DIGITAL LEADERSHIP STARTS IN THE BOARD

How digital leadership can be embedded in the board's corporate governance roles.

Laura Caluwe, Steven De Haes – University of Antwerp – Antwerp Management School

Despite an increased focus on attracting digitally savvy directors, boards of directors lack clarity about their role in governing digital technology to deliver value to the organization. We outline the realm of roles boards can play in digital governance and how to implement them.

Digital transformation is fundamentally and urgently changing how organizations create and deliver business value. As boards of directors are ultimately accountable for risk management, strategic decision-making and performance, the implications of digital transformation urge them to take accountability with regard to digital and IT.

Still, it remains unclear how the board of directors can take up their roles in governing digital technology. It seems that a growing number of boards acknowledge the fact that IT expertise within the boardroom is important, yet they struggle with using this increased digital competence to its full potential and optimally contribute value to the governance of digital technology. Also, one of the key challenges here is not to cross the fine line between governance and management, balancing between executive and non-executive roles. In our research, we provide an answer to these challenges by articulating the variety of roles boards can play in governing digital tehnology and as such embed digital leadership in its corporate governance roles. Further, we outline specific mechanisms that may help boards in implementing their digital-related responsibilities.

The question

How can digital leadership be embedded in the board's corporate governance roles?

Key findings

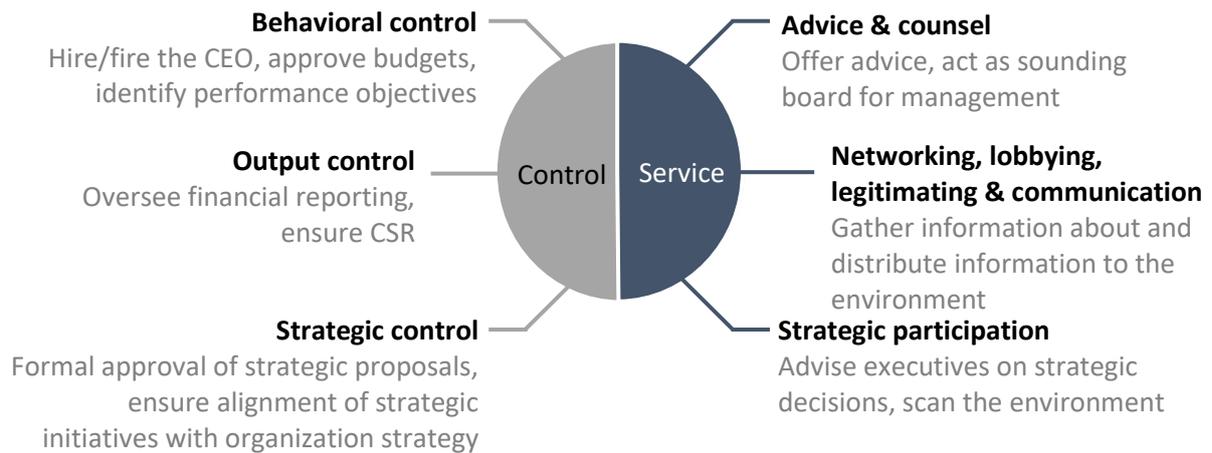Classic governance control and service roles all have a digital-related component.

While a digital savvy board is the cornerstone of board involvement in governing digital technology, specific board structures and activities can enhance board involvement in digital matters.

Board digital leadership roles

The two core corporate governance roles of the board are providing control and service towards the organization. The board's control role relates to monitoring activities in the context of the board's fiduciary duty to protect shareholder and other stakeholder's interests. This role entails controlling management behavior, outputs in financial markets, strategic decision-making and a focus on corporate social responsibility. The board's service role involves advising management based on board members' competency, boundary spanning activities such as networking in support of the provision of resources, lobbying and legitimating, but also active participation in strategy formulation and implementation.

Note
The terms "digital" and "IT" are interchangeably used to refer to both running current technology to support efficiency, stability and safety as well as exploring new technology for (disruptive) innovation.

