identified in the “internal practices” perspective. The goal is to “ensure effective and sustained IT governance”. A structure put forward by many authors is an IT strategy and oversight committee at board level (Posthumus, von Solms, & King, 2010; Read, 2004; O. Turel & Bart, 2014). Such a committee can support the board in taking up their digital leadership role. The suggested processes relate to the frequency and type of IT discussions held by the board (Bart & Turel, 2010; Jewer & McKay, 2012; O. Turel & Bart, 2014).

It is important to evaluate the IT governance system from the perspective of all relevant stakeholders, including the board of directors, executive management, business and IT users but also customers, shareholders and regulators. Therefore the mission of the “stakeholders’ orientation” perspective is “Measuring up to stakeholders’ expectations”. As one of the board’s most important stakeholders are regulators, legal and ethical compliance should be monitored closely (OECD, 2015).

Furthermore, stakeholders should be informed about IT governance by the board. As research indicates that board level IT governance leads to increased organizational performance and theories such as voluntary disclosure theory and agency theory predict that firms can improve their liquidity and firm valuation through better information intermediation, we argue that organizations can benefit from IT governance disclosure (Healy & Palepu, 2001).
The ultimate goal of IT governance is business value through the alignment of business and IT. That is why we can translate the financial perspective of the original balanced scorecard into a “corporate contribution” perspective in the board level IT governance balanced scorecard. The mission defined for this perspective is “Ensuring maximum profit through IT with reasonable risk”. This entails three primary objectives: strategic alignment, value delivery and risk management.

For each objective, several metrics were identified. Simply specifying each metric’s actual value will not help boards to better execute their digital oversight role. Boards should identify a target value for each metric that is monitored. Doing so will give meaning to the actual values and enable boards to evaluate their performance.

It is important to note that the scorecard perspectives are interlinked. Causal relationships between them can be identified. For example, board members with appropriate IT expertise (future orientation) may have more IT discussions (internal practices), which in turn will increase legal compliance (stakeholders’ orientation), and will ultimately lead to reduced IT risk (corporate contribution). In other words, the future orientation and internal practices perspectives refer to what boards need to do to ensure digital oversight and strategy.

Accordingly, the metrics belonging to these perspectives can be called “lead indicators”. Contrarily, the corporate contribution and stakeholders’ orientation perspectives illustrate the outcomes boards can expect from their digital oversight and strategy. Hence, metrics within these perspectives can be called “lag indicators”.

Figure 2. Causal relationships between scorecard perspectives
A first step in implementing IT governance at board level is articulating an understanding of the role of IT in the organization. This is a crucial step, as the best way for boards to take up their digital leadership role is not the same for every type of organization.

According to the strategic impact grid of Nolan and McFarlan (2005), organizations can be situated along two axes (contingencies): the organization’s need for new IT and the organization’s need for reliable IT. Organizations with a high need for new IT use innovation through technology for their competitiveness. This type of organization adopts an offensive strategy. On the other hand, a low need for new IT entails a defensive strategy. The need for reliable IT refers to the level to which the business depends on the continuity, security and smooth operation of IT.

Combining these two contingencies results in four IT use modes. Organizations in support mode only need technology to support employee’s activities. Factory mode organizations require highly reliable IT, but have a low need for new IT. When the need for new IT is high, but the organization does not rely on IT for the continuity of the business, turnaround mode applies. Usually, companies do not spend a long time in this mode, as it is a transition state. Organizations with a high need for both reliable and new IT are situated in the strategic mode.

The different IT use modes call for different board level IT governance approaches. For example, boards of organizations in factory mode need to actively monitor the security of IT. However, for boards operating in an organization in support mode, IT security is not a priority. The same principle applies for the way in which boards evaluate their IT governance effectiveness. Certain metrics are more important to monitor than others for each IT use mode. The last column in the dashboard illustrates this principle: important metrics for each IT use mode are marked with an “x”. For example, boards should monitor “the number of security incidents causing financial loss, business disruption or public embarrassment” in factory and strategic mode, as the need for reliable IT is high. However, the need for reliable IT is low in support and turnaround mode. Therefore, this metric is of less importance to boards in these modes.
USE THIS DASHBOARD AS A TOOL

The dashboard is meant to be used as a tool that boards can customize to meet their specific needs. Not only can custom objectives and metrics be added, but the dashboard can also be extended with additional information to facilitate board members even more in taking up their digital oversight role.

Examples of additional information are: the priority of each objective or metric, benchmarks for each metric, actions that could be taken to improve actual values, etc.

Figure 4. Example of extended dashboard
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REFERENCES


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by visiting our website

www.antwerpmanagementschool.be/boarditgovernance

- Research Briefing 1: How governing boards report on IT Governance: towards more IT Governance Transparency

- Research Briefing 2: How boards lead and govern digital assets: a summary of the state-of-the-art research

- Research Briefing 3: Corporate governance codes and digital leadership

- Toolkit 1: Building digital leadership capabilities for the board

- Toolkit 2: A board level dashboard for digital strategy & oversight

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