Universiteit Antwerpen
Faculteit Bedrijfswetenschappen en Economie

AMS

Behavioral control
Hire/fire the CEO, approve budgets, identify performance objectives

Advice & counsel
Offer advice, act as sounding board for management

Output control
Oversee financial reporting, ensure CSR

Control | Service

Networking, lobbying, legitimating & communication
Gather information about and distribute information to the environment

Strategic control
Formal approval of strategic proposals, ensure alignment of strategic initiatives with organization strategy

Strategic participation
Advise executives on strategic decisions, scan the environment

These board roles encompass the board's duties described in the 2020 Belgian Code on Corporate Governance ("2020 Code"), albeit with a different classification. The 2020 Code describes three board roles: setting the company's strategy (reflected in strategic control and participation), putting in place effective, responsible and ethical leadership (covered in behavioral control and also linked to legitimating) and monitoring the company's performance (mostly reflected in behavioral and output control).

In this board briefing, we further explore these roles and translated them into specific responsibilities with regard to digital matters. This analysis clarifies six roles that enable boards to take up their leadership role in governing digital technology.

Service roles

The board's service roles in the context of governing digital technology typically receive the least attention and remain unclear. This may be attributed to the fact that, in contrast to the control roles, it is more difficult to guard the fine line between management and governance. The following sections outline what might fall under the board's duties.

Advice and counsel

With respect to advice and counsel, boards, based on their directors' expertise and experience, play a key advisory role in providing advice and feedback that informs and counsels the CEO and executive management.

With regard to digitalization, boards should constructively challenge management regarding digital matters. Especially directors with IT experience should add value to an organization through their digital expertise, such

as knowledge related to governing IT and IT outsourcing. In the context of this role, boards can provide insights on and guide management's attention towards certain topics and stimulate collaboration between the CIO and executive management.

Such constructive questioning promotes trust between the board and top management. Further, creating a shared understanding of how digital technology can add business value through innovation and growth is supported. Lastly, board members should enable a better fit between the needs of the organization and the external environment, and address risks of IT resource deficiencies by directing the attention of management and enhancing the quality of their decisions.

Networking, lobbying, legitimating, communication

Boards act as boundary spanners between the organization and its environment. The essence of the board's networking, lobbying, legitimating and communication role resides in the board's relational (also termed social) capital, which includes the board's links to the organization's environment (e.g. customers, suppliers, investors etc.). Through their relational capital, directors provide access to resources required by the organization, facilitate access to the commitment of outside parties, foster communication between the organization and its environment, perform a lobbying function and provide legitimacy.

With respect to digital governance, this board role entails two main functions: the provision of resources and a signaling function. Directors may leverage their relationships with multiple organizations to provide access to resources such as capital. The signaling function, involves establishing digital governance mechanisms at board-level, thereby signaling to the market that digital issues are significantly situated on the board's agenda, thereby strengthening the public image of the firm's digital capability.

It is the board's task to use its directors' ties to the external environment to facilitate provision of IT-related resources, thereby supporting improved fulfilment of its organization's internal needs. Further, by establishing digital governance mechanisms at the board-level, organizations demonstrate the importance that they attribute to digital matters, which in turn sends a positive signal to the stock market, and therein possibly influences stock returns.

Strategic participation

In this role, the focus for boards concerns their active involvement in strategic decision-making, rather than more passive involvement in strategic control. In setting the strategic direction for the organization, the board becomes a strategic partner with management. More specifically, this role entails boards assisting in initiating strategic analysis, as well as its formulation, and implementation.

The board's strategic participation should be evident from its proactive engagement in digital strategic decision-making. Through their networks, directors may be well placed to garner information about the external environment. Here board roles include boundary spanning activities in order to inform the strategic debate, and thereby complement perspectives offered by executive management. By providing information about the external environment and thereby guiding management regarding digital strategic topics, the board may ensure that the organization identifies and grasps relevant opportunities.

Role	Service areas	Typical questions to ask
Advice and counsel Offering advice and counsel to the executive management based on experience and expertise.	• Discuss digital matters • Answer to management questions and requests • Direct management attention • Create atmosphere of joint accountability concerning IT resources • Stimulate collaboration between CIO and executive management	• Is our top management aware of the role of digitalization in our organization? • How can the board ensure a healthy dynamic between the board and management on digital topics? • Does the board have appropriate and adequate attention to digital matters on the board agenda?
Networking, lobbying, legitimating, communication Acting as boundary spanners of the organizations and the environment, providing access to resources, lobbying, legitimating and communicating.	• Provision of IT-related resources	• Does our board composition and structure reflect the importance we attach to digital matters? • How can our network be used to acquire necessary IT-related resources in support of our digital strategy?
Strategic participation Active involvement in strategic decision making, i.e., initiating strategic analysis, strategy formulation and strategy implementation.	• Gather information regarding digital aspects about the external environment	• Is our investment portfolio sufficient to deal with competitive threat? • What are current and potential competitors doing in the area of digitalization?

Control roles

Our findings indicate that the majority of the control roles of the board with regard to digitalization are generally quite well understood. Often, this is a consequence of laws and regulations firms have to adhere to (such as the European General Data Protection Act) that specifically refer to digital aspects. Still, these control roles entail much more than ensuring appropriate risk management and controlling IT material weaknesses. More depth on the digital control roles of the board is provided in the following paragraphs.

Output control

The board's output controls primarily relate to organizational outputs such as corporate social responsibility and outputs in financial markets. Towards digital, a major element of board output

control is oversight of identification, reporting and remediation of potential IT material weaknesses (e.g., lack of controls over who can initiate and approve journal entries or accounting systems that are unable to process complicated transactions). A second focus area is the board's responsibility to respond the cyber exposures and disclosure of material security breaches (e.g., inaccessibility of vital databases or theft of core intellectual property). Thirdly, this role includes strategic responses to government regulations related to privacy and security, such as the data breach notification regulations (e.g., the European General Data Protection Regulation, the Directive on security of network and information systems (NIS directive)), requiring organizations to inform regulators and affected individuals of data breaches.

Behavioral control

In general, the board's role in behavioral control or monitoring function focuses on management behavior and operational control and entails scrutinizing, evaluating and regulating the actions of executive management.

In the context of digitalization, boards are responsible for monitoring/controlling managerial digital-related decisions and actions. In doing so, boards should focus on *how* management handles decision-making and evaluate whether they have set up the right procedures to adequately manage IT, rather than judging each management decision. Specifically, this role requires boards to monitor IT-related risk management, determine the organization's levels of risk tolerance, identify and monitor performance objectives, ensure compliance with IT laws, regulations and industry standards and contractual commitments and ratify decisions with regard to digital technology. By doing so, ineffective digital investment behavior can be avoided and value is created by lowering the cost of capital and regaining shareholders' trust after IT failures. Furthermore, IT risk management practices are improved and consequently, costly lawsuits can be avoided.

Strategic control

The board's role in strategic control relates to its monitoring function, particularly reviewing strategic initiatives and overseeing the execution of strategy. This role relates to the board's fiduciary duty to control strategic decisions and evaluate these for their organizational value.

In the context of digital governance, digital goals and strategic proposals should be evaluated and monitored. The board should ensure the establishment of an effective strategic planning process, evaluate and ratify the overall IT or digital strategy and monitor digital strategic progress to verify whether IT delivers against strategy. In this regard, of primary concern is ensuring the alignment of business and digital strategy, typically phrased as strategic alignment. This requires the board to ensure that IT's role aligns with the organization's overall strategy.

Role	Control areas	Typical questions to ask
Behavioral control Monitoring of management behavior and operational control.	• Ensure IT risks are identified and addressed • Identify and monitor digital performance objectives • Hire and fire the CIO • Ensure compliance with IT laws, regulations, industry standards and contractual commitments	• Do we have fast-response processes in place in the event of an attack? • Are we protected against possible intellectual-property-infringement lawsuits? • Do we regularly benchmark to maintain our competitive cost structure?

	• Ratify decisions regarding digital technology • Determine IT risk tolerance levels	• Are digital-related enterprise risks known and managed?
Output control Controlling organization output with attention to all organization stakeholders.	• Ensure adequate controls over financial reporting • Track demonstrable and audited book value of digital technology • Ensure reporting on digital aspects to all stakeholders	• Do we have the right processes in place to identify, report and remediate IT material weaknesses? • Are we prepared to adequately report on security breaches? • Are we ready to report towards regulators and corporate governance codes?
Strategic control Evaluating strategic initiatives and overseeing strategy implementation.	• Evaluate and ratify digital strategy • Ensure IT strategic alignment • Measure digital strategic progress • Facilitate cooperation between CIO and other managers	• How do we ensure that all necessary internal and external stakeholders towards digital are engaged in the strategy setting? • Are our strategic IT development plans proceeding as required? • Do we have processes in place that will enable us to discover and execute any strategic digital opportunity?

Board digital leadership instruments

Practitioners and academics seem to agree that digital savviness is the cornerstone of board involvement in governing digital technology. In addition, boards should think about which structures and activities they can adopt/implement to adequately and effectively perform the various roles with regard to digitalization outlined above. An outline of some key digital governance instruments is discussed below.

Board digital savviness

An adequate level of digital expertise in the boardroom can be ensured by training board members regarding digital matters or hiring independent directors with digital expertise. The latter is particularly relevant because of the social (i.e., network ties) and human (i.e., experience, expertise) these directors bring in, which enables them to perform monitoring as well as advising and networking tasks. In this context, it is crucial that these directors have gained digital expertise at strategic levels of organizations (e.g., as C-level management at an IT-intensive firm, or as CIO), so that it is perfectly fit to perform board tasks.

At the same time, findings from our focus group show that this key mechanism is quite difficult to achieve. As directors are more likely to have financial and managerial expertise than digital expertise, the behavioral control and output control roles may be executed more effectively in terms of cost

management than in terms of proactive IT risk management and compliance. Because directors with digital expertise and strategic perspectives (thus expertise gained at the strategic level of the firm) are scarce, board roles in the context of digitalization such as providing advice and counsel regarding digital matters and taking up a reactive and proactive role with regard to digital strategic decision-making are difficult to achieve. Therefore, boards could consider including subject matter experts in an "ad hoc" way, involving external consultants when needed.

Board digital governance structures

Including independent directors with digital expertise on the board is not only important in terms of the IT competence they bring in. Because of their independence, these directors are typically regarded as crucial for the board to perform its control roles. As argued above, adequate digital expertise is invaluable to adequately control management behavior related to digital matters and outputs in financial markets. Further, network ties and alternative viewpoints brought in by independent directors supports the board networking, advising and strategic participation roles.

Structural arrangements that could facilitate board involvement in governing digital technology include using inside directors or senior management on the board. Inside directors play a crucial role in ensuring organization-specific digital-related information for board deliberations. Related strategies include: making the CIO a board member or regular presenter and encouraging directors to communicate with CIOs or IT management in between board meetings.

Further, boards may choose to establish a board-level committee with a digital governance focus. Responsibilities of such committees differ, from keeping an eye out for what competitors and other organizations are doing with technology, to focusing on IT-related risk management, to more generally ensuring digital matters are a standard topic on the board's agenda that is addressed in a structured approach. Traditional board committees could also take up similar responsibilities. For instance the audit committee could discuss issues related to risk and compliance, while the nomination committee might deal with ensuring adequate digital expertise within the organization.

Board digital governance activities

While less evident, activity-related mechanisms seem to be equally relevant to perform board roles with regard to digital aspects. First of all, effective communication (e.g., concerning digital strategic direction and progress) between boards and management and more frequent briefings regarding digital matters could assist boards in staying up-to-date about organizational digital issues and result in trust and respect between boards and management. Second, boards can ensure actual involvement through more frequent formal attention to digital matters, such as making digital a fixed item on the board's agenda (e.g., a yearly presentation of business risks linked to information security). A last option would be to provide equity compensation for CIOs, which might encourage them to act in the general interest of the firm.

Conclusion

Our key conclusion is that Boards need to extend their governance accountability, from often a mono-focus on finance and legal as proxy to corporate governance, to include technology and provide digital leadership and organizational capabilities to ensure that the enterprise's IT sustains and extends the enterprise's strategies and objectives.

Our research shows how digital leadership can be embedded in the board's corporate governance roles by outlining the various roles boards can play in governing digital technology. We hope to inspire directors to consider the wide variety of focus areas wherein they can contribute to digital matters.

Board structures	Board activities
Including independent directors (with digital expertise)	Effective communication between board and senior management (including CIO)
Using inside directors or senior management on the board (including CIO)	More frequent briefings regarding digital matters
Board-level committee with digital governance focus	More frequent formal attention to digital matters
Board digital savviness